

CHAPTER IV IMPLEMENTATION

4.1 Application Implementation

The implementation stage is the stage where the research output titled “Designing Learning Media for Bataknese Cuisine Using Multimedia Development Life Cycle (MDLC) Method” will be installed and opened. In the making of this learning application, first I gather the assets or materials such as information about Bataknese Cuisines, the recipes, pictures, videos, and background music. Then, I use Adobe Premiere CS6 to edit the videos and combine it with background music. I set the video scale to 150, unlink the audio from the video and replace it with background music, using cut tool to discard the unwanted parts of the video and audio, and add keyframes for the audio to slowly decrease the volume at the end of the video. The files are exported into mp4 format with 720p resolution (Figure 4.1).

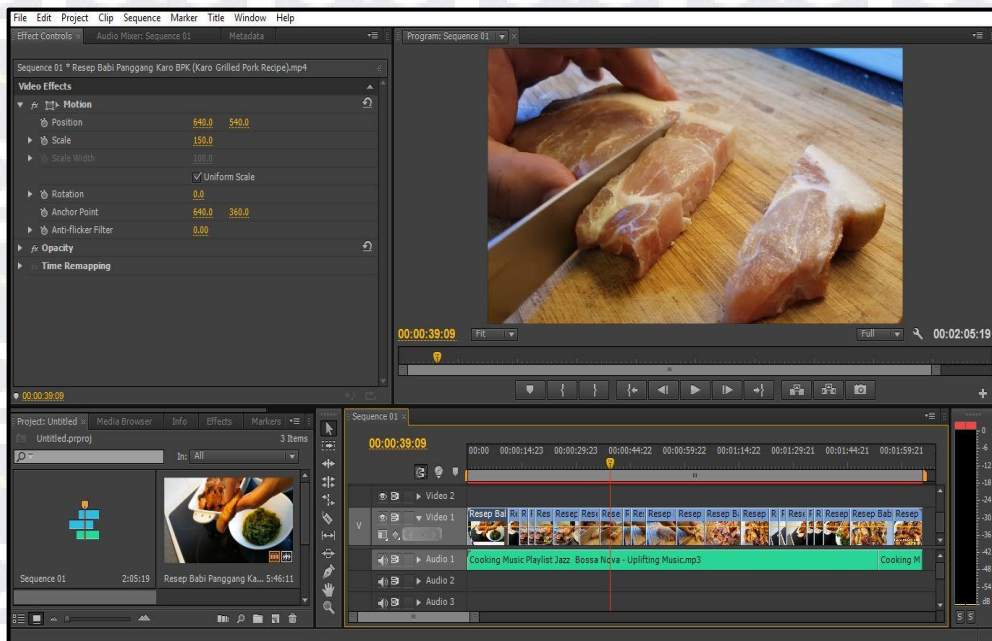


Figure 4.1 Editing the videos

After the videos are done, I use Unity 2D to start developing the learning application. First, I made the UI by placing Canvas and Panel to place the background and objects. Then, I make some buttons to navigate through the application. For the buttons to work, I have to do coding by using C# programming language in Visual Studio. First, I add the new component in the inspector for the button in Unity. After that, it will open a programming software to do the coding.

After done with the coding, I set the button function with the code I made before.

This learning application consists of 6 pages:

1. Main Menu page

This page contains the application's title with Menu and Quit buttons which are made using LiberationSans SDF font type from Text Mesh

Pro, Font Sizes 70pt for the title, 55pt for the Menu button, 50pt for the Quit button, FFC757 to FFA34A color gradient from top to bottom for the title, menu and quit buttons. Adding color tint transition effect for

the Menu and Quit buttons that show a darker color when highlighted and clicked. I use a green background for the panel and decorate it with

PNG objects that are related with cooking such as vegetables and

kitchen utensils. For the buttons, I use LoadScene function in Menu

Button to make it go to the List of Menu page and quit function for the

Quit button to exit the application when clicked. (Figure 4.2).



