CHAPTER III

RESEARCH METHODOLOGY

3.1 Material Research

The material used in research is as follows:

1. Imbuhan Prefix (ber, men, ter, pen)

2. Imbuhan Suffix (an)

3. Imbuhan Konfiks (men-kan, men-i, ke-an, per/pen-an).

3.1.1 The tool of Research

The tools used in this research is as follows:

3.1.1.1 Laptop

Laptop uses to the development process of application. The laptop is used by writers having specifications as follows:

a. Processor Intel Core i3 M 360 2,53 Ghz

b. RAM 4 GB

c. Hard disk 1 T

3.1.1.2 Mobile Android Device

A mobile device based android used to run a test against application mobile which has been built. Device has specification as follows:

a. Android version: 5.1.1 LMY47V and Android security patch level

b. CPU: Hexa-core Max1.8GHz

c. RAM 2 GB, Internal memory (16GB)

3.1.1.3 Software

In the development of this application, specification material or software that use is as follows:

- Operation System: Window 10

- IDE and Android Studio SDK (Software Development Kit)

3.1.2 Research Step

Steps will be taken in this research is:

3.1.2.1 Literature study

The literature study is done by studying literature, a book or brochures anything to do with an object the treatment. Use this method is expected to clarify the theory and purposes of the analysis and get the data indeed.

3.1.2.2 The initiation of study

Spreading the questionnaire on Cambodian students to knew about the problem in learning process 'Imbuhan'.

3.1.2.3 Interview

Writer gathers material by asking questions and answers directly for lecturers and teachers indonesian directly teaching Cambodian

students, for this application, it developed to be easily understood and compelling to Cambodian students.

3.1.2.4 Method of development software

a. Analysis development software requirement

Analysis was done by analyzing the data and information obtained so that can be used as the software development. The result of analysis be documents technical specifications software requirement.

b. Development Software Design

Design be done to get a description of architecture software, a description of interface, a description of data, and descriptions of procedural. The design of documents description of design software.

c. Software Implementation

The implementation of done by translating description of design into based program mobile.

d. Software Testing

Testing was done by two stages, that is testing functionality software and testing users. Testing software by the user was done by means of share questionnaire to know their opinions regarding application developed by this.
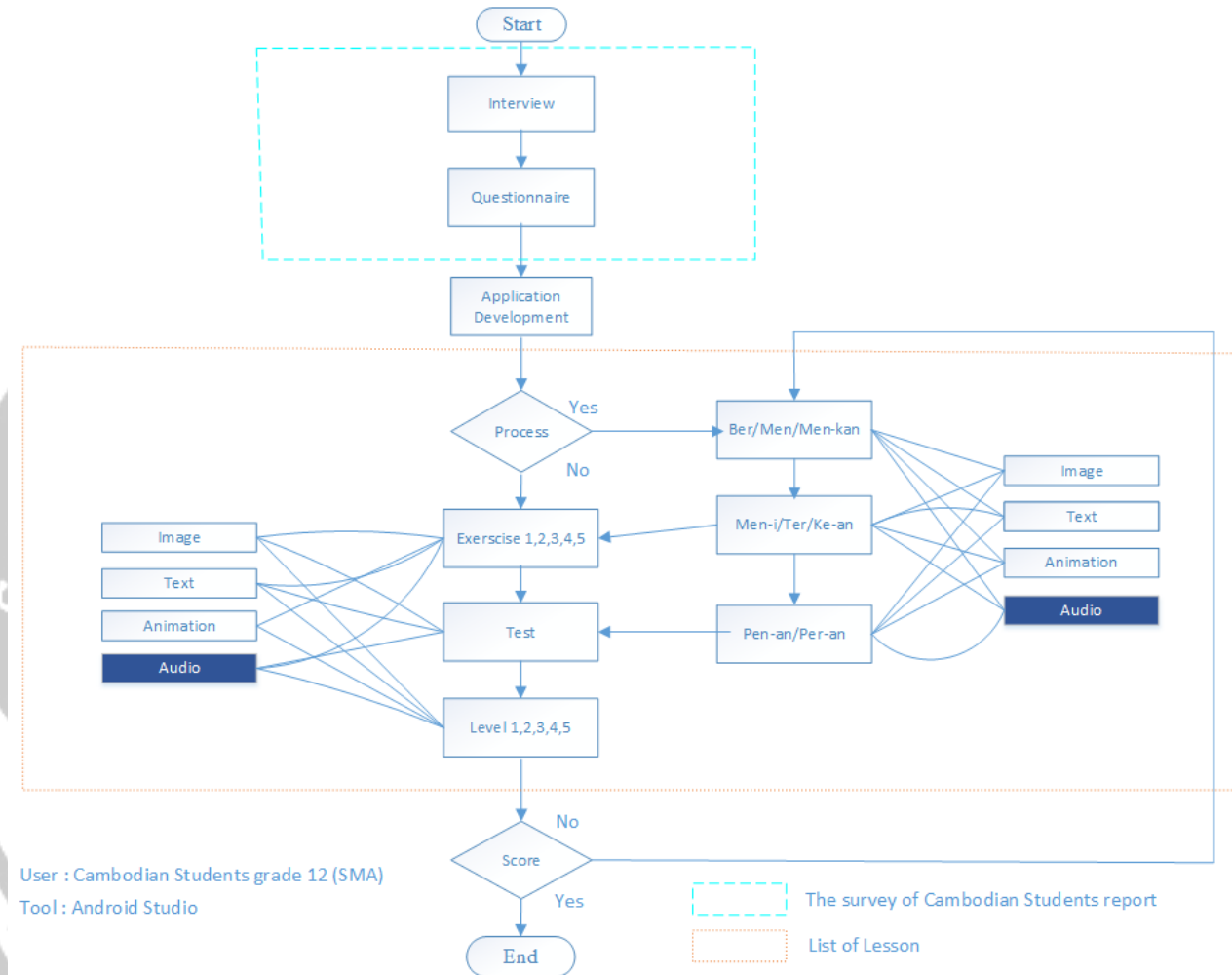
3.1.3 FlowChart

Figure 3.1 FlowChart

The first time, we should collect data from Cambodian Students and interview about learning Indonesia Grammar difficulty. We have created questionnaire to know the mount of Cambodian Students who have learned Indonesian Grammar. After researching, we decide to create new application to solving

some problems that Cambodian Students have told before. For this processing has two choices, if users choose Yes, users will go Lesson List to learn 'Imbuhan' after that users can test which has level 1-5. If users choose No, users will go to Exercise 1-5, Test, Level 1-5. For this part, users can check score whether it is low or high if the score low, users can do/go back again to 'Imbuhan'. If users do Exercise/Test high score, users can go to End.