CHAPTER III

METHODOLOGY

3.1. Data Collection Methodology

This research uses a mixed methodology to collect research data about the Javanese language. The first method is qualitative research using interviews and the second method is quantitative research by distributing online questionnaires to elementary school students in Malang.

3.1.1. Interview

The interview was conducted online using the WhatsApp application and e-mail with Javanese language teachers to get the research data. These interviews were held on Friday and Saturday, 18-19th September 2020, and Wednesday, 23rd September 2020.

3.1.1.1. Interview with Javanese Teachers

Ms. Rizqi Anjar, Ms. Tri Lestari, and Ms. Ema Khafidhotur is a Javanese teacher in Malang. From the interview result with the teachers, it can be concluded that Many teachers still experience problems during the teaching and learning process. According to Mrs. Rizqi Anjar, children's ability to learn varies, so that teachers must always look for creative solutions so that children can continue to be enthusiastic in learning Javanese. Moreover, it is even more difficult because of the COVID-19 pandemic in Indonesia, which forces the entire teaching and learning process to be online-based. According to all of the interviewees, learning Javanese Krama Inggil is very important for children because it teaches manners in communication, especially to older people. However, there are still many children who cannot speak Javanese Krama. According to Javanese language teachers, children are rarely able to speak Javanese because they are accustomed to speak in Indonesian by their family.

According to the interviewees, learning has been carried out using textbooks and practice books (LKS), but these two media is less effective. Mrs. Rizqi Anjar admitted that he was confused in determining the right learning media. As for Ms. Tri Lestari, she started to use other media such as videos, but there were still obstacles, according to her. For example, the internet had low speed, so her students could not access the video. According to Ms. Ema Khafidhotur, children always prefer to play while learning, but so far, it is still quite challenging to find the right games to help the children's learning process.



Figure 3. 1 Ms. Ema Khafidhotur



Figure 3. 2 Ms. Tri Lestari



Figure 3. 3 Mrs. Rizqi Anjar

3.1.1.2. Interview with Apps Designer

On Wednesday, 23rd September 2020, the author interviewed Gabriel Mamites, a computer science graduate and now working as a UI/UX designer. He focuses on minimal and modern style as a freelancer. In his opinion, an application (app) is a bundle or set of programs built to do a specific task or achieve a specific goal. To lessen the time and effort consumed by users in doing a particular action.

Nowadays, he said; a mobile aplication can help children learn new things and become a medium to improve skills such as language. Also, according to Gabriel, the use of apps for children still requires parents' assistance to operate apps properly. It is best not to make apps that are too formal because it will give them a bland impression and create a negative perception.

Gabriel also said that in designing an application aimed at children, it is better if the author uses bright colors and provides cute and attractive graphics to maintain their attention on the mobile application. Also, use buttons and easy navigation so that children do not get confused. The number of prototype tests for a small project is generally 2-3 times. However, creating an application is an evolving process, so there is no fixed number to keep growing.



Figure 3. 4 Gabriel Mamites

3.1.2. Questionnaire

The questionnaire was conducted using a random sampling method. According to the Ministry of Education and Culture, the total population of elementary school students in Malang is 74,934. According to the Slovin formula, with a margin of error of 10%, the total sample is 100 people. The questionnaire was distributed online from 14th-18th September 2020. This questionnaire was conducted to obtain data on Javanese Krama's use among children and their design preferences.





The diagram above shows that there are 30 respondents aged 6-8 years old, 43 people aged 8-10 years old, 26 people aged 10-12 years old, and over 12 years old. There is only one person.



Figure 3. 6 The Language Used When Talking to Friends Diagram

In this diagram, it can be concluded that 87 out of 100 people use Javanese Ngoko to communicate with their friends, seven people use Indonesian, six people speak English, and none of the respondents use Javanese Krama to talk to their friends.



Jika sedang berbicara kepada orang tua kamu lebih sering menggunakan bahasa apa?

Figure 3. 7 The Language Used When Talking to Parents Diagram

Through this diagram, it can be seen that only four people use Javanese Krama to talk to their parents. However, most of the respondents (53 out of 100 people) use Javanese Ngoko when they speak to their parents, 40 people choose to use Indonesian, and three use English.



Figure 3. 8 Most Frequently Used Objects

Based on the second questionnaire that was distributed on 28th September 2020, with a total of 107 respondents. The majority of respondents totaling 91 out of 107 people (85%), chose smartphones as the most often used objects in everyday life.