Figure 4.2 Main Menu page

2. List of Menu page

This page contains a selection of categories including Main Dishes, Snacks and Beverages, Spice and Seasonings, Quiz and Back buttons which are made using LiberationSans SDF font type, Font Sizes 70pt for the title, 35pt for the Main Dishes, Snacks and Beverages, Spices and Seasonings, Quiz and Back Buttons. Using FFC757 to FFA34A color gradient from top to bottom for the title, Main Dishes, Snacks and Beverages, Spices and Seasonings, Quiz and Back buttons. I also use a green background for the panel and decorate it with PNG objects such as vegetables and kitchen utensils. LoadScene function are used in Main Dishes, Snacks and Beverages, Spices and Seasonings, Quiz and Back buttons. Main Dishes button will take the user to Main Dishes page contents, Snack and Beverages button will go to Snacks and Beverages contents, Spices and Seasonings button will go to Spices and Seasonings contents, Quiz button will go to the Quiz section and Back button will

go to the previous page when clicked. Adding color tint transition effect for the Main Dishes, Snacks and Beverages, Spices and Seasonings, Quiz and Back buttons that show a darker color when highlighted and clicked (Figure 4.3).

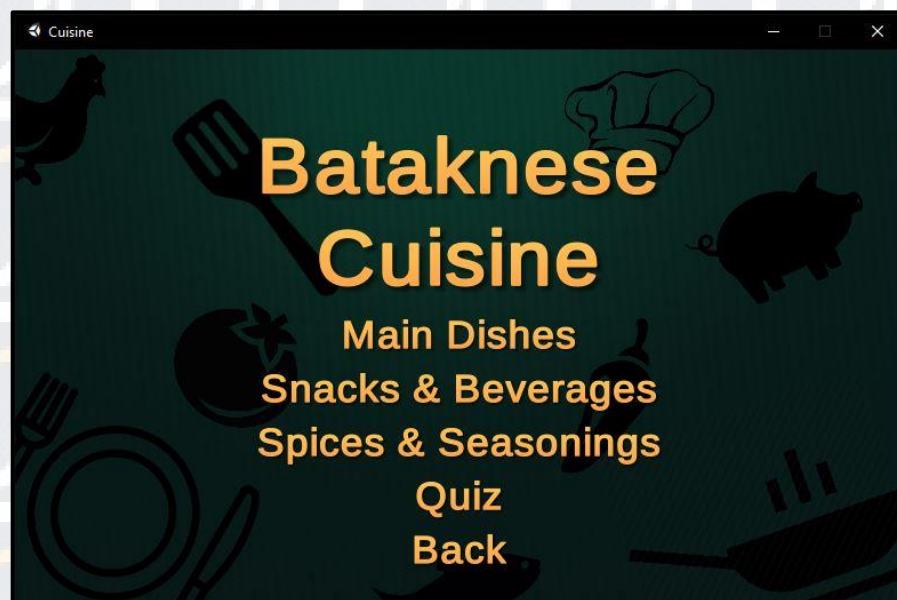


Figure 4.3 List of Menu

3. Main Dishes page

This page contains Main Dishes names with pictures that work as buttons and Back button. Using LiberationSans SDF font type to make the names of each dishes and Back button, font size 30pt for dishes names and 40pt for Back button. Using FFC757 to FFA34A color gradient from top to bottom for dishes names and Back button. I also use the same green background and PNG for this page. For the buttons in the Main Dishes, I use their picture as a button that will take you to its description, recipe and video and Back button will take you back to Menu page by inserting LoadScene function in each picture. In the dish page, I use LiberationSans SDF font type to make the name of the dish,

the description, fun fact, How to make, Recipe and Back button, font size 30pt for dish name, 10pt to 15pt for the description and fun fact and 40pt for How to cook, Recipe and Back button. Using FFC757 to FFA34A color gradient from top to bottom for dish name, How to cook, Recipe and Back button. Using white font color for the description and recipe and yellow for the fun fact. I also use the same green background and PNG for this pages. The recipe button will take the user to the dish recipe page and how to make buttons will go to video page. Also added an effect to the buttons where it will be highlighted darker if you hover the mouse over it. For the videos in how to cook page, i use a function that plays the video and use play/pause function to make the video pausable when clicked. Back to menu button will go to Main Dishes page and Back to recipe will go to the dish recipe page (Figure 4.4, Figure 4.5, Figure 4.6 and Figure 4.7).



