

## CHAPTER 5

### DATA ANALYSIS OF PHASE II : DESIGN AND DEVELOPMENT PHASE

#### 5.1 Introduction

In this chapter, researcher will discuss on the analysis of data for phase II: the design and development phase. In this phase, researcher has come out with one research objective which is to design and develop a KKQ meaning-based *Tarannum* mobile app model. There is a research question with four sub-research questions in guiding the main research question. The details of research objective and research questions are shown in table 5.1 below.

**Table 5.1:** Research Objectives and Research Questions for Phase II : Design and Development phase

RESEARCH OBJECTIVES	RESEARCH QUESTIONS
3) To design and develop a KKQ meaning-based <i>Tarannum</i> mobile app model.	3) How to design and develop a KKQ meaning-based <i>Tarannum</i> mobile app model? 3.1 What are the components of <i>Tarannum</i> learning in the existing <i>Tarannum</i> mobile apps? 3.2 What are the components of <i>Tarannum</i> learning in the KKQ handbook? 3.3 What are the elements of multimedia included in the existing <i>Tarannum</i> mobile apps? 3.4 How were the features of the existing <i>Tarannum</i> mobile apps?

Based on the table 5.1 above, the second research objective is to design and develop a model for KKQ meaning-based *Tarannum* mobile app. According to that

research objective, researcher had come out with one research question which is: how to design and develop a model for KKQ *Tarannum* mobile app based on the meaning? To be more specific, researcher then constructed another four sub-research questions under the main research question as the question is quite general and broad to answer. In the first and second sub-research question, researcher wants to figure out the components of *Tarannum* learning in the existing apps and in the KKQ handbook. The third question, researcher wants to look up for the elements of multimedia that were included in the existing app then apply in the model for KKQ *Tarannum* mobile app. In the fourth which is the last sub-research question, researcher looked up at the features of the existing mobile apps to be adapted in the model for KKQ *Tarannum* mobile app.

The table 5.2 below is the matrix of research question 2 and the sub-research questions with its method in collecting the data and the analysis for each of the sub-research questions. For sub research question 3.1 until 3.4, the method used is the same, whereby the document analysis was employed in gaining the data and information. While, the analysis of the data are also the same, whereby matrix analysis and thematic analysis were used in presenting and explaining the output and findings.

**Table 5.2:** Matrix of Research Question 3; The Method, Instrument and Analysis Used











Research Questions	Method	Outcome	Analysis
<b>3) How to design and develop a KKQ meaning-based <i>Tarannum</i> mobile app model?</b>			
3.1 <i>What are the components of <i>Tarannum</i> learning in the existing <i>Tarannum</i> mobile apps?</i>	Document analysis	Matrix analysis	Thematic analysis

3.2	<i>What are the components of Tarannum learning in KKQ handbook?</i>	Document Analysis	Matrix analysis	Thematic analysis
3.3	<i>What are the elements of multimedia included in the existing Tarannum mobile apps?</i>	Document analysis	Matrix analysis	Thematic analysis
3.4	<i>How were the features of the existing Tarannum mobile apps?</i>	Document analysis	Matrix analysis	Thematic analysis

### **5.2 Research Question 3: How to Design and Develop a KKQ Meaning-Based Tarannum Mobile App Model?**

Based on research question 3, in order to design and develop a KKQ meaning-based *Tarannum* mobile app model, researcher had done a survey on the existing *Tarannum* mobile apps available in the google Playstore website. Through this method, researcher had compiled and documented a final of ten selected existing *Tarannum* mobile app from the online market into a table. Table 5.3 below show the analyzed *Tarannum* mobile apps. Based on the table below, researcher had classify the *Tarannum* apps based on the apps name, its icon in Google Play Store, the developer and the category each of the *Tarannum* apps. The *Tarannum* apps are from different developer except for ‘Tn Hj Radzi Kamarul Hailan’ and Syarifah Khasif Fadzilah’ are from the same developer which is developed by ‘Mustel App’.

**Table 5.3:** Search on the Existing *Tarannum* Mobile Apps

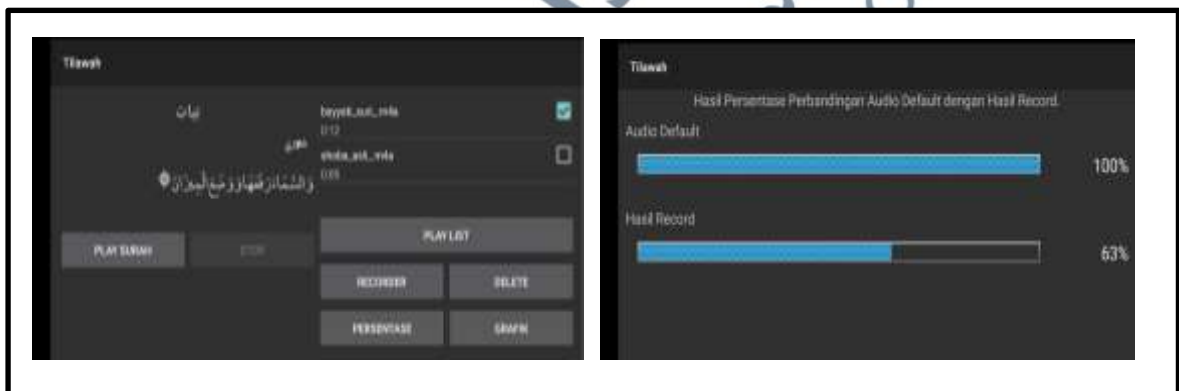
No.	Apps	Icon in Google Play	Developer	Category
1.	Tilawah Qur'ān		LABKOMIF UIN Bandung	Education
2.	Belajar BerTarannum mp3		Khasyaff Store	Education
3.	Learning Al-Qur'ān		Edukasi Anak Nusantara	Education
4.	AlQur'ān (Belajar Qiro'at)		Queenza dev	Music & audio
5.	Tn Hj Radzi Kamarul Hailan		Mustel App	Music & audio
6.	Syarifah Khasif Fadzilah		Mustel App	Music & audio
7.	Belajar tilawah offline		WorthLucky	Music & audio
8.	Belajar tilawah		Rian Cupika	Books & Reference
9.	Belajar Tilawah Dasar		cakMad	Music & audio
10.	Al-Bayan		Ilmiah Resources	Music & audio

Source: <https://play.google.com/store?hl=en>

Based on the survey from Google Play Store on *Tarannum* apps above, researcher had detected three main categories for existing *Tarannum* mobile apps which are; 1) education category, 2) Music and audio category, and 3) Books and reference category. There are three *Tarannum* apps from education category which are the 'Tilawah Qur'ān', 'Belajar Ber*Tarannum* mp3' and 'learning Al-Qur'ān' app. While there are six category from music & audio category which are 'AlQur'ān

(Belajar Qiro'at)', 'Tn Hj Radzi Kamarul Hailan', 'Syarifah Khasif Fadzilah', 'Belajar tilawah offline', 'Belajar Tilawah Dasar', and 'Al-Bayan' apps. For books & reference category, only one *Tarannum* app under this category which is 'Al-Bayan' app.

*Tarannum* apps for education category, this category has element on learning for example; the apps have a practice on *Tarannum* recitation. It means that users can use these apps in practicing the *Tarannum* recitation and the marks would be given for that practice (see Figure 5.1). Other than that, the text of Qur'anic verses are depicted together with the audio to assist users in reviewing the audio of recitation that being recites (see Figure 5.2). The navigation is broad to navigate across the different pieces of content within the app.



**Figure 5.1:** Left side: Show the Practice Page for 'Tilawah Qur'an' App and The Right Side: Show the Marks Given to The *Tarannum* Recitation Practice



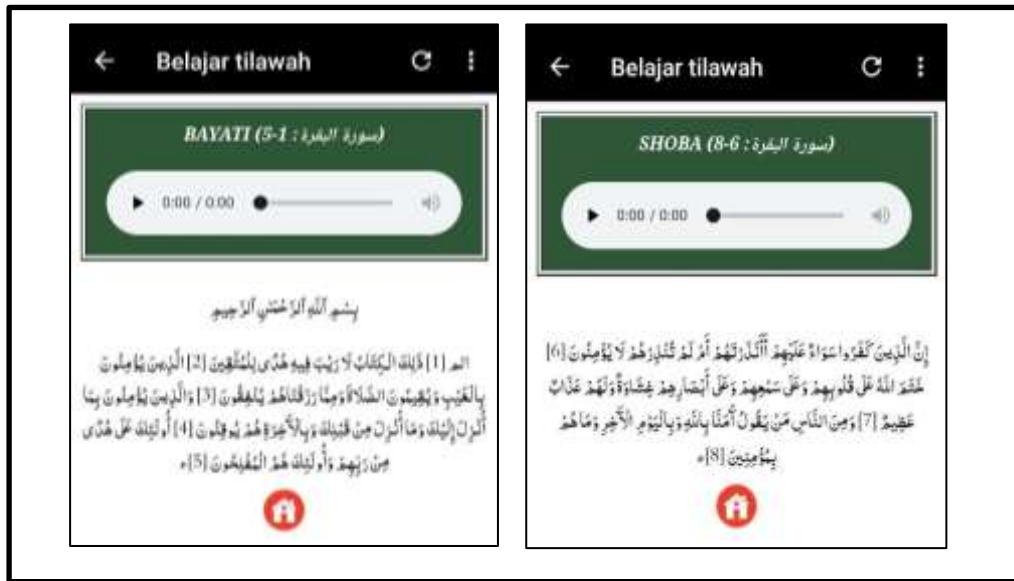
**Figure 5.2:** Show the *Tarannum* Apps that depicted the text of *Tarannum* Recitation with the Audio Recited

*Tarannum* apps for music & audio category, the apps are more focused on the audio of *Tarannum* recitation. This category is lacking on the element of learning such as practice on *Tarannum* recitation. The navigation is limited whereby it limits to audio navigation only. Other than that, from this category, one of the apps provides the text of Qur'ānic verses in the pdf format but the text and audio of recitation would be in different page and it complicate the users to check and review the audio of *Tarannum* recitation along with the text.



**Figure 5.3:** The Audio (in the left side) and the Text (in the right side) are Depicted in a Different Page

*Tarannum* apps for book & reference category, for each of the *Tarannum* melodies the page will depict the text of the Qur'anic verses together with the audio player. Users can follow the *Tarannum* recitation, stop or even repeat the *Tarannum* recitation and at one point users can check and review the recitation based on the text depicted in the same page.



**Figure 5.4:** The *Tarannum* Mobile App Page Below Depicted The Audio and Text are Together in one Page

Based on the survey on ten *Tarannum* apps in google playstore, it can be summarize that there are three categories of the apps namely the education category, the music & audio category and the book and reference category. From these categories the education and the book and reference category were suitable to be embedded for the model of KKQ *Tarannum* mobile app because of the functions, elements and component that have in the apps that seems to be more users friendly and suitable to be used by the secondary students' level.

### 5.2.1 *Tarannum* Mobile Apps in Play Store Marketplace

In designing the KKQ meaning-based *Tarannum* mobile apps, researcher had done the search on *Tarannum* mobile apps that are available in the Google Play Store.

Through this search, researcher had found out that there are small amount of



*Tarannum* mobile apps available in the market. The search on *Tarannum* mobile apps








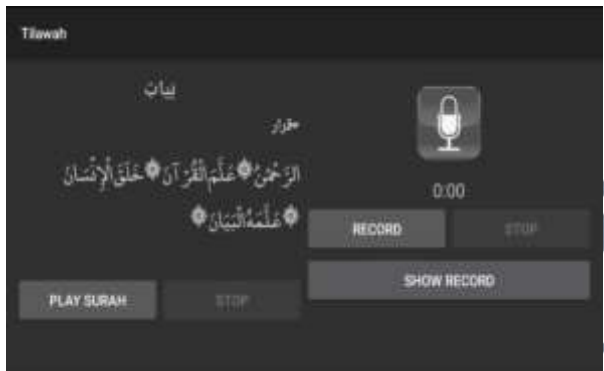
conducted by using the keywords “*Tarannum al-Qur’ān*”, “*Maqamat al-Qur’ān*”, and “*Tilawah Al-Qur’ān*”. Researcher had selected ten *Tarannum* mobile apps based on the suitability of the learning style of KKQ students at the secondary school level, that have the interactive elements whereby it is convenient for the age of the students. Then, researcher documented each of the apps, its pages and contents in the table. Researcher had trace out the contents and the elements of *Tarannum* learning that have in every page of the apps. The sub-sub heading below depicted the ten *Tarannum* mobile apps with the description each of the apps’ page and the elements that have in the apps.