This questionnaire concludes that children aged 8-12 years who attend school in Malang generally use Javanese Ngoko to communicate with friends and parents. Meanwhile, the number of users of Javanese Krama is only four people. Children also prefer to use smartphones in their daily lives.

3.1.3. Reference Study

In this reference study, the authors conducted a study of several applications for learning languages. The author will use "Duolingo" as a visual and content reference and "Busuu" as the content reference.

1. Duolingo



Figure 3. 9 Duolingo

(www.google.com, 2020)

Duolingo is the most popular language-learning app and website globally. This company uses a freemium type where the application and website can be accessed for free, but there are paid features, for example, Duolingo Plus. Overall, language learning can be accessed for free. Duolingo has a very playful visual style where there is absolutely no formal impression in it, but the material delivery is straightforward.

a) Visual

Table 3. 1	Duolingo	Visual
------------	----------	--------

Analysis	Duolingo
Variable	
Icon	
Typeface	San serif, rounded
	New course update! × We've added new skills and updated some old ones.
	СНЕСК ІТ ООТ



b) Content

Table 3. 2 Duolingo Content

Analysis	Duolingo
Tillary 515	Duolingo
Variable	
v unuene	

Useful	This application has a high level of usability because it		
	can provide lessons about language, and the		
	completeness of the content provided is very high.		
Application	The Duolingo application has been very successful in		
Explain	explaining the purpose of the application. Because of		
Themselves	the high level of consistency and supportive visuals,		
	users can feel a very high level of "friendly" from the		
	application. The author can feel from the visual style		
	alone that the target audience of the Duolingo is		
	children who are currently in school.		
Back Button	In the Duolingo application, there is no back button.		
	There is only the X button to cancel the language lesson		
	or to close the pop-up that appears. The author realizes		
	that when the X button is pressed while the lesson is in		
	progress without warning, all progress will disappear		
	and return to the homepage.		
Easy Go	This application is effortless to return to the previous		
Home	page. As the author has explained in the back button,		
	the user can quickly return to the homepage by simply		
	pressing the X button in the screen's left corner.		
	Duolingo's straightforward interface makes it easy to		
	use.		
Memorable	Duolingo's interface design with a consistent layout,		

	color selection, and graphics make the user never		
	confused when opening the menu.		
Effective	During the learning process, all the material presented		
	can be appropriately conveyed. Even Duolingo provides		
	a feature where the user must mimic by speaking, and		
	then the app will record and rate their pronunciation. Duolingo also recommends at least 10 minutes a day to		
	learn a language. Duolingo has high effectiveness in the		
	learning process.		

2. Busuu



Figure 3. 10 Busuu (www.google.com, 2020)

Busuu is a language learning application that is supported by AI. Busuu is available in android application, iOS, and website. There are 12 languages provided for learning by Busuu, English, Spanish, French, German, Italian, Portuguese, Chinese, Japanese, Polish, Turkish, Russian, and Arabic. This research uses Busuu as a content reference because the content from Busuu is structural and precise.

a) Content

|--|

Aspect	Busuu
Useful	Busuu asks new users to what extent they want to learn
	the language, and Busuu will prepare the right materials
	as needed. Busuu does not have a reward system,
	making it more tedious than Duolingo, but it focuses
	more on learning.
Application	Based on how Busuu's interface look, the author
Explain	realizes that the target users of Busuu are people who
Themselves	are more mature than Duolingo. The selection of
	typeface, shape, and others seems rigid and formal.
	There are no illustrations in Busuu's UI. However,
	some photos adjust to the gender of the voice delivering
	the learning material.
Back Button	This application has a back button that is easy to use.
	The back button on Busuu and Duolingo is not much
	different. When the user is on the learning page,
	pressing the X button will be redirected to the previous
	page, which is the page to start the lesson and not
	directly to the homepage. If the user presses the back
	button again in the upper left corner, the screen will
	return to the homepage.