Figure 4.4 Main Dishes page

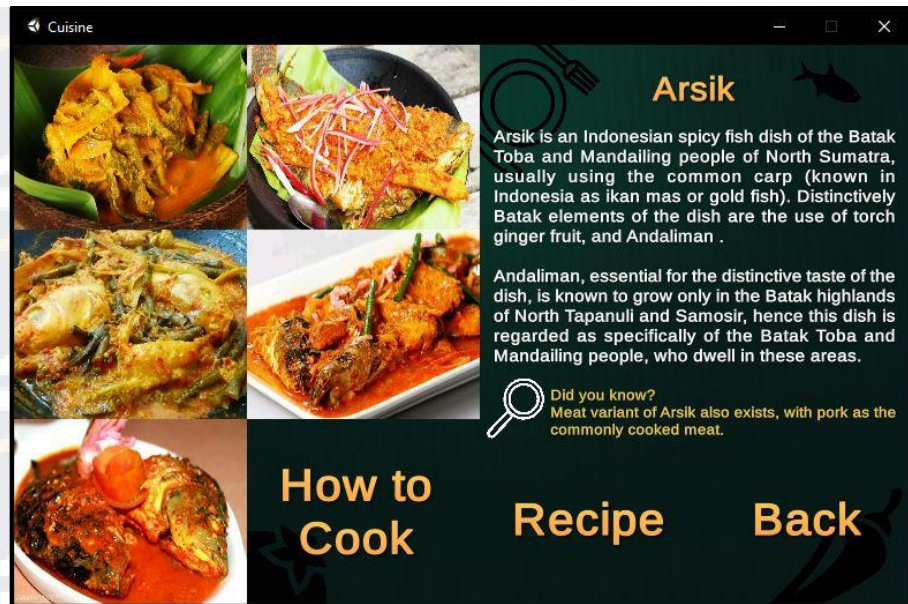


Figure 4.5 Dish descriptions

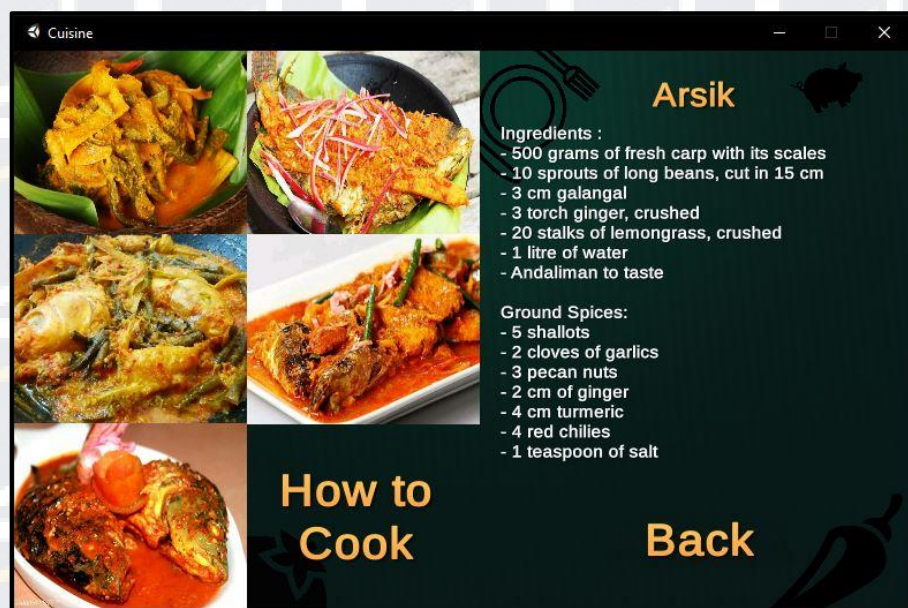


Figure 4.6 Dish Recipe



Figure 4.7 Dish Video

4. Snacks and Beverages page

This page contains Snacks and Beverages names and pictures that works as buttons. For the dish name and back button, I use LiberationSans SDF font type, font size 25pt for dish names and 40pt for Back button. Using FFC757 to FFA34A color gradient from top to bottom for dishes names and Back button. I also use the same green background and PNG for this page. Each dish picture that works as a button will take you to its descriptions and Back button will go to Menu page by using LoadScene function in it. In the description page, I use LiberationSans SDF font type, font size 30pt for dish names, 10pt to 15pt for the description and 40pt for Back button. Using FFC757 to FFA34A color gradient from top to bottom for dish name and Back button. As for the description, I use white font color for easier to read. The Back button will take you to Snacks and Beverages page (Figure 4.8 and Figure 4.9).