#### 5.2.1.1 *Tilawah Qur’an App*

**Table 5.4:** *Tilawah Qur’an App Analysis*


Mobile Apps <i>Tarannum</i>	Page	Elements
	Information of the app: Year: 2013 Size: 11M Installs: 100,000+ Current version: 1.2.1 Requires Android: 2.0 + Content rating: 3+ Reviews: 4.6	
	<b>Main page.</b>  <b>Main Menu:</b> 1. Tutorial 2. <i>Tilawah</i>	

		<p><b>Page Tutorial.</b></p> <p>This page explains on how to use this app.</p>	
		<p><b>Page Tilawah.</b></p> <p>7 types of <i>Tarannum</i>:</p> <ol style="list-style-type: none"> <li>1. <i>Bayyati</i></li> <li>2. <i>Shoba</i></li> <li>3. <i>Hijaz</i></li> <li>4. <i>Rast</i></li> <li>5. <i>Sikah</i></li> <li>6. <i>Jiharkah</i></li> <li>7. <i>Nahawand</i></li> </ol>	<p>Types of <i>Tarannum</i> (7 types of <i>Tarannum</i>)</p>
		<p><b>Page Bayyati.</b></p> <ul style="list-style-type: none"> <li>• 6 variations of <i>Bayyati</i></li> <li>• Button LATIHAN</li> <li>• Button SURAH</li> <li>• Button TAUSYIH</li> </ul> <p>Users can choose either TAUSYIH or SURAH or LATIHAN</p>	
		<p><b>Page Tausyih.</b></p> <p>Text <i>tausyih</i> will be displayed at the same page, and</p> <p>Audio of TAUSYIH will be play if users touch on one of the variations of <i>Tarannum</i> (<i>Qoror/nawa/syuri/husaini/jawab</i>).</p> <p>The audio will stop if users touch for the second time.</p>	<p>Audio and text of <i>tausyikh</i></p>

	<p><b>Page Surah.</b></p> <p>Text SURAH will be displayed at the same page, and Audio of SURAH will be play if users touch at one of the variation of <i>Tarannum</i> (Qoror/nawa/syuri/ husaini/ jawab). The audio will stop if users touch for second time.</p>	<p>Audio and text of surah</p>
	<p><b>Page Latihan.</b></p> <p>The left panel: <i>Surah</i> will be displayed in this page. User can play and stop the <i>surah</i> repeatedly to practice.</p> <p>The right panel: User can RECORD the <i>Tarannum</i> recitation, STOP, and SHOW RECORD to see the marks given by this app after the recording.</p>	<p>Audio and text of <i>surah</i>.</p> <p><i>Tarannum</i> practice. Users can record their <i>Tarannum</i> recitation and see the marks given by the apps.</p>

### 5.2.1.2 Belajar BerTarannum mp3 App

Table 5.5: Belajar BerTarannum mp3 App Analysis

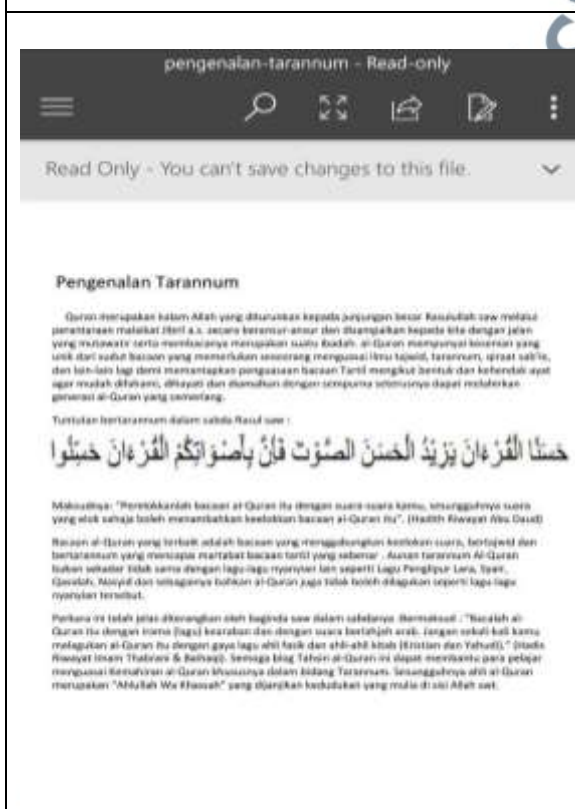
Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:  Year: 2016  Size: -  Installs: -  Current version: -  Requires Android: -  Content rating: -  Reviews: -</p>	



**Main Page.**

**Main Menu:**

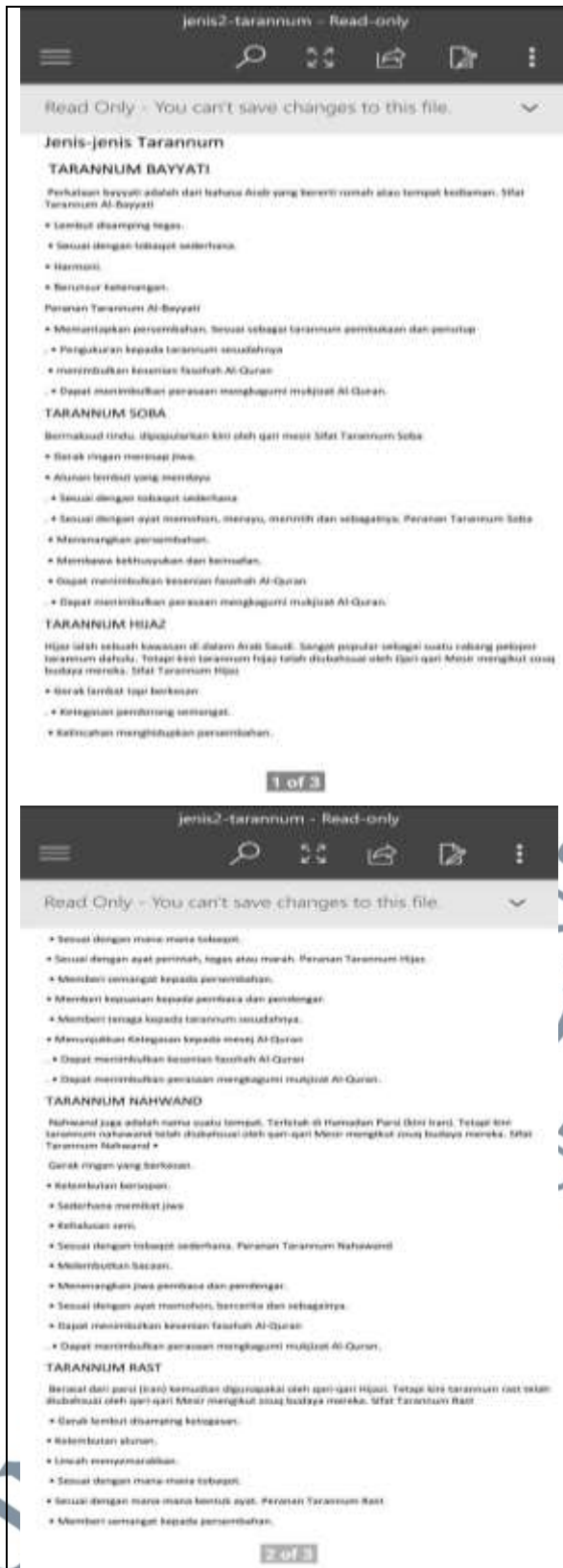
1. Pengenalan *Tarannum* (Introduction to *Tarannum*)
2. Jenis-jenis *Tarannum* (Types of *Tarannum*)
3. *Al-Mulk* ayat 1-4 *Tarannum Baiyyati* (*Al-Mulk* verse 1-4 *Tarannum Baiyyati*)
4. *BerTarannum*
5. Khasyaff Store
6. PDF Installer



**Page 1: Pengenalan *Tarannum* (Introduction to *Tarannum*)**

In this page it will navigate user to 'Pengenalan *Tarannum*' in PDF format. Users have to install PDF in smartphone or tablet to view and read it.

Text in read-only document type. Need to download.




**Page 2: Jenis-jenis Tarannum (Types of Tarannum)**

Same as in page 'Pengenalan Tarannum', in this page it will navigate user to 'Jenis-jenis Tarannum' in PDF format. User have to install PDF in smartphone or tablet to view and read it.

Text on 'Pengenalan Tarannum'.

7 types of Tarannum are explained in text. In PDF file.

 <p>jenis2-tarannum - Read-only</p> <p>Read Only - You can't save changes to this file</p> <ul style="list-style-type: none"> <li>• Memberi tenaga kepada tarannum berikutnya.</li> <li>• Memberi kepastian kepada pembaca dan pendengar.</li> <li>• Dapat merambatkan kepastian faedah Al-Quran.</li> <li>• Dapat merambatkan perasaan menghayati mukjizat Al-Quran.</li> </ul> <p><b>TARANNUM SIKAH</b></p> <p>Berasal dari parti (dari) kemuliaan dipergunakan oleh qari-qari Hijazi (pada zaman-koran 7 masehi hingga 10 masehi). Tetapi kini tarannum Sikah telah diusahakan oleh qari-qari Arabi (mengikut masa terdahulu mereka). Sifat Tarannum Sikah:</p> <ul style="list-style-type: none"> <li>• Gerak lambat meyakinkan.</li> <li>• Kalam-kalam menaruh kalbu.</li> <li>• Bersiti kesadikhan dan kearifan.</li> <li>• Sesuai dengan apa-apa yang menaruh, memahani, memirisi dan sebagainya.</li> <li>• Sesuai dengan mana-mana tabakat. Contoh: Peranan Tarannum Sikah.</li> <li>• Memerhatikan persembahan.</li> <li>• Memberi kepastian kepada pembaca dan pendengar.</li> <li>• Mendama kekhidusan dan kearifan.</li> <li>• Dapat merambatkan kepastian faedah Al-Quran.</li> <li>• Dapat merambatkan perasaan menghayati mukjizat Al-Quran.</li> </ul> <p><b>TARANNUM JIHARKAH</b></p> <p>Berasal dari parti (dari) kemuliaan dipergunakan oleh qari-qari Hijazi (pada zaman-koran 7 masehi hingga 10 masehi). Tetapi kini tarannum Jiharkah telah diusahakan oleh qari-qari Arabi (mengikut masa terdahulu mereka). Sifat Tarannum Jiharkah:</p> <ul style="list-style-type: none"> <li>• Gerak ringan yang berkesan.</li> <li>• Kalam-kalam menaruh kalbu. • Harmoni.</li> <li>• Sesuai dengan apa-apa yang menaruh, memahani, memirisi dan sebagainya.</li> <li>• Sesuai dengan tabakat mana-mana. Peranan Tarannum Jiharkah.</li> <li>• Memerhatikan ketegasan persembahan.</li> <li>• Memerhatikan persembahan.</li> <li>• Mendama kekhidusan dan kearifan.</li> <li>• Dapat merambatkan kepastian faedah Al-Quran. • Dapat merambatkan perasaan menghayati mukjizat Al-Quran.</li> </ul> <p>3 of 3</p>		
	<p><b>Page 3: Al-Mulk ayat 1-4</b></p> <p>Same as in page 'Pengenalan Tarannum', in this page it will navigate user to 'Al-Mulk ayat 1-4' in PDF format. User have to install PDF in smartphone or tablet to view and read it.</p>	<p>Text in read-only document type. Need to download.</p>