Easy Go	Busuu's loading screen seems fast, so there are no		
Home	obstacles, such as delays. Returning to the homepage is		
	also relatively easy because the user only needs to press		
	the back button. After returning to the page to start the		
	lesson, the user can immediately press the back button		
	again to return home.		
Memorable	The design on the Busuu interface is quite full, so that		
	as a new user, the author has a little difficulty		
	navigating the application. The lack of graphics on the		
	UI is also very influential. Although the target of Busuu		
	may indeed be adults and have worked, adding graphics		
	to the UI will undoubtedly increase the user's		
	attractiveness and ability to remember the navigation of		
	the application.		
Effective	The lessons provided by Busuu are quite complete,		
	starting with vocabulary, pronunciation, grammar,		
	etcetera. The material that is broken down like that is		
	quite helpful in the learning process. However, it will		
	be even more effective if accompanied by supportive		
	graphics.		

3.1.4. Existing Study

The author chooses to use an existing study to get a reference or benchmark regarding the application design. The application made is expected to be a medium for learning the Javanese Krama language. The application that will be the benchmark is "*Belajar Bahasa Jawa*," released by Solite Kids, an interactive studio consisting of nine people and was founded in 2016. Solite kids have launched approximately 80 games for children aged 2-12 years old and considered by many to help parents teach new things to their children.

1. Belajar Bahasa Jawa



Figure 3. 11 *Belajar Bahasa Jawa* (www.google.com)

This application is aimed at children and made explicitly to learn primary Javanese language, divided into learning content and games/quizzes. The learning material is divided into four parts: learning verbs, body parts, animal names, and Javanese script.

All material presented has a shallow level of difficulty and is intended for children aged 4-6. Children of this age have just mastered the ability to read and write. This application is also equipped with an audio feature, where users can listen to every word written on the screen. However, there are several shortcomings in the audio provided, where sometimes the audio will sound colliding with each other, which might confuse the users.

The interface style used is amicable for children by using bright colors and rounded shapes. The game content sometimes a little confusing because there is no written way to play. Especially in Javanese script game, users are told how to play orally through the provided audio, but it's not well received by the user, especially children.

The question asked in quizzes were also very random and unorganized. So that the material received is also random and unstructured. Besides, no material contains grammar or how to use these words. The material taught is informative. Children can know several Javanese words that have been provided, but the information is not sufficient to be used in daily communication.

3.2. Design Methodology

The author uses a design thinking method based on the book "UX for Lean Startups" by Laura Klein. The following are several stages in the design process:

- 1. **Empathize.** According to Klein (2013), the first stage in design is to find problems in the target market that can be solved, then understand it more deeply. The best problem to solve is when the user does not even realize that it is a problem before it has been solved (p. 6).
- 2. **Define.** At this stage, the results of observations in the form of problems that have been found in the Empathize stage will be further analyzed. Then they are grouped to help the author determine the target user, problem

boundaries, and ways so that this new solution does not become an additional problem in society.

- 3. **Ideate.** At this stage, the author is expected to generate ideas to solve the problems from the Empathize stage and the boundaries that have been determined at the Define stage. One of the most commonly used ideation techniques is Brainstorming and the Worst Possible Idea. These techniques are still beneficial today because they can generate lots of creative ideas quickly.
- 4. **Prototype.** Objectify the results of the ideate process into a product in the form of a mobile application. Then the prototype of the mobile application will be examined further to find gaps for improvement. With this stage, the authors are expected to imagine user behavior and predict how users will react when using the final product.
- 5. **Test.** At this stage, the author will ask several people who are still within reach of a predetermined target user. Then ask for input from them regarding the prototypes that have been made. Some of these inputs will be redefined, and existing prototypes will be improved to achieve the expected results.
- 6. Final result. The final result is in the form of a visual design of the UI / UX, which has been objectified into an Android-based mobile application prototype. Hopefully, it can be used by target users to help them alleviate the problems they are facing.

3.2.1. Empathize

The author has conducted research online to obtain information and data on the issues. Then a problem that is actively occurring in Malang was found, the fading of Javanese Krama Inggil in people's daily lives in Malang. Starting from the large number of immigrants from outside the city or island who later settled in the city of Malang to schools deliberately abolishing local language lessons so that all students do not feel left behind are the reasons behind the scarcity of Javanese Krama Inggil in everyday life.

According to the interview conducted with Javanese teachers, the author gets data about today's children who do not understand Javanese in general, including Javanese Krama Inggil. Meanwhile, learning Javanese Krama Inggil starting from a young age can teach manners in communicating with older people or higher positions.