Figure 4.8 Snacks and Beverages Page

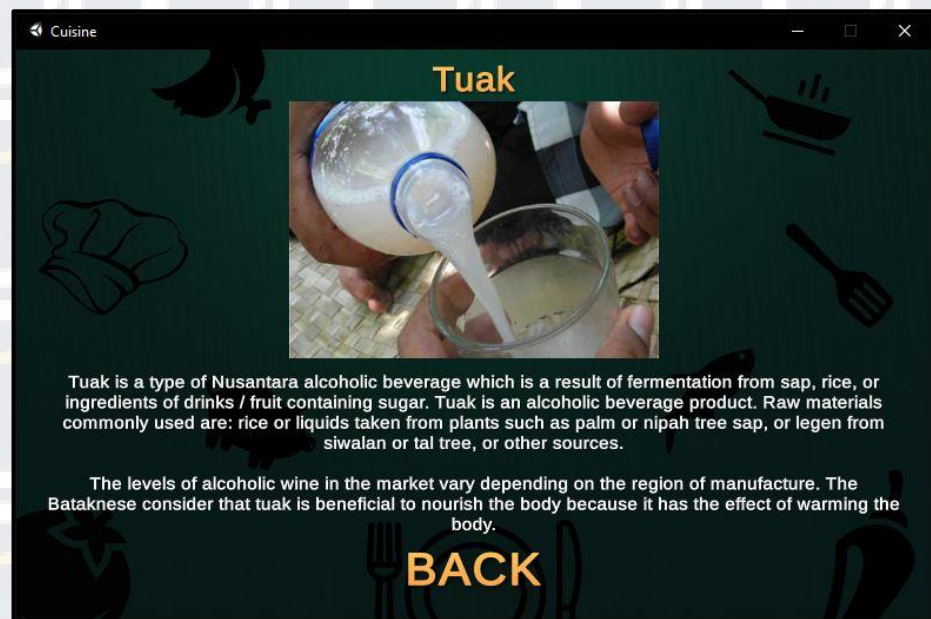


Figure 4.9 Snacks and Beverages Descriptions

5. Spices and Seasonings page

This page contains Spices and Seasonings names, picture, descriptions, left arrow, right arrow and Back button in Bataknese Cuisine. The title and description are made by using LiberationSans SDF font type, font size 30pt for the title, 15pt for the description and 40pt for Back button.

Using FFC757 to FFA34A color gradient from top to bottom for the title, arrows and Back button. I also use the same green background and objects for this page. The two arrows are buttons that will navigate to the next or previous picture and content by using the LoadScene function in it. Back button also use LoadScene function that will take you back to Menu page. All the available buttons are using the same effect that will show a darker color when highlighted and clicked. (Figure 4.10).