<p>al-mulk-ayat-1-4-tarannum-baiyyati - Read-only</p> <p>Read Only - You can't save changes to this file.</p> <p>Al-Mulk 1-4 Tarannum Baiyyati</p> <p>بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ</p> <p>بِتَرَكِ الَّذِي بِيَدِهِ الْمُلْكُ وَهُوَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ</p> <p>Sahih International [He] is He in whose hand is dominion, and He is over all things competent -</p> <p>Indonesia: Maha suci Allah Yang di tangan-Nya-lah segala kerajaan, dan Dia Maha Kuasa atas segala sesuatu.</p> <p>الَّذِي خَلَقَ السَّمَوَاتِ وَالْأَرْضَ لِيُبَيِّنَ لَكُمْ آيَاتِهِ وَأَهُوَ الْعَزِيزُ الْعَلِيمُ</p> <p>Sahih International [He] who created death and life to test you [as to] which of you is best - and He is the Exalted in Might, the Forgiving -</p> <p>Indonesia: Yang menjadikan mati dan hidup, supaya Dia menguji kamu, siapa di antara kamu yang lebih baik amalnya. Dan Dia Maha Perkasa lagi Maha Pengampun.</p> <p>الَّذِي خَلَقَ سَبْعَ سَمَاوَاتٍ طِبَاقًا مَّا تَرَى فِي خَلْقِ الرَّحْمَنِ مِنْ تَفَوتٍ فَأَنْزَجَ الْبَصَرَ هَلْ تَرَى مِنْ فُطُورٍ</p> <p>Sahih International [And] who created seven heavens in layers. You do not see in the creation of the Most-Merciful any inconsistency. So remain [as to] what [is the] sky, do you see any break?</p> <p>Indonesia:</p>		
<p>Bacaan Merdu Bertarannum</p> <p>Al-Mulk 1-4 Tarannum Baiyyati</p> <p>cara belajar tarannum</p> <p>Tarannum</p> <p>Bacaan merdu bertarannum</p> <p>No Track</p> <p>0:00 0:00</p>	<p><b>Page 4: BerTarannum</b></p> <p>In this page, user can hear the <i>Tarannum</i> audio.</p> <p>Users can choose each of the options given.</p> <p>In ‘cara belajar <i>Tarannum</i>’, users will be taught based on <i>harakat</i> using <i>tausyikh</i>. (7 melodies)</p> <p>In ‘<i>Tarannum</i>’ users will be taught based on <i>harakat</i> using <i>Surah Al-Baqarah</i>. (7 melodies)</p>	<p>Audio of <i>Surah al-Mulk</i>.</p> <p>Audio of <i>Tausyikh</i> with 7 types of <i>Tarannum</i>.</p>

### 5.2.1.3 AlQuran (Belajar Qiro'at) App

**Table 5.6:** AlQuran (Belajar Qiro'at) App Analysis

Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:            Year: 2020            Size: 41M            Installs: 100,000+            Current version: 7.0            Requires Android: 4.1 +            Content rating: 3+            Reviews: 4.8</p>	
	<p><b>Main Page.</b></p> <ol style="list-style-type: none"> <li>1. Nada <i>Bayyati</i></li> <li>2. Nada <i>Shoba</i></li> <li>3. Nada <i>Hijaz</i></li> <li>4. Nada <i>Rost</i></li> <li>5. Nada <i>Jiharkah</i></li> <li>6. Nada <i>Sika</i></li> <li>7. Nada <i>Nahawand</i></li> <li>8. Contoh <i>Qiroat</i></li> <li>9. Text (<i>Tausyih</i>)</li> </ol>	<p>Types of <i>Tarannum</i> (7 types of <i>Tarannum</i>)</p>
	<p><b>Page Nada Shoba.</b></p> <p>Audio <i>Tausyih</i>            Audio <i>Surah</i>            (Ar-rahman:14-15)</p>	<p>Audio <i>Tausyih</i>            Audio <i>surah</i></p>



	<p><b>Page Contoh Qiroat.</b></p> <p>Al-Kahfi 109-110 &amp; Al-Hasyr 21-23 Ar-Rahman Al-Balad</p>	<p>Audio of selected <i>surah</i></p>
	<p><b>Page text.</b></p> <p>7 text <i>tausyih Tarannum</i></p> <ol style="list-style-type: none"> <li>1. <i>Bayyati</i></li> <li>2. <i>Shoba</i></li> <li>3. <i>Hijaz</i></li> <li>4. <i>Rost</i></li> <li>5. <i>Jiharkah</i></li> <li>6. <i>Sika</i></li> <li>7. <i>Nahawand</i></li> </ol>	<p>Contain text <i>tausyikh</i> of 7 <i>Tarannum</i></p>
	<p><b>Page Tausyih.</b></p> <p>Text <i>Tausyih Hijaz</i>. This page displays the text of <i>tausyikh</i> once user has tap the 'Tausyih Hijaz' button at the previous page.</p>	<p>Text <i>Tausyikh</i></p>

### 5.2.1.4 Learning Al-Qur'an App


Table 5.7: Learning Al-Qur'an App Analysis


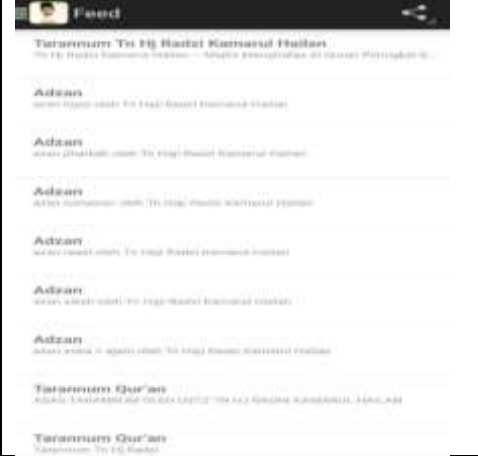

Mobile Apps Tarannum	Page	Elements
	Information of the app: Year: 2021 Size: 32M Installs: 10,000+ Current version: 1.0.9 Requires Android: 4.1 + Content rating: 3+ Reviews: 4.6	
	<b>Main Page.</b>	
	<b>Page Nada Tilawah.</b> <b>(Tausyikh)</b>  7 melodies – users have to touch next, to hear the next melody	Audio and text of <i>Tausyikh</i>
	<b>Page Praktis Tilawah.</b> <b>(Surah)</b>  7 melodies – users have to touch next to hear the next melody	Audio and text of <i>Surah</i>
	<b>Page Tingkat Lanjut.</b>  3 examples of <i>surah</i> An-nisa' Yasin Al-Anfal	

	<p><b>Page Annisa.</b></p> <p>Displays <i>surah An-Nisa'</i> verses 142-146 with audio played directly without audio player. The audio cannot be stopped.</p>	<p>Audio and text of <i>Surah</i>. *No audio player button to play or stop the audio</p>
	<p><b>Page Yasin.</b></p> <p>Displays <i>surah Yasin</i> verses 1- 83 with audio played directly without the audio player. The audio cannot be stopped.</p>	<p>Audio and text of <i>Surah</i> *No audio player button to play or stop the audio</p>
	<p><b>Page Surah Al-Anfal.</b></p> <p>Displays <i>surah Al-Anfal</i> verses 1- 6 with audio played directly without the audio player. The audio cannot be stopped.</p>	<p>Audio and text of <i>Surah</i> *No audio player button to play or stop the audio</p>

5.2.1.5 Tn Hj Radzi Kamarul Hailan App

Table 5.8: Tn Hj Radzi Kamarul Hailan App Analysis

Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app: Year: 2016 Size: 1.5M Installs: 1,000+ Current version: 1.0 Requires Android: 2.3↑ Content rating: 3+ Reviews: 4.5</p>	
	<p><b>Main Page.</b></p> <p>3 buttons: 1. Tn Hj Radzi Kamarul Hailan</p>	

	<p>2. <i>Tarannum Qur'ān</i> 3. H. Muammer ZA</p>	
	<p><b>Page Tn Hj Kamarul Hailan.</b></p> <p>In this page, it contains varieties of <i>Tarannum</i> recitation and azan call with different melodies.</p>	
	<p><b>Page <i>Tarannum</i> Tn Hj Radzi Kamrul Hailan.</b></p> <p>Users have to download each of the recitations in order to hear it.</p> <p>Not developed well as the downloaded recitation cannot be played.</p> <p>Too many ads.</p>	

### 5.2.1.6 Syarifah Khasif Fadzilah App

**Table 5.9:** Syarifah Khasif Fadzilah App Analysis

Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:            Year: 2019            Size: 4.3M            Installs: 10,000+            Current version: 1.2            Requires Android: 4.0 ↑            Content rating: 3 +            Reviews: 4.5</p>	
	<p><b>Main Page.</b></p> <p>This app contains other reciter (qāri' &amp; qāri'ah)</p> <p>Not developed well as it always turned off unexpectedly.</p>	
	<p><b>Page Qori Syarifah Khasif (Malaysia).</b></p> <p>Users can choose which Youtube video links of the recitation that they want to hear</p>	



This page will appear after user have chosen one of the buttons.

Audio of the selected buttons.

This page will appear after user have chosen one of the buttons.

Audio of the selected buttons.





Too many ads.


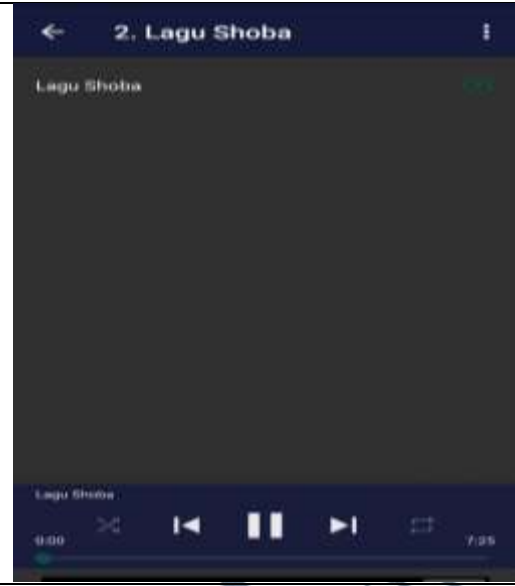





### 5.2.1.7 Belajar Tilawah Offline App

**Table 5.10:** Belajar Tilawah Offline App Analysis

Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:            Year: 2020            Size: 31M            Installs: 50,000+            Current version: 2.0.7            Requires Android: 4.1↑            Content rating: 3+            Reviews: 4.7</p>	
	<p><b>Main Page.</b></p> <p>This page contains buttons:</p> <ol style="list-style-type: none"> <li>1. Lagu Bayyati</li> <li>2. Lagu Shoba</li> <li>3. Lagu Hijaz</li> <li>4. Lagu Nahawand</li> <li>5. Lagu Rost</li> <li>6. Lagu Sika</li> <li>7. Lagu Jiharkah</li> <li>8. Teks Lagu &amp; Praktik</li> <li>9. Maqro' Haji</li> <li>10. Maqro' Nikah</li> <li>11. Maqro' Maulid Nabi</li> <li>12. Maqro' Isra' Mi'raj</li> <li>13. Maqro' Puasa</li> <li>14. Maqro' Khitan</li> </ol>	<p>Types of <i>Tarannum</i> (7 types of <i>Tarannum</i>)</p>



	<p><b>Page Lagu Bayyati.</b></p> <p>Depicts audio player of Lagu Bayyati.</p> <p>Users can play around with the audio player whether to play, pause, repeat or go to next recitation.</p>	<p>Audio of <i>Tarannum Bayyati</i> – <i>Tausyikh &amp; Surah</i></p>
	<p><b>Page Lagu Shoba.</b></p> <p>Depicts audio player of 'Lagu Shoba'</p>	<p>Audio of <i>Tarannum Shoba</i> - <i>Tausyikh &amp; Surah</i></p>
	<p><b>Page Lagu Hijaz.</b></p> <p>Depicts audio player of 'Lagu Hijaz'</p>	<p>Audio of <i>Tarannum Hijaz</i> - <i>Tausyikh &amp; Surah</i></p>