3.2.2. Define

Based on the problems that have been obtained through the empathize stage, the author defines the problem by determining the target audience that is deemed appropriate to this problem. The author found a study conducted by linguists McLaughlin and Genesee in which children can learn a language faster than adults. This statement is supported by Eric H. Lennenberg, a neurologist, saying that children's brains are more flexible in receiving information before puberty. Therefore, the author chose a target audience aged 8-12 years.

The author also distributed a questionnaire to 100 elementary school students to determine what language they usually use in their daily lives and

media preferences. The author conducted interviews with Javanese teachers to clarify the low usage of Javanese Krama Inggil by children and how important it is for children to learn Krama Inggil Javanese in everyday life. A suitable media can be used by children and can convey information interestingly and efficiently is needed.

The questionnaire results showed that most of them used smartphones more often than books or board games, and some of them had already used applications to learn foreign languages. Therefore the authors decided that the right medium for learning Javanese Krama Inggil was through a smartphone application, which has a friendly interface for children and uses attractive colors.

3.2.3. Ideate

In this stage, the learning media design process that has been determined in the define stage, namely a mobile application begins. The author also asked about the application style preferences that the children liked, and the results were balanced between minimalistic and cartoonish. The author decided that this application would carry vibrant colors like a cartoonish style and minimalistic as the overall layout type. Following is the process carried out to get an application design idea for learning Javanese Krama Inggil:

3.2.3.1. Mind Mapping



Figure 3. 12 Mind Map

A mind map was a way to start the brainstorming process. In this mind map, the author chooses Javanese as the mind map's midpoint, divided into seven branches. The way to choose these branches is to choose one word that comes first when thinking of Javanese. These words are then further translated into smaller branches to determine the correct keywords for the application to be used.

From the middle point, namely Javanese, the writer divides it into seven parts: language, learning, communication, culture, register, writing, and speaking. The seven branches are further divided into other branches that may produce words that can be used as keywords. The author further elaborates on the branches and then gets two keyword combinations. The first one is fun, close, and easy to understand. The second keyword combination we got was learn, consistent, and clear.

3.2.3.2. Big Idea

Based on the mind map made and the keyword obtained, the next process is to determine the big idea of the application that will be made from the keywords obtained. Based on the first keyword combination, the first big idea is to get a close friend who is fun and easy to understand. The second big idea that is generated from the second keyword is a Java language learning application clearly and consistently.

It is hoped that by making this big idea, an application will help children aged 8-12 years who live in Malang to learn Javanese Krama Inggil clearly and help them be consistent in learning the Javanese Krama Inggil. By providing clear learning materials, it is hoped that they can improve their understanding of the Javanese Krama Inggil language better.

3.2.3.3. Concept

The concept used by the author to create a learning application for Javanese Krama Inggil is minimalistic. The selection of minimalistic as the overall concept of this application is based on the questionnaire that was distributed to elementary school children in Malang. Most choose cartoonish and minimalistic styles. Both styles get a balanced turnout, and the author chooses the one that is likely to be more helpful in the learning process. The level of focus possessed by children is relatively low. Therefore it is better to use minimalistic styles to reduce the

possibility of children being distracted by other objects during the lesson and keep the design simple.

The next concept is taken from an interview with a UI/UX designer named Gabriel Mamites. According to Gabriel, children like bright colors and attractive color combinations. Therefore, a colorful concept was chosen for this application. Besides, the shapes contained in this application will have rounded edges so that they have the impression of being safe for use by children. Therefore, this application's concept determined based on user needs is minimalistic, colorful, and rounded shapes.

3.2.3.4. Mood board

Moodboard is a note that is made visually and is usually used to convey the design's overall idea. Moodboards can convey various kinds of information depending on contents and their purpose. The author has created the following color mood board:



Figure 3. 13 Color Mood board

This mood board is based on the chosen concept, which is colorful. The colors chosen are also tried to be as neutral as possible, not to be too inclined to colors for girls and boys. The colors on the mood board are also bright colors. According to the interview results with Gabriel Mamites, children would be more attracted to bright colors rather than muted colors.

According to Pancare (2018), children tend to be attracted more to bright colors, the reasons are it could help them distinguish form and categorize objects as these colors are easier for children to see. Colors could also affect their moods and behavior. Primary colors such as red, yellow, and blue, and secondary colors like green, orange, and purple are more appealing to them rather than shades of pink and beige or any neutral color such as gray and brown. That reasons are also used by beverage industries, as well as the toy industries to market children's products.