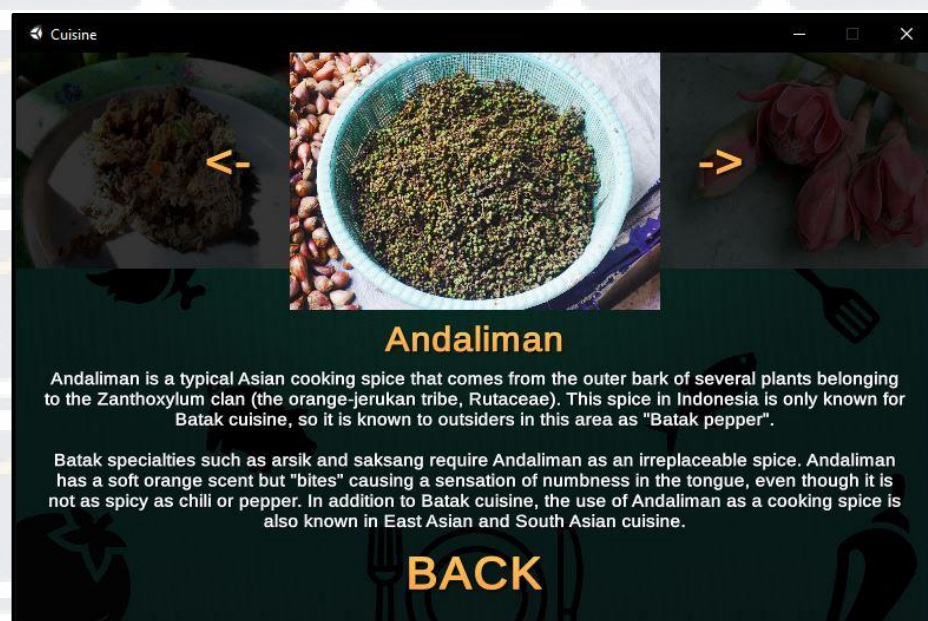


Figure 4.10 Spices and Seasonings Page

6. Quiz page

This page contains quizzes, each question have four options related to Bataknese Cuisine. I use LiberationSans SDF font type, font size 30pt for the question, answers and Back button. For the question and back button, I use FFC757 to FFA34A color gradient from top to bottom. I also add the effect for the answers and back button which will show a darker color when highlighted and clicked. Each question page has one

right answer and each of the answer button will take you to the right answer page by using LoadScene function in it. The answer will have white font color before you clicked one of the four and will be highlighted in green after you answer the question. The back and next buttons are also using the LoadScene function. Back button will take you back to the Menu page and Next button will take you to the next question. (Figure 4.11, Figure 4.12).