	<p><b>Page Lagu Nahawand.</b></p> <p>Depicts audio player of 'Lagu Nahawand'</p>	<p>Audio of <i>Tarannum Nahawand</i> - <i>Tausyikh &amp; Surah</i></p>
	<p><b>Page Lagu Rost.</b></p> <p>Depicts audio player of 'Lagu Rost'</p>	<p>Audio of <i>Tarannum Rost</i> - <i>Tausyikh &amp; Surah</i></p>
	<p><b>Page Lagu Sika.</b></p> <p>Depicts audio player of 'Lagu Sika'</p>	<p>Audio of <i>Tarannum</i> - <i>Tausyikh &amp; Surah</i></p>

		
	<p><b>Page Lagu Jiharka.</b> Depicts audio player of 'Lagu Jiharka'</p>	<p>Audio of <i>Tarannum - Tausyikh &amp; Surah</i></p>

UNIVERSITI  
 ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

BAYATI	
Dua, Khatib	
بَدَأَتْ بِسْمِ اللَّهِ فِي الْإِطْعَامِ أَوَّلًا	بَارَكَ رَحْمَةً رَحِيمًا وَمَوَدَّةً
بَدَأَتْ بِسْمِ اللَّهِ فِي الْإِطْعَامِ أَوَّلًا	بَارَكَ رَحْمَةً رَحِيمًا وَمَوَدَّةً
وَلَمَّا سَلَى اللَّهُ رَجُلًا عَلَى الرِّجْلِ	صَدَّقَ الشَّهَدَى إِلَى النَّاسِ فَرَسًا
وَعَزَّيْزَةً كَرَّ الْمُتَعَبِيَةَ كَرَّ مِنْ	تَلَاغَمَ عَلَى الْإِسْحَاقِ بِالْحَيِّ وَتَلَا
وَتَلَّكَتْ أَنْ تَقْبَلَ طَهْرًا	وَمَا لَيْسَ مَعْدُودًا بِهِ الْحَلِيمُ الْغَلَا
وَبَعْدَ فَحَسَّنَ اللَّهُ فِيهَا كَلِمَةً	فَضَاعَدَ بِهِ حَتَّى أَعَادَ فَحَسَّنَا

BAYATI (praktik)	
Dua, Khatib	
﴿١﴾	
﴿٢﴾	
﴿٣﴾	
﴿٤﴾	
﴿٥﴾	
﴿٦﴾	
﴿٧﴾	
﴿٨﴾	
﴿٩﴾	
﴿١٠﴾	

SHOBA	
Dua	
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ

SHOBA	
Dua	
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ
وَأَخَى خَدَاةً وَأَهْمًا غَفْلَةً	وَأَنَّ كَلِمَاتِ اللَّهِ أَزْفَقُ شَافِعٍ

SHOBA (praktik)	
Dua	
﴿١﴾	
﴿٢﴾	
﴿٣﴾	
﴿٤﴾	
﴿٥﴾	
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﴿٨﴾	
﴿٩﴾	
﴿١٠﴾	

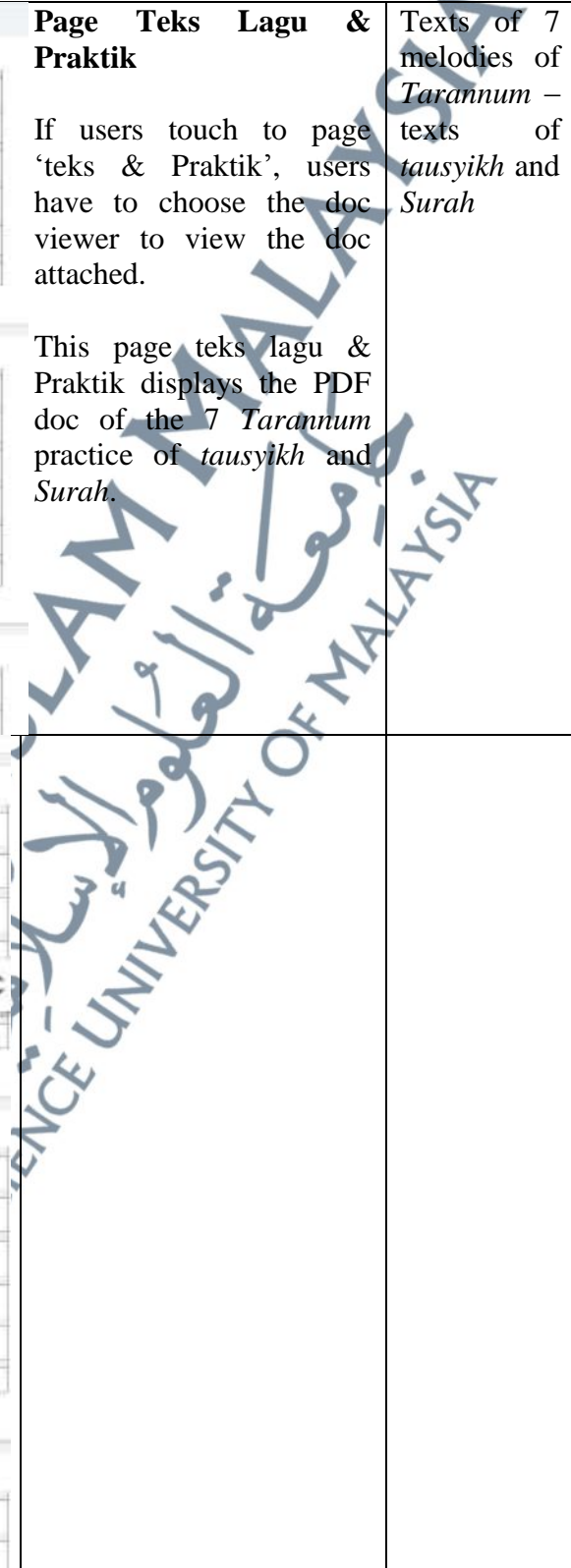
HILAZ	
Dua	
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً
لَأُزِي بِوَجْهِ ذَاتِ جَهَنَّمَ خَائِرًا	يَا وَرْدَةَ وَسَطِ الرِّيحِ تَجَلَّةً

**Page Teks Lagu & Praktik**



If users touch to page 'teks & Praktik', users have to choose the doc viewer to view the doc attached.

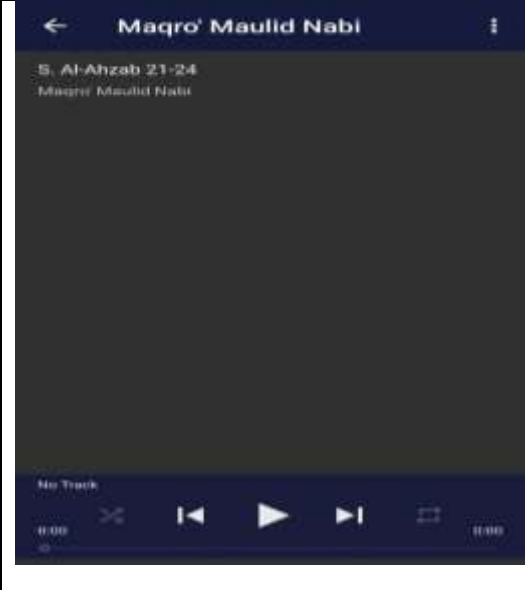

This page teks lagu & Praktik displays the PDF doc of the 7 Tarannum practice of *tausyikh* and *Surah*.



Texts of 7 melodies of *Tarannum* – texts of *tausyikh* and *Surah*



UIN

 <p>The screenshot shows an audio player with a dark blue header. The title 'Maqro' Hajji' is at the top left. Below it, the text 'S. Al-Baqarah 197-202' is displayed. The main area is dark with 'No Track' written in the center. At the bottom, there is a playback control bar with a play button, a progress indicator at 0:00, and other standard audio controls.</p>	<p><b>Page Maqro' Hajji</b></p> <p>Depicts audio player of 'Maqro' Hajji'</p>	<p>Audio of <i>surah Al-Baqarah</i> verses 197-202</p>
 <p>The screenshot shows an audio player with a dark blue header. The title 'Maqro' Nikah' is at the top left. Below it, the text 'S. An-Nisa' 1-3' and 'Maqro' Walimah Nikah' is displayed. The main area is dark with 'No Track' written in the center. At the bottom, there is a playback control bar with a play button, a progress indicator at 0:00, and other standard audio controls.</p>	<p><b>Page Maqro' Nikah</b></p> <p>Depicts audio player of 'Maqro' Nikah'</p>	<p>Audio of <i>surah An-Nisa'</i> verses 1-3</p>

	<p><b>Page Maqro' Maulid Nabi</b></p> <p>Depicts audio player of 'Maqro' Maulid Nabi'</p>	<p>Audio of <i>surah Al-Ahzab</i> verses 21-24</p>
	<p><b>Page Maqro' Isra' Mi'raj</b></p> <p>Depicts audio player of 'Maqro' Isra' Mi'raj'</p>	<p>Audio of <i>surah An-Najm</i> verses 1-25</p>




	<p><b>Page Maqro' Puasa</b></p> <p>Depicts audio player of 'Maqro' Puasa'</p>	<p>Audio of <i>surah Al-Baqarah</i> verses 183-186</p>
	<p><b>Page Maqro' Khitan</b></p> <p>Depicts audio player of 'Maqro' Khitan'</p>	<p>Audio of <i>surah Luqman</i> verses 12-15</p>




### 5.2.1.8 Belajar Tilawah App


**Table 5.11:** Belajar Tilawah App Analysis

Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:            Year: 2020            Size: 23M            Installs: 1,000+            Current version: 1.0.0            Requires Android: 4.1↑            Content rating: 3+            Reviews: 4.6</p>	
	<p><b>Main Page.</b></p> <p>Contains buttons:</p> <ol style="list-style-type: none"> <li>1. Give Rating</li> <li>2. Mulai Belajar Tilawah Al-Qur'ān</li> <li>3. More Apps</li> <li>4. My Playstore</li> </ol>	
	<p><b>Page Mulai Belajar Tilawah Al-Qur'ān</b></p> <p>Contains 7 melodies of <i>Tarannum</i> :</p> <ol style="list-style-type: none"> <li>1. Bayati</li> <li>2. Shoba</li> <li>3. Nahawand</li> <li>4. Hijaz</li> <li>5. Rost</li> <li>6. Sikah</li> <li>7. Jiharkah</li> </ol>	<p>Types of <i>Tarannum</i> (7 types of <i>Tarannum</i>)</p>





	<p><b>Page Bayati.</b></p> <p>This page depicts the audio player of <i>surah</i> and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Bayyati</i></p>
	<p><b>Page Shoba.</b></p> <p>This page depicts the audio player of <i>surah</i> and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Shoba</i></p>
	<p><b>Page Nahawand.</b></p> <p>This page depicts the audio player of <i>surah</i> and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Nahawand</i></p>

	<p><b>Page Hijaz.</b></p> <p>This page depicts the audio player of <i>surah</i> and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Hijaz</i></p>
	<p><b>Page Rost.</b></p> <p>This page depicts the audio player of <i>surah</i> and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Rast</i></p>
	<p><b>Page Sikah.</b></p> <p>This page depicts the audio player of <i>surah</i> and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Sikah</i></p>

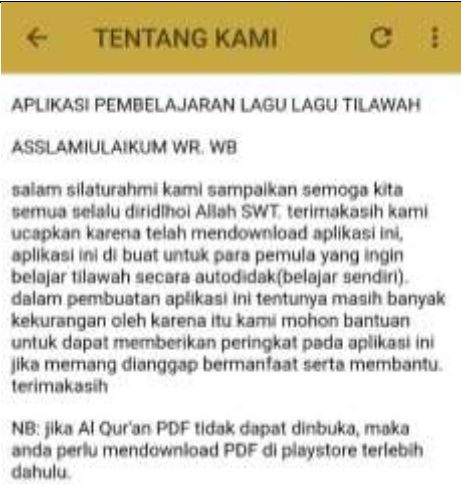
	<p><b>Page Jiharkah.</b></p> <p>This page depicts the audio and text of <i>surah</i> in the same page.</p> <p>Users can check the recitation while listening to the audio synchronously.</p>	<p>Audio and text of <i>surah</i> – <i>Tarannum Jiharkah</i></p>
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#### 5.2.1.9 Belajar Tilawah Dasar App