3.2.4. Prototype

The prototype is when a designer can start the design process until the design is ready to carry out prototype tests. There will be a lot of iteration and improvement processes to achieve the desired results at this stage. The first step is to create an information architecture to create a user navigation image when using this application. This application's navigation must be made as easy as possible so that target users who are children aged 8-12 years old can easily use this application without experiencing confusion.





After creating the information architecture, the writer then makes a rough sketch and the application flow. The flow is based on the information architecture that was created in the previous step.



Figure 3. 15 Rough Sketch and Flow

The author's next step is to make a fairly detailed sketch on paper, which then becomes the benchmark for the next step, namely digitizing the work.



Figure 3. 16 Detailed Sketches

After making a fairly detailed sketch on paper, the next step is to digitize the sketch using Adobe XD software and makes some adjustments to the layout that has been made on paper.



Figure 3. 17 High Fidelity

The following is the digitization result of the paper sketch that has been made. High fidelity is based on detailed sketches. The colors used also match the color mood board that has been made. Then the high-fidelity prototype is made based on the flow that has been previously made.



Figure 3. 18 Multi-Column Grid

In the application design process, the author uses a multi-column grid with a total of 4 columns. The width of each column is 64 pixels with a gutter size of 10 pixels. Then the remaining 37 pixels margin on the right and left side of the screens.



Figure 3. 19 Prototype

The image above is a screenshot of the prototype flow for the "SKUY-Sinau Kuy" application. Here are some of the visual assets that have been created. Starting from the buttons, icons, typography to the mascot:

1. Buttons

A button should be made to resemble a real button that gives the desire to press it. Here are the final results for the buttons used in the "SKUY-Sinau Kuy" application.



Figure 3. 20 Buttons

The buttons used in this application have a total of four sizes. The largest buttons are 286 pixels long by 47 pixels high. The size of the second button is 234 pixels long by 47 pixels high. For the third size, the button is 150 pixels long and 26 pixels high. The button with the last size is 138 pixels long and 47 pixels high. The length of this button is taken based on the grid used in making the application layout.



Figure 3. 21 Buttons Design

2. Icons

A good icon should provide information about what will happen if the icon is pressed. Here is a sketch of the icon made on paper. The author makes various alternative icon sketches according to the needs and then selects some that are deemed under the application concept "SKUY-Sinau Kuy" which is minimalistic but still has a cartoonish impression.

1COns 22 2 2 2 4 7 7 7 8 8 8 6 Market Leaderboard ER A+ Course LE back R RASA 170 PD1

Figure 3. 22 Icons Sketches

The image below is the final image of the icon that has been digitized using Adobe XD software. The colors used on the icons are also obtained from the color mood board's predefined color palette. The icon chosen is the icon for the course list, leaderboard, and profile. The author determines the icons used by considering the "SKUY-Sinau Kuy" application's minimalistic, colorful, and rounded concept. Therefore, the following icons chosen were deemed sufficient under the needs and were expected to be following the wishes of the target audience based on a survey of elementary school children. Most respondents wanted an application with a minimalistic main theme. However, they had a cartoonish impression to add to the impression of friendly and fun.



Figure 3. 23 Icons

3. Typography

There is only one typeface used for this application. The typeface used is Linotte. This typeface is used on the application logo, and the entire "SKUY-Sinau Kuy" application is using this typeface.

• Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

1234567890

Heavy

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvxyz

1234567890

• Semi Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmopqrstuvwxyz

1234567890

• Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

• Light

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

The choice of typeface is based on its san-serif and rounded shape. Besides, this typeface also has various levels of thickness of writing to help determine the design hierarchy in the "SKUY-Sinau Kuy" application. Another reason is that the Javanese Krama Inggil language is categorized as a polite and formal language, so generally, the serif typeface is more suitable to describe this language. However, because this application's target users are children, a solid and firm typeface but rounded is needed. From that consideration, the writer decided to use the Linotte typeface as the main typeface.

4. Logo

The logo of this application is used for the application icon that will appear on the smartphone screen. It consists of an application mascot waving and a bubble chat above its head bearing the word SKUY, the name of this Javanese Krama Inggil learning application. SKUY itself is an abbreviation of the word "*Sinau*," which means learning in Javanese Krama Inggil and "*Kuy*" or "*Yuk*" in reverse. Malang City is indeed famous for its "walikan" or culture of flipping words. Malang people are accustomed to deliberately flipping words. For example, the word *singo edan* becomes *ongis nade*.



Figure 3. 24 Logo The author makes this application logo with a size of 1080x1080 pixels. This logo consists of a mascot image with a chat

bubble with the word "SKUY" which is the name of this application. The chat bubble contained in the application logo has a slope of 18 degrees.

5. Mascot

Based on the research that has been done by the author regarding mascots and children, the use of mascots in all kinds of media related to children can quickly help to improve children's ability to receive information. The image below is a sketch of the mascot design exploration for the "SKUY-Sinau Kuy" application.



Figure 3. 25 Mascot Sketches

The author chooses the most uncomplicated form among all the alternative designs that have been made and then digitizes it in Adobe Illustrator.



Figure 3. 26 Digitalized Mascot

The basic shape of the Bimo, the rhinoceros, is a sphere. According to Cohen (2011), body shape can describe the personality of the characters that are made. Bimo the rhinoceros has a circular body shape, which matches his patient, cheerful, and kind personality. A sphere is a form that has no edges, so this shape is the most appropriate shape for a mascot with good traits. To add a Javanese impression to the mascot, the writer added lurik clothes, which are clothes with stripes that are traditional Javanese clothes.



Figure 3. 27 Final Mascot

Here is the final result of Bimo the rhino. In addition to adding striated clothes to him, the author also added various poses for Bimo. The mascot on the "SKUY-Sinau Kuy" application also acts as a guide during the tutorial. Bimo will also appear on the page for correct or false answers. Bimo will also congratulate the user when completing the lesson.

3.2.5. Test

The author conducted an alpha test on the prototype day held on November 6, 2020, which was attended by parties who have experience in interaction design and then received input for the "SKUY-Sinau Kuy" application so that it could be improved again. The following is the link used during the prototype day: https://xd.adobe.com/view/6b44f12e-27e0-4008-7710-be8d37d067a9-

1d75/?fullscreen&hints=off. Then a link to the questionnaire that can be filled was provided for the prototype day visitors. The questionnaire got 25 respondents, and most of the respondents' input focused on improving UI / UX and strengthening the Javanese theme in the "SKUY-Sinau Kuy" application.

After getting this input, improvements was made to the UI layout and added tutorials to the application. It is hoped that with this tutorial, target users who are children can be helped while using this application. On December 11, 2020, the author conducted a beta test by asking for help from one of the tutors in Malang to distribute the prototype link along with the questionnaire link to her students who are still in elementary school and 13 children are willing to do a user test on the application "SKUY-Sinau Kuy". The 13 children were asked to try the latest prototype of this application and then fill out the questionnaire. Based on the survey results, most children can easily use this application and feel that the lessons provided in this application are not too difficult so that they are easy to understand. According to the respondents, the mascot they used was cute, and it helped them improve their experience while using the "SKUY-Sinau Kuy" application. Most of the respondents also like the colors used in this application.

Moreover, according to them, there are no obstacles to the application. It is just that the internet connection used by the user to access the prototype has a speed below average, so the main obstacle they face is slow internet speed. Users also provide some input, such as adding more images to make it more interesting or adding more tutorials. However, overall, users say that this application is funny and interesting to learn about Javanese Krama Inggil in the future.

3.2.6. Final Result

The author determines the final form of this application only up to the high fidelity prototype form, which is made using Adobe XD software. This decision was made based on the author's lack of knowledge about coding. Therefore the final result of this application was only up to the prototype. The following is the final look of the "SKUY-Sinau Kuy" application.

Since Key	Masuk Daftar Email Password Masuk	Masuk Daftar Nama Email Passward
Belajar	Papan Peringkat	Profil 83
Komunikasi Dasar Kata Sapan Matika belajarat kata davama lagar Matika belajarat kata davama lagar Matika belajarat kata davama lagar Matika belajarat yang Sebakan terlebih dalak pelajarat yang	Selesaikan dulu satu pelajaran untuk bergabung dengan papan peringkat minggu ini	Lidi
Pengaturan Profil kamu UBAH AVATAR		X IIII Pilih terjemahan yang benar: Pagi
Nama Aldi Email Aldiyph13@gmail.com Password ••••••	Rahasa Jawa Kroma Inggil