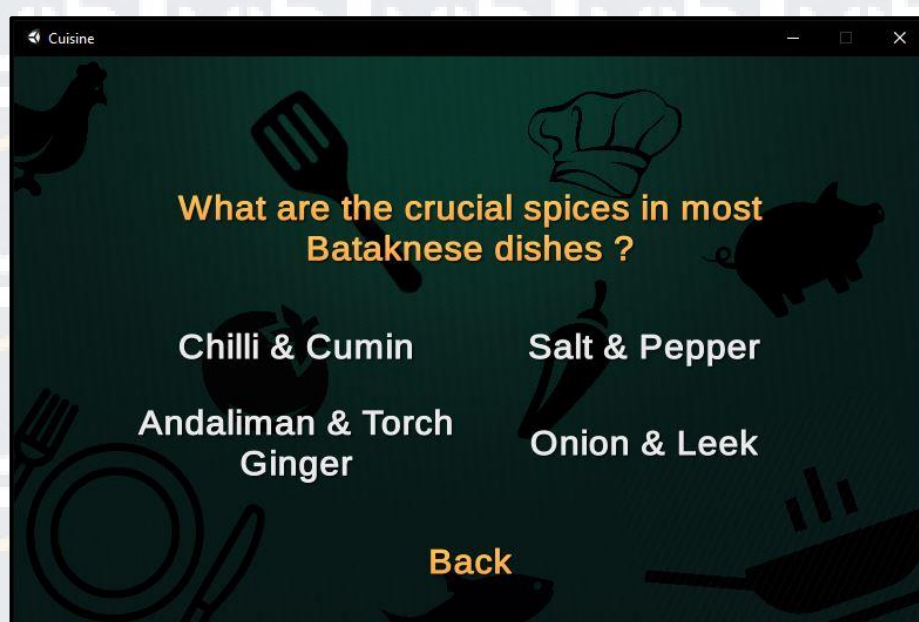


Figure 4.11 Quiz page

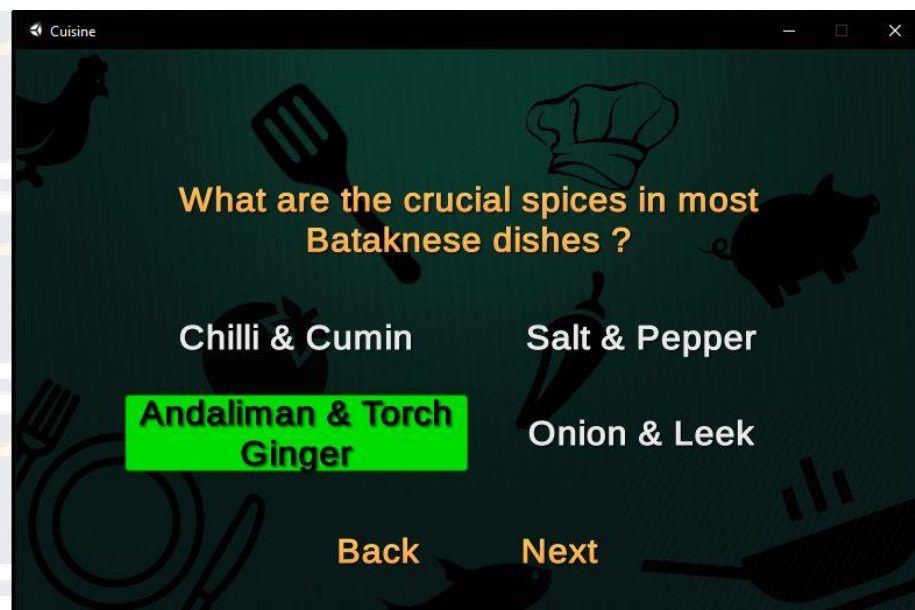


Figure 4.12 Right answer

After the development is finished, the application is built using Unity and stored in a folder. The output of this research is in form of .exe format which can be opened on Windows platform.

4.2 Testing Table

Bataknese Cuisine Learning Media tested by the author. The success of the testing are summarized in Table 4.1:

Table 4.1 Testing Table

Panel	Description	Status
1.1	Whether the contents of Main Dishes is in accordance to the storyboard.	Succeed
1.2	Whether the contents of Snacks and Beverages is in accordance to the storyboard.	Succeed
1.3	Whether the contents of Spices and Seasonings is in accordance to the storyboard.	Succeed
1.4	Whether Quiz is in accordance to the storyboard.	Succeed
2	Whether the application run on the platform.	Succeed
3	Whether the buttons in the application function properly.	Succeed

4.3 Implication

The result of the project is Bataknese Cuisine learning application. This application contains the information, recipes, and videos on how to make Bataknese dishes. With this application, it can help in introducing Bataknese cuisine to the public, provide knowledge and fun way to learn about Bataknese typical dishes. People can become more interested in local specialties and cultures so they will try to preserve it, also introducing the uniqueness of the cuisine to people abroad can make it famous outside and attract tourists to visit.