**Table 5.12:** Belajar Tilawah Dasar App Analysis



Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:  Year: 2020  Size: 42M  Installs: 10,000+  Current version: 3.1  Requires Android: 4.1↑  Content rating: 3+  Reviews:4.8</p>	
	<p><b>Main Page.</b></p> <p><b>Main Menu:</b></p> <ol style="list-style-type: none"> <li>1. Lagu Tilawah</li> <li>2. Tilawah Full Maqro'</li> <li>3. Al-Qur'an PDF</li> <li>4. Tentang Kami</li> </ol>	

	<p><b>Page 1 : Lagu Tilawah</b></p> <p>This page displays 7 <i>Tarannum</i> melodies with 5 variations of Basmalah</p> <p>User can choose each one of it and can play with the audio player whether to play, pause, repeat or play next.</p>	<p>Audio of <i>Tarannum</i> recitation – 7 melodies</p> <p>Types of <i>Tarannum</i> (7 types of <i>Tarannum</i>)</p>
	<p><b>Page 2: Tilawah Full Maqro'</b></p> <p>This page displays the variety of <i>surahs</i> with different <i>Tarannum</i> recitation.</p>	<p>Audio variety of <i>surah</i>.</p>
	<p><b>Page 3: Al-Qur'an PDF</b></p> <p>In this page, once users have touched the 'Al-Qur'an PDF' button, users need to choose the PDF viewer to view the file.</p> <p>Users can see the full text Al-Qur'an in PDF file.</p>	<p>Text of Al-Qur'an in PDF format</p>

	<p><b>Page 4: Tentang Kami</b></p> <p>This page provides introduction of the apps.</p>	
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#### 5.2.1.10 Al-Bayan App

**Table 5.13: Al-Bayan App Analysis**


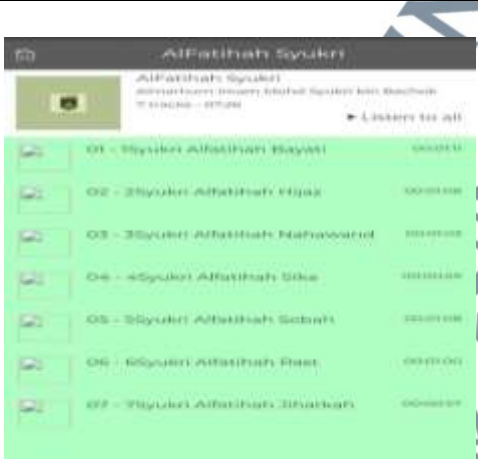
Mobile Apps <i>Tarannum</i>	Page	Elements
	<p>Information of the app:-  Year: 2020  Size: -  Installs: -  Current version: -  Requires Android: -  Content rating: -  Reviews: -</p>	
	<p><b>Front page.</b></p>	


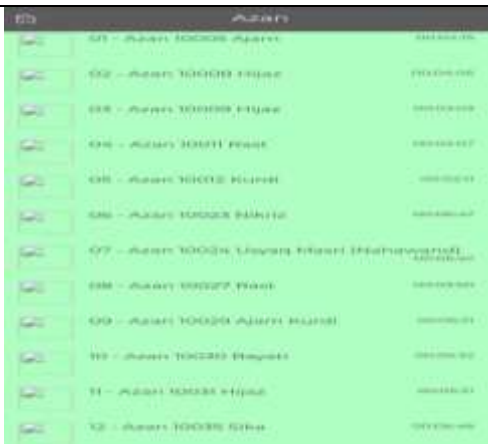

 <p>A yellow navigation menu with five items: Makluman (megaphone icon), Al-Quran (open book icon), Azan (musical note icon), Sumbangan (hand holding coin icon), and Zikir Bayi (hand holding heart icon).</p>	<p><b>Main page.</b> Navigation/Home page.</p> <ol style="list-style-type: none"> <li>1. Makluman</li> <li>2. Al-Qur’ān</li> <li>3. Azan</li> <li>4. Sumbangan</li> <li>5. Zikir Bayi</li> </ol>	
 <p>A screenshot of the 'Al-Quran' page. It features a search bar with 'Alburis' and a 'Play All' button. Below are two featured items: 'Azlan Mohamad Ali' with 28 tracks (2 hours) and 'Mohd Syukri Bachok' with 7 tracks (7 minutes). Each item has an icon of a mosque dome.</p>	<p><b>Page 2: Al-Qur’ān</b></p> <p>Buttons:</p> <ol style="list-style-type: none"> <li>1. Azlan Mohamad Ali</li> <li>2. Mohd Syukri Bachok</li> </ol>	

	<p><b>Page : Azlan Mohamad Ali</b></p> <p>3 buttons:</p> <ol style="list-style-type: none"> <li>1. Juz 30</li> <li>2. Juz 29</li> <li>3. Surah Pilihan</li> </ol>	
	<p><b>Page Juz 30.</b></p> <p>Users can touch and hear the <i>Tarannum</i> recitation by <i>qāri'</i> from <i>surah</i> An-Naba' until <i>Surah Al-Lail</i>.</p>	<p>Audio of verses.</p> <p>Comprises 7 melodies of <i>Tarannum</i> Al-Qur'ān.</p>
	<p>When users touch 'An-Naba' Bayati from page 'Juz 30', this page will appear and users can use the buttons from the player either to play, pause, repeat, rewind etc.</p>	<p>Audio of verses</p>

	<p><b>Page Juz 29.</b></p> <p>Same as page 30, Users can touch and hear the <i>Tarannum</i> recitation by <i>qāri</i>’ in juz 29.</p>	<p>Audio of verses</p>
	<p>When users touch ‘Surah Al-Mulk Hijaz’, from page ‘Juz 29’, this page will appear and users can use the buttons from the player either to play, pause, repeat, rewind etc.</p>	<p>Audio of verses</p>
	<p><b>Page Surah Pilihan.</b></p> <p>In ‘<i>surah pilihan</i>’ page, it displays 3 <i>surah</i> and users can choose each of the <i>surah</i> and hear it.</p>	<p>Audio of verses</p>



	<p>When users touch ‘<i>Surah Al-Mulk Nahawand</i>’, from page ‘<i>Surah pilihan</i>’, this page will appear and users can use the buttons from the player either to play, pause, repeat, rewind etc.</p>	<p>Audio of verses</p>
	<p><b>Page Mohd Syukri Bachok.</b> This page contains ‘<i>Al-Fātihah</i>’ button.</p>	
	<p>When users touch ‘<i>Al-Fātihah Syukri</i>’ button, this page will appear and it contain 7 <i>surah Al-Fātihah</i> with different <i>Tarannum</i> melodies.</p>	<p>Audio of <i>Al-Fātihah</i> with different <i>Tarannum</i></p>




	<p><b>Page 3: Azan</b></p> <p>This page contains 'Azan' button.</p>	
	<p>When users touch 'Azan' button, it will navigate to this page which contains Azan call with different melodies.</p>	<p>Audio of Azan with different <i>Tarannum</i></p>
	<p><b>Page 5: Zikir Bayi.</b></p> <p>This page contains several videos of <i>zikir</i> for babies.</p>	<p>Video of <i>zikir</i> for babies</p>

## 5.2.2 The Components of *Tarannum* Learning in the Existing *Tarannum* Mobile Apps

### 3.1 What are the components of *Tarannum* learning in the existing *Tarannum* mobile apps?

In this section, researcher had employed a document analysis method in order to find out the *Tarannum* mobile apps available in Google Play store. Then, researcher had analyzed the findings by using this matrix analysis. Researcher had developed the matrix in order to figure out the components of *Tarannum* learning in the existing *Tarannum* mobile apps in Google Play store. The matrix analysis then was verified by the experts. Table 5.14 show the matrix analysis of the components of *Tarannum* learning.

**Table 5.14:** A Matrix Analysis of the Components of *Tarannum* Learning

No.	<i>Tarannum</i> Apps	COMPONENTS OF <i>TARANNUM</i> LEARNING						ADDITIONAL FEATURES	
		TYPES OF <i>TARANNUM</i>	<i>TARANNUM</i> VARIATION (HARAKAT)	SURAH		TAUSYIKH			
				Text	Audio	Text	Audio		
1.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	√	√	√	√	√	<i>Tarannum</i> Practice
2.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	√	√	x	x	x	x
3.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	√	√	√	√	√	x

4.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	x	√	√	√	x
5.		Not mention	x	x	√	x	x	Adzan
6.		Not mention	x	x	√	x	x	x
7.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	√	√	√	√	x
8.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	√	√	x	x	x
9.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	√	x	√	x	x	x
10.		1. Bayyati 2. Soba 3. Hijaz 4. Rast 5. Sikah 6. Jiharkah 7. Nahawand	x	x	√	x	x	Video of zikir for babies

Based on the matrix above, it can be concluded that there are six components of *Tarannum* learning that available in the existing *Tarannum* mobile apps. The components of *Tarannum* learning included in the existing apps are types of *Tarannum*, Qur'ānic verses in text and audio, tausyikh in text and audio, *Tarannum* practice, adzan and video.

**Types of *Tarannum*** : Basically, there are two types of *Tarannum* streams which are *Tarannum Misri* and *Tarannum Hijazi*. *Bayyati, Hijaz, Soba, Rast, Sikah, Jiharkah,* and *Nahawand* are *Tarannum* melodies from the types of *Tarannum Misri* that commonly recited by *Tarannum* practitioners whether in professional fields such as qāri' and qāri'ah or in educational field such as teachers and lecturers. These types of *Tarannum* were originated from *Tarannum Misri* that forms from *lahjah Misri*; the Egyptian dialect (Mohd Ali, 2015; Nik Jaa'far, 2012). So, most of the *Tarannum* apps applied this types of *Tarannum* melodies in the recitation.

**Qur'ānic verses in text and audio** : Qur'ānic verses is one of the important components that is necessary for *Tarannum* learning. From the analysis of ten *Tarannum* mobile apps, the component of Qur'ānic verses are in the form of text and audio. Six out of ten apps enclose/include the Qur'ānic verses text. While, all the ten apps included the Qur'ānic verses audio. The audio of *Tarannum* recitation is the component that must have to be included in the apps for the users to learn, hear and follow the *Tarannum* recitation according to the different *Tarannum* melodies. For KKQ *Tarannum* mobile app model, researcher had suggested that the component of Qur'ānic verses in both form; in text and audio form, must be included together in one page, so that users can read and recite based on the audio of *Tarannum* recitation.

***Tausyikh* in text and audio** : *Tausyikh* means an Arabic poems which is used to simplify learners to follow the *Tarannum* melodies. It is one of the methods to measure and feel the melody (Mohd Ali, 2015). The same thing goes with Qur'ānic verses, *tausyikh* component have in two forms which is in text and audio. From the analysis of the existing *Tarannum* mobile apps, some of the apps having both text and audio of *tausyikh*, or some are not having both. For the KKQ *Tarannum* mobile apps

model, researcher suggested that *tausyikh* component should be included in the app both text and audio, based on the interview done by researcher which KKQ teachers need this *tausyikh* as a first step in order to introduce the *Tarannum* melodies to students.

**Additional features: (*Tarannum* practice) :** *Tarannum* practice is the component that have in existing *Tarannum* mobile apps. From this component, users can record their voice or *Tarannum* recitation and they can see the marks given for the recorded voice. This component is an interactive function which can attract users to use the app and always practice *Tarannum* recitation to improve their recitation. Only ‘Tilawah Qur’ān’ app that included this component.

**Additional features : (Adzan) :** Adzan is the Islamic ‘call’ to prayer five times daily. One of the *Tarannum* apps had included adzan with seven different *Tarannum* melodies in order to differentiate the *Tarannum* melodies.

**Additional features : (Video) :** Video component was included in Al-Bayan app. But this video was not related to *Tarannum* recitation. The video included in Al-Bayan app is the video of zikir for babies. Thus, for the model development of KKQ *Tarannum* mobile app, the video on *Tarannum* recitation by famous international or local qāri’ and qāri’ah can be consider to be included in the app as a reference or motivation to KKQ students to recite the Qur’ān with *Tarannum*.

### 5.2.3 The Components of *Tarannum* Learning in the KKQ *Tarannum* Handbook

3.2: *What are the components of Tarannum learning in the KKQ Tarannum handbook?*

In this section, researcher had done an analysis of document whereby researcher had analyzed from the KKQ handbook in finding out the components of *Tarannum* learning for the KKQ syllabus. Table 5.15 below is the matrix analysis for the components of *Tarannum* learning In KKQ Handbook. Based on the matrix analysis below there are three components of *Tarannum* learning in the KKQ handbook which are the types of *Tarannum*, Qur'ānic chapters or Qur'ānic verses that were used in KKQ syllabus for *Tarannum* recitation and the *Tarannum* variation (*harakat*).

**Table 5.15:** An Analysis for the Components of *Tarannum* Learning in KKQ Handbook

COMPONENTS OF <i>TARANNUM</i> LEARNING IN KKQ HANDBOOK			
Form	Types of <i>Tarannum</i>	Chapters & Verses	<i>Tarannum</i> Variation (Harakat)
1	Bayyati	<b>Surah Al Insan</b> (1-3) & <b>Surah As-sajadah</b> (1-3) <b>Surah Al Insan</b> (4-5) & <b>Surah As-sajadah</b> (4)	<i>Tarannum</i> Bayyati (Harakat 1-4) <i>Tarannum</i> Husaini (Harakat 5-6)
2	Nahawand & Rast	<b>Surah Al-Waqiah</b> (Verses 1-6) (Verses 7-9) (Verses 10-17) (Verses 18-23) (Verses 24) <b>Surah Nuh</b> (Verses 1-3) (Verses 4) (Verses 5-7) (Verses 8-11) (Verses 12-13)	<i>Tarannum</i> Bayyati (Harakat 1-4) <i>Tarannum</i> Husaini (Harakat 5-7) <i>Tarannum</i> Nahawand (Harakat 1-5) <i>Tarannum</i> Rast (Harakat 1-5) <i>Tarannum</i> Bayyati penutup <i>Tarannum</i> Bayyati (Harakat 1-4) <i>Tarannum</i> Husaini (Harakat 5-6) <i>Tarannum</i> Nahawand (Harakat 1-5) <i>Tarannum</i> Rast (Harakat 1-5) <i>Tarannum</i> Bayyati Penutup
3	Hijaz & Soba	<b>Surah Al-Jum'ah</b> (Verses 1-2) (Verses 2-3) (Verses 4-5) (Verses 5-6) (Verses 7) <b>Surah As-Soff</b> (Verses 1-3) (Verses 4-5) (Verses 5-6) (Verses 5) (Verses 7)	<i>Tarannum</i> Bayyati (Harakat 1-4) <i>Tarannum</i> Husaini (Harakat 5-6) <i>Tarannum</i> Soba (Harakat 1-5) <i>Tarannum</i> Hijaz (Harakat 1-4) <i>Tarannum</i> Bayyati penutup <i>Tarannum</i> Bayyati (Harakat 1-4) <i>Tarannum</i> Husaini (Harakat 5-7) <i>Tarannum</i> Soba (Harakat 1-5) <i>Tarannum</i> Hijaz (Harakat 1-5) <i>Tarannum</i> Bayyati penutup

4	Sikah & Jiharkah	<b>Surah Al-Munafiqun</b> (Verses 1-2) (Verses 2-3) (Verses 4-5) (Verses 5-7) (Verses 8) <b>Surah Yasinn</b> (Verses 1-6) (Verses 7-9) (Verses 9-12) (Verses 12-15) (Verses 15)	<i>Tarannum Bayyati</i> (Harakat 1-4) <i>Tarannum Husaini</i> (Harakat 5-7) <i>Tarannum Sikah</i> (Harakat 1-5) <i>Tarannum Jiharkah</i> (Harakat 1-5) <i>Tarannum Bayyati</i> penutup  <i>Tarannum Bayyati</i> (Harakat 1-4) <i>Tarannum Husaini</i> (Harakat 5-7) <i>Tarannum Sikah</i> (Harakat 1-5) <i>Tarannum Jiharkah</i> (Harakat 1-5) <i>Tarannum Bayyati</i> penutup
5	All types of <i>Tarannum</i>	<b>Surah Al-Mulk</b> (Verses 1-3) (Verses 3-5) (Verses 5-8) (Verses 9-11) (Verses 12-15) (Verses 16) <b>Surah Al-Mulk</b> (Verses 1-3) (Verses 3-5) (Verses 5-8) (Verses 9-11) (Verses 12-14) (Verses 15)	<i>Tarannum Bayyati</i> (Harakat 1-4) <i>Tarannum Husaini</i> (Harakat 5-7) <i>Tarannum Hijaz</i> (Harakat 1-5) <i>Tarannum Sikah</i> (Harakat 1-4) <i>Tarannum Jiharkah</i> (Harakat 1-5) <i>Tarannum Bayyati</i> penutup  <i>Tarannum Bayyati</i> (Harakat 1-4) <i>Tarannum Husaini</i> (Harakat 5-7) <i>Tarannum Nhawand</i> (Harakat 1-5) <i>Tarannum Rast</i> (Harakat 1-4) <i>Tarannum Jiharkah</i> (Harakat 1-3) <i>Tarannum Bayyati</i> penutup

Source : Bahagian Pendidikan Islam (n.d.)

From the table on the analysis on the Components of *Tarannum* learning in KKQ Handbook, researcher will explain below each of the components that has been analysed.

**Types of *Tarannum* :** For types of *Tarannum*, there are seven types that were used in KKQ syllabus which are *Bayyati*, *Nahawand*, *Rast*, *Hijaz*, *Soba*, *Sikah* and *Jiharkah*. But, the types of *Tarannum* were introduced differently for each form. For example; for form 1, students will learn *Tarannum Bayyati*, for form 2, students will learn *Tarannum Nahawand* and *Rast*, for form 3, students will learn *Tarannum Hijaz* and *Soba*, for form 4, students will learn *Tarannum sikah* and *Jiharkah* and for form 5, students will learn all types of *Tarannum* melodies.



**Chapters and Verses:** For the Qur'ānic verses, in every form, students will have a different *surah* (chapter) to be learnt. Every chapter will be chunk into a few verses and to be recited with different variation (*harakat*) for each of the *Tarannum* types or melodies.

**Tarannum variation :** From the table 5.15 on the matrix analysis, it can be seen that each of the *Tarannum* types has different *Tarannum* variation (*harakat*). According to (Bahagian Pendidikan Islam, n.d.; Mohd Ali, 2015; Nik Jaa'far, 2012), *harakat* means style of singing or chanting that is composed from several *qit'ah* with its particular *mahattah*. *Qit'ah* means the shortest motion of a song without a specific *mahattah* while *mahattah* means end style to a certain *harakat*. Generally, the role of *harakat* is to diversify the sound art, enliven the recitation, improve the quality of performance, and also as a measure of the melodies which to be recited afterwards (Nik Jaa'far, 2012). Basically, in *Tarannum* science, *harakat* has six with its own role which are:

- 1) First *harakat* : is the beginning of *harakat* and its role as adaptation or adjustment with the last *harakat* on the previous melody.
- 2) Second *harakat* : its role as encouragement and stimulation to the following *harakat*.
- 3) Third *harakat* : its role as as *harakat Jawab* (high pitch)
- 4) Fourth *harakat* : its role as *harakat Jawab al-jawab* (highest pitch)
- 5) Fifth *harakat* : its role as decrease *harakat* (prepared to decrease)
- 6) Sixth *harakat* : its role as closing *harakat*.

## 5.2.4 The Elements of Multimedia Included in the Existing *Tarannum* Mobile Apps

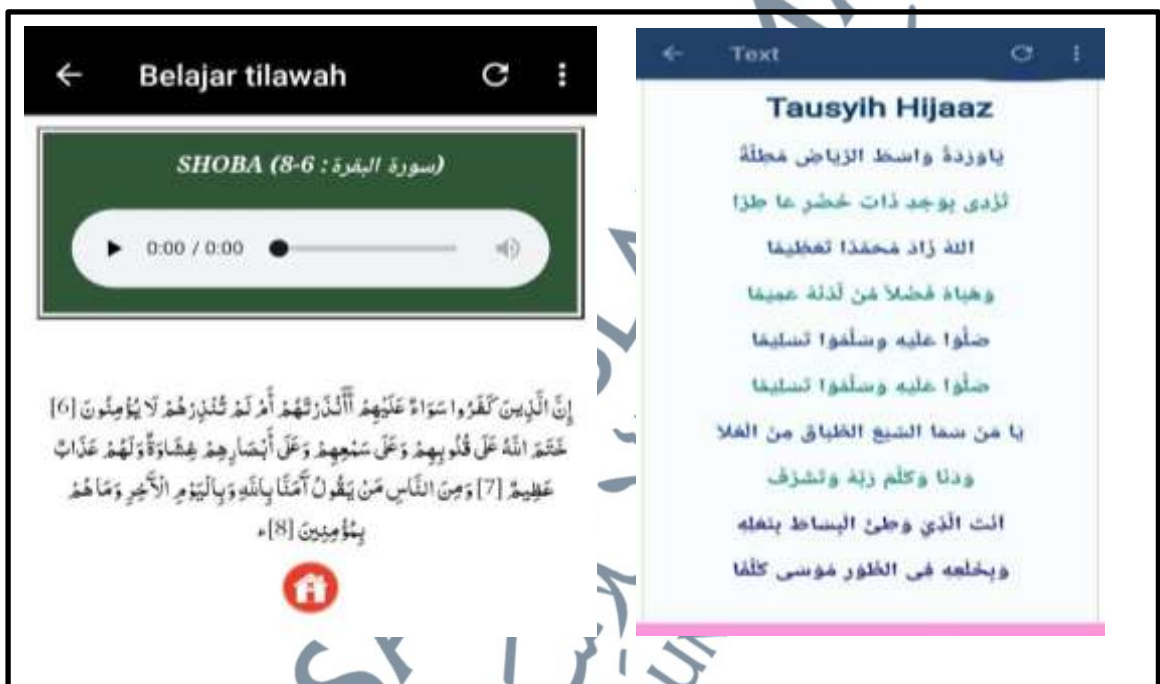
3.3: *What are the elements of multimedia included in the existing Tarannum mobile apps?*

In this section, researcher had come out with the elements of multimedia that were included in the existing *Tarannum* mobile apps. Based on Vaughan (2011) and Costello et al. (2012), there are five elements of multimedia which are text, audio, graphics, video and animation. Researcher had developed a matrix analysis on the elements of multimedia in the existing *Tarannum* mobile apps. Below is the description on each of the multimedia elements.

**Text :** Text is the fundamental information or characters used in many multimedia programs. It is the most common multimedia elements which expresses the information to the viewers. According to Vaughan (2011), text and symbols are one of the important mediums of communication that has been used over the past century till present. It plays an effective way to communicate ideas, conveying news and messages, provide instruction to users and delivers information that can have potent meaning. Its purpose is to express specific information or reinforce information.

The element of text is one of the most important components of a multimedia program. Text is the visual representation of intellectual thought as expressed through a human language system. Text was predicted on humankind's ability to share information and ideas through formally agreed upon conversations of writing. Even in

multimedia age, it continues to rely on text as the primary means of recording, receiving, and transferring human knowledge and ideas (Costello et al., 2012). In explaining about text in the existing *Tarannum* mobile apps, text was in the form of *surah* or *tausyikh* or both. The Figure 5.5 below depicted the example of the text that was presented in the form of *surah* and *tausyikh* in different *Tarannum* mobile apps.

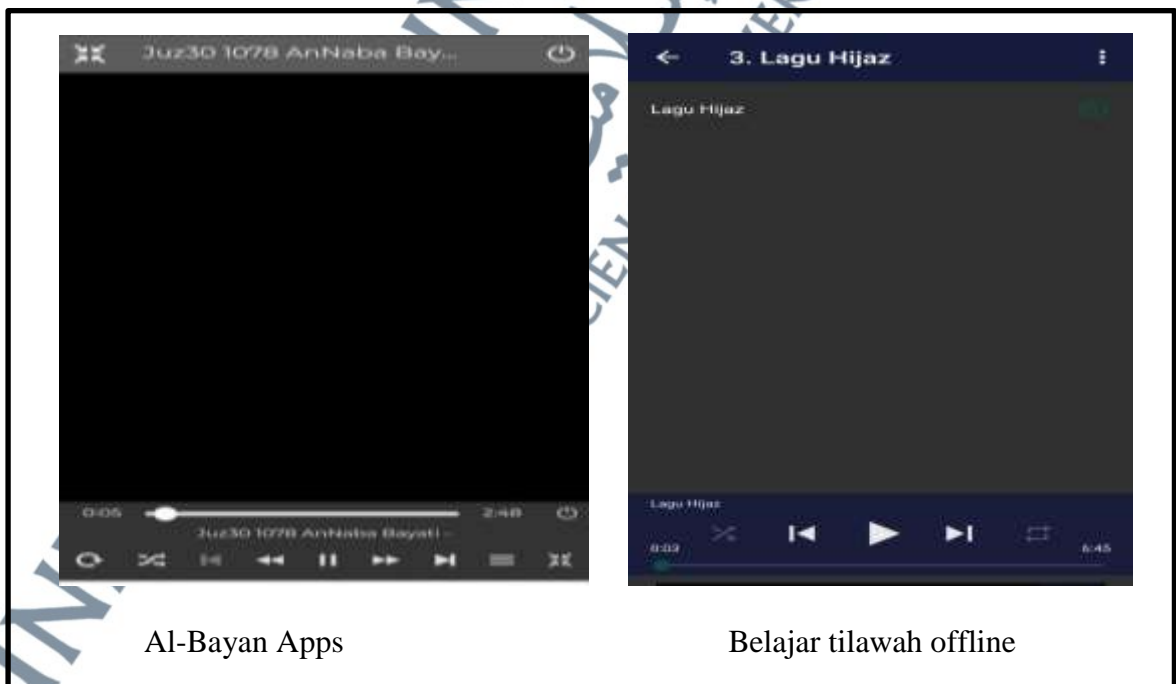


**Figure 5.5:** Example of the Text of Surah (left side) and the Text of Tausyikh (right side)

**Audio :** Audio or sound is one of the multimedia elements in order to convey the information and a great way to catch and focus the users' attention. The use of audio or sound is one of the attractions that can grab and appeal to users' attention. Audio and sound is one of the multimedia elements that can be integrated in multimedia presentation to make the programs become more attractive and users' will not feel bored while using it. According to Jamalludin and Zaidatun (2003), they

claimed that the use of audio system in multimedia presentation has a variation of types such as voice recording, background sound and music and also special sound effect of the audio. From the angle of conveying information, audio elements can help multimedia presentation to be more practical and effective in use.

In some cases, there are several types of information that can not be conveyed effectively without using an audio or sound. In this case, for *Tarannum* subject, the audio is definitely an important multimedia element to be included as the users need to hear the audio of the *Tarannum* recitation for the purpose of training and practicing the recitation. The audio in the existing *Tarannum* mobile apps is in the form of *surah* or *tausyikh* or both. Figure 5.6 below depicted the page of audio elements in different *Tarannum* mobile apps. The audio of *Tarannum* recitation was controlled by the audio player.



**Figure 5.6:** The Audio Player Page for Al-Bayan Apps (left side) and Belajar Tilawah Offline App (right side)

Based from the Figure 5.6 above, the audio player for ‘al-Bayan’ app and ‘belajar tilawah’ app are likely similar in their interface design but the function for ‘al-Bayan’ app are more than ‘belajar Tilawah’ app. These audio players will help users to control and navigating the audio of *Tarannum* recitation easily.

**Graphics or images :** Graphic refers to the image or any type of visual presentation of non-text information or an object that can be displayed on a physical surface like a sheet of paper, wall poster blackboard, or computer monitor. Graphics are a product of human imagination and are typically created by hand or with computer-assisted drawing and design tools. It also includes things like stick figures, symbols, numbers drawings, typography, logos, web buttons, illustrations and line art (Costello et al., 2012).

The use of graphic can convey certain information in the most effective and efficient way due to the presentation in the visual form can help users to really understand, visualise and interpret it (Jamalludin Harun & Zaidatun Tasir, 2003). An icon is a graphical symbol that is often designed to suggest the option it represents. An iconic graphical symbol has many advantages such as they take up less screen space than corresponding textual description and they can be understood more quickly if it were well designed. The icon representing objects such as wall, doors, windows, and circuit elements are often referred to as application icons. The icon representing actions, such as rotate, magnify, scale, clip, or paste and it are called control icons or command icons (Hearn, Baker, & Carithers, 2011).

From the definition above, specifically for this research, graphic is defined as any visual presentation that is presented in the existing *Tarannum* mobile apps such as buttons, icons, pictures or images in a static way without any motion effect or movement. They were displayed in still presentation. In explaining the graphics in the existing *Tarannum* mobile apps, Figure 5.7 below show the example of the graphics elements included into mobile application.



**Figure 5.7:** The Learning Qur'an App with The Graphics and Images Elements

**Video :** Video is a visual multimedia application that combines a sequence of images to form moving pictures and sound (“The Five Elements of Multimedia,” n.d.). Vaughan (2011) in his book stated that video will places the highest performance demand on a computer or device and its memory and storage. Apart from that, video is the most engaging of multimedia venues and it is a powerful tool for bringing users closer to real world. It was also an excellent method for delivering multimedia to an audience. So, to include the video element in a multimedia project, it should be

planned carefully and well-executed. Through document analysis done on the existing *Tarannum* mobile apps, researcher had found that only one *Tarannum* mobile app that is Al-Bayan, has the video embedded to the app, but it was not relevant to the app itself as the developer embedded the video of *zikr* for babies. So, based on this research, researcher had suggested to put the video of famous *qāri'* reciting Qur'ān with *Tarannum* inside the KKQ *Tarannum* mobile app.



**Figure 5.8:** The Videos that was embed in the Al-Bayan Mobile App

**Animation :** Animation refers to moving graphics images or a series of graphics that create an illusion of motion. By definition; animation makes static presentation comes alive. It is a visual change to the web pages, slide presentations and other multimedia projects by the use of multimedia application software or multimedia authoring tools. Animation is an object actually moving across or into or out of the screen. It is also the primary source of dynamic action (Vaughan, 2011). Animation in other sense is a series of images in rapid succession to create the illusion of movement. A good animation also seeks to communicate some type of message









and, it is hoped, to make the viewers forget that they are looking at a bunch of drawing or images. Animation relies on the fact that the brain can interpret a series of static images in rapid succession as object in motion (Villalobos, 2008). As the definition suggested by Chapman and Chapman (2011), animation may be defined as the creation of moving pictures in one frame at a time, though the term 'pictures' may be interpreted broadly to include pictures of text, for example. Animation works in which the elements or characters such as sequence of drawing or painting on paper intended to change or move during the sequence are altered or repositioned in each drawing. The persistence of vision causes the succession of still images to be seen as a continuous moving image, despite the fact that an animation is nothing but an illusion.



In other definition from the previous study, animation refers to the process in making some objects become alive or it is a picture that shows the static things to be movable or the transition and transformation occurred to the object, picture, illustration text and so on (Jamalludin & Zaidatun, 2003). Thus, in this research the animation term can be defined as an animated transition or motion visual presentation that is displayed on a user's mobile devices. Based on the Table 5.16, a matrix analysis on the elements of multimedia in the existing *Tarannum* mobile apps; all the apps were very straightforward, as there is no animation or any animated transition applied in the apps presentation. There was no animation inserted during the gap from one page to another only for 'al-Bayan' app. According to Dessart, Motti, and Vanderdonckt (2012), animated transitions are subject to a series of potential shortcomings as they may require more cognitive workload and may also cause user distraction.



Based on the description above, researcher had developed a matrix analysis on the elements of multimedia that have in the existing *Tarannum* mobile apps. The matrix analysis done in order to figure out the elements of multimedia that was commonly applied in the existing *Tarannum* mobile apps to be embedded into KKQ *Tarannum* mobile app. Table 5.16 below presented a matrix analysis done on the elements of multimedia in the existing *Tarannum* mobile apps.

**Table 5.16:** A Matrix Analysis on the Elements of Multimedia in the Existing *Tarannum* Mobile Apps

No.	<i>Tarannum</i> Apps	ELEMENTS OF MULTIMEDIA						
		TEXT		AUDIO		GRAPHICS	VIDEO	ANIMATION
		Surah	Tausyikh	Surah	Tausyikh			
1.		√	√	√	√	√	x	x
2.		√	x	√	x	√	x	x
3.		√	√	√	√	√	x	x
4.		x	√	√	√	√	x	x
5.		x	x	√	x	√	x	x
6.		x	x	√	x	√	x	x
7.		√	√	√	√	√	x	x
8.		√	x	√	x	√	x	x

9.		x	x	√	x	√	x	x
10.		x	x	√	x	√	Video of zikir for babies	√

As depicted in the table above, researcher had done a survey on the existing *Tarannum* mobile apps. Researcher had listed ten *Tarannum* mobile apps and done the matrix analysis on the elements of multimedia that are available in each of the *Tarannum* mobile apps. The elements of multimedia were text, audio, graphics, video and animation. For text and audio, researcher had categorized it into *sūrah* and *tausyikh*. Based on the table, it can be concluded that the audio of *sūrah* and the graphics elements are the important elements that have to be included into mobile apps for *Tarannum*. As in *Tarannum* al-Qur’ān learning, voice or audio is the main thing to deliver the learning. For graphic elements, it is the main component to be included in every multimedia product to simplify the presentation and attract the users to utilize the learning product. For video, none of the *Tarannum* mobile apps included the video, except for only one app, ‘al-Bayan’ app which has included the video into the app. However, the video is not related to *Tarannum* learning or *Tarannum* recitation, the embedded video is the video of *zikir* for babies. For animation element, all of the studied apps did not apply any animated transition in the presentation; as all the apps were very straightforward in presenting the content or learnings except for ‘al-Bayan’ app.


### 5.2.5 The Features of the Existing *Tarannum* Mobile Apps



#### 3.4: What are the features of the existing *Tarannum* mobile apps?

In comparing the existing *Tarannum* mobile apps from Google Play Store, researcher had conducted a search through Google Play Store app and also Google Play Store website. Through this search, researcher had found out that there are small amount of *Tarannum* mobile apps available in the market. The search on *Tarannum* mobile apps conducted by using the keywords “*Tarannum* al-Qur’ān”, “Maqamat al-Qur’ān”, and “Tilawah al-Qur’ān”.





Through this section, as researcher had selected the ten *Tarannum* mobile apps, this study then segregates it based on the apps category which are education category, music and audio category and book and reference category. This study compared the features of ten existing *Tarannum* mobile apps in a matrix analysis based on its interface, performance, user friendly, the cost for downloading mobile apps and the use of internet while using the apps for each of the mobile apps. Table 5.17 below present the *Tarannum* mobile apps features based on education category.



**Table 5.17:** *Tarannum* Mobile Apps Features Based on Education Category

No.	<i>Tarannum</i> Apps	Features				
		Interface	Performance	User friendly	Cost	Internet
1.	 Tilawah Qur’ān	Nice interface with suitable colour choice	Very good and smooth performance	Easy to use, simple and easy to understand how to use it	Free	Offline


2.	 Belajar BerTarannu m mp3	Very simple interface and not attractive	Good and smooth performance	Simple and easy to understand how to use it but need to install plug in to display the document in the app	Free	Offline
3.	 AlQur'an (Belajar Qiraat)	Nice interface but not suitable colour choice as the font can not clearly be seen	Very good and smooth performance yet too simple	Easy to use, simple and easy to understand how to use it.	Free	Offline

**Table 5.18:** *Tarannum* Mobile Apps Features Based on Music and Audio Category

No.	Tarannum Apps	Features				
		Interface	Performance	User friendly	Cost	Internet
4.	 Learning Al-Qur'an	Nice interface with attractive colour choice with a little graphics used.	Very Low performance. No audio player button to play or stop; too much ads; some of the buttons are not functioning	Easy to use, simple and understand how to use it but the buttons are not functioning well and the navigation is not working properly	Free	Offline
5.	 Tn Hj Radzi Kamarul Hailan	Very simple interface and not attractive	Very low performance with too many ads; the audio cannot be downloaded and played	Easy to use and simple but the buttons are not working properly	Free	Offline
6.	 Syarifah Khasif Fadzilah	Very simple interface yet suitable colour choice	Low performance with too many ads	Easy to use and simple; not working properly as it has too many ads.	Free	Offline
7.	 Belajar tilawah offline	Have a simple interface yet suitable colour choice	Low performance and too simple; a lot of interrupting ads	Easy to use, simple and understand how to use it	Free	Offline

8.	 Belajar Tilawah Dasar	Have a simple interface yet suitable colour choice	Good and smooth performance but too simple	Easy to use, simple and easy to understand how to use it; the buttons and navigation are working properly	Free	Offline
9.	 Al-Bayan	Have a nice interface with little graphics used.	Good and smooth performance but too simple	Easy to use, simple and easy to understand how to use it; the buttons and navigation are working properly	Free	Offline

**Table 5.19:** *Tarannum* Mobile Apps Features Based on Book and Reference Category

No.	Tarannum Apps	Features				
		Interface	Performance	User friendly	Cost	Internet
10.	 Belajar tilawah	Very nice interface and suitable colour choice	Very good and smooth performance	Easy to use, simple and easy to understand how to use it; the buttons and navigation are working properly	Free	Offline

The analysis from ten *Tarannum* mobile apps, none of it were based on KKQ *Tarannum* syllabus. This study had figured out the features of the existing *Tarannum* mobile apps based on their interface, performance, user friendly, cost and the internet.

Based on the interface and performance, most of the apps have moderate interface and performance. While being user friendly, as most of the apps are easy to use and navigate; for some of the apps, the buttons are not functioning well. For the cost in downloading the mobile apps, all the *Tarannum* mobile apps were free to be

downloaded and for the all of the mobile apps can be used while the mobile devices are in offline mode.

### 5.3 The Research Model Prototype of KKQ Meaning-Based *Tarannum* Mobile App

The research model prototype of KKQ meaning-based *Tarannum* mobile app was developed based on the document analysis conducted through the existing *Tarannum* mobile apps and KKQ handbook by the Ministry of Education (MoE). All the components of the research model prototype were extracted in the form of matrix analysis and the model of KKQ *Tarannum* mobile app prototype were developed based on the Figure 5.9 below.

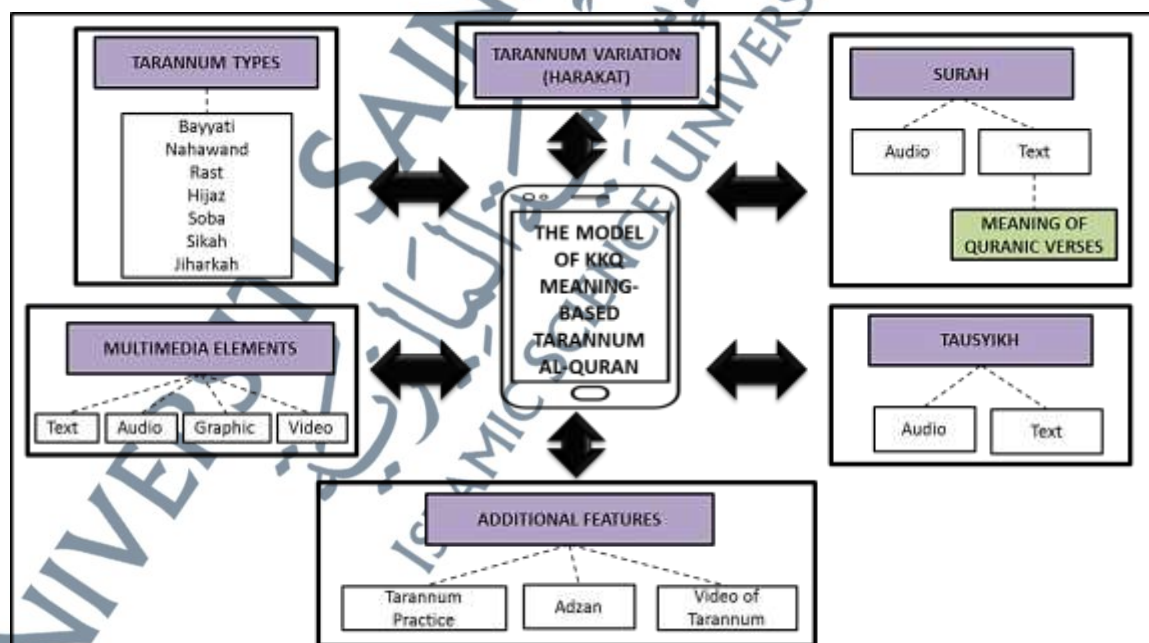


Figure 5.9: The Prototype Model of KKQ Meaning-Based *Tarannum* Al-Qur’ān

As depicted in the Figure 5.9 above, there are six main elements that the KKQ meaning-based *Tarannum* Al-Qur'ān mobile application model should have. The main elements of the model are (1) *Tarannum* types which consist of seven types of *Tarannum* (i.e. *Bayyati*, *Nahawand*, *Rast*, *Hijaz*, *Soba*, *Sikah* and *Jiharkah*), (2) *Tarannum* variation (*Harakat*), (3) *Surah*; with the audio or text or both of the *surah* (4) *Tausyikh*; that have the audio or text or both of *tausyikh*, (5) additional features (*Tarannum* practice, *Adzan*, Video of *Tarannum*), and (6) multimedia elements (text, audio, graphics, and video).

In ***Tarannum* type's** component, there are seven melodies of *Tarannum* which are *Bayyati*, *Nahawand*, *Rast*, *Hijaz*, *Soba*, *Sikah*, and *Jiharkah*. These melodies were from the *Tarannum Misri* which is formed from *lahjah Misri* (Egyptian dialect). Each type of *Tarannum* melodies has its own characteristics, thus the recitation of *Tarannum* must be recited based on its characteristic which for example, *Tarannum Hijaz* is suitable for verses which indicates the command, prohibits and anger. So, the verses that indicate those meaning has to be the example for that type of *Tarannum*.

***Tarannum variation*** is the *harakat* of *Tarannum*. Based on Nik Jaa'far (2012), there are six *harakats* which is *harakat* 1 until *harakat* 6 and every *harakat* has its own role. From the analysis of KKQ handbook, each of the *Tarannum* melodies has to be recited in different *harakat*. For example; in reciting *Tarannum Bayyati*, *surah As-sajadah* verses one until three, it must be recited based on *harakat* one until *harakat* four.

**Surah or chapters** is used to be the recitation of *Tarannum* al-Qur'ān, it is the selection of chapters from the Qur'ān. Based on the analysis done on the existing *Tarannum* mobile apps, the chapters were comprised of *surah Ar-Rahman*, *surah al-*

*Baqarah, surah al-Mulk, surah al-Alaq* and the few more chapters that were chunk into verses. The form of chapters and verses of the Qur'ān is whether in the form of audio or text or both. Based on the analysis done on the KKQ handbook, the chapters were from the selected *surahs* which are *surah al-Insan, surah as-Sajadah, surah al-Waqiah, surah Nuh, surah al-Jum'ah, surah as-Soff, surah al-Munafiqun, surah Yasinn* and *surah al-Mulk*. All of these *surahs* were chunked into verses and recited based on different *Tarannum* melodies with its variation (*harakat*).

**Tausyikh** is the formula or Arabic poems in each of the *Tarannum* melodies. The stanzas of *tausyikh* were used in order to learn and identify the *Tarannum* melodies. Based on the analysis done on the existing *Tarannum* mobile apps, *tausyikh* for each melody is whether in the form of audio or text or both.

**Additional features** are the additional components that are available in the existing *Tarannum* mobile apps. Based on the analysis done to the existing *Tarannum* mobile apps, researcher had found that there are three interesting features that can be included into the KKQ *Tarannum* mobile app model. The features are *Tarannum* practice, Adzan, and Video of *Tarannum*).

- 1) The function of *Tarannum practice* is whereby users can do the *Tarannum* recording voice and the apps are managed to give the marks for the recording of *Tarannum* recitation. This engaging function is attractive and will grab the users' interest to do more practices on *Tarannum* recitation.
- 2) Adzan is the additional feature that is available in one of the existing *Tarannum* mobile apps.



The Adzan (the call prayer) were chanted according to seven *Tarannum* melodies that are *Bayyati*, *Nahawand*, *Rast*, *Soba*, *Hijaz*, *Sikah*, and *Jiharkah* in order to educate users or learners on the different types of *Tarannum* melodies.

- 3) Video of *Tarannum* is one of the additional features that can be included in the designed KKQ mobile app model in order to attract the users' interest to learn and practice the *Tarannum* recitation. For example; the video of a famous reciter who recites the Qur'ān with *Tarannum* recitation.

For the **multimedia elements**; researcher had proposed four types of multimedia elements required in developing *Tarannum* mobile app for KKQ classes. The elements are the text, audio, graphic, and video.

- 1) Text elements that is the text of chapters or verses from the KKQ syllabus that should be included to the apps. Besides, the texts of *tausyikh* in the form of text were also relevant to be inserted to the apps. These kind of text elements were proposed to be inserted into the *Tarannum* apps as the users can check the recitation of *Tarannum*.
- 2) An audio element which is the sound of *Tarannum* recitation is one of the important elements and a must have element in order to teach *Tarannum* recitation. It can be whether the audio of Qur'ānic verses or the audio of *tausyikh*. These two series of audio is relevant to be embedded into mobile apps model as the audio elements are one of the main elements in order to deliver the *Tarannum* learning.
- 3) Graphics is defined as an image or visual representation such as pictures, maps, symbols, logos, buttons and etc. In developing mobile apps for learning purpose, graphics is useful elements to be inserted into the apps as the size of the space on mobile screen is small and quite limited. The useful graphics such as buttons to

enter the page, the picture as the background, the iconic buttons that show on certain meaning or function that helps users to navigate throughout the apps, will be very helpful and user-friendly. These kinds of graphics will help to reduce the space in certain multimedia program.

- 4) A video element is one of the important elements in teaching the *Tarannum* al-Qur'ān recitation. For example; the video of *Tarannum* recitation by famous qāri' were relevant to be embedded into this KKQ *Tarannum* mobile apps model as to grab the students' interest to learn *Tarannum* al-Qur'ān. At the same time, the video of the qāri' or qāri'ah can be the example on how to recite the Qur'ān with *Tarannum* and users can practice to recite al-Qur'ān with *Tarannum* together with the video provided.

For the element of **Qur'ānic verses meaning**, researcher proposed that the element of meaning of Qur'ānic verses should be included into the KKQ *Tarannum* mobile apps in the form of text; so that the element of meaning can be applied into the *Tarannum* recitation as users understand the meaning of the verses. At the same time, users can feel and appreciate (*tadabbur*) with the Qur'ān recitation.

#### **5.4 Summary of research findings phase 2**

In this chapter, which is chapter 5, researcher had presented the findings from phase II of the DDR approach which is the Design and Development phase. Detail analyses of phase II were discovered in this chapter whereby researcher discovered on research question 3. In order to answer the research question 3, four sub-research questions has been formulated in directing the study.

Based from the findings on this phase; the design and development phase, a KKQ meaning-based *Tarannum* mobile app model has been formed. The model is developed from several document analyses that were conducted by the researchers. The document analysis towards the ten existing *Tarannum* mobile apps through Google Play Store application were conducted in order to figure out the elements of *Tarannum* learning that have in the apps. Furthermore, the study has also figured out the elements of multimedia that are included in the apps that work in attracting the users to utilize the application as one of the learning material. Besides, this study were explore on the features that are available in the selected *Tarannum* mobile apps. On top of that, the document analysis towards the KKQ handbook was conducted in order to figure out the element of *Tarannum* learning that are applied for KKQ students. The outcomes from these analyses are the matrix analysis that presents components of *Tarannum* learning, the multimedia elements, and the features of each of the existing *Tarannum* mobile apps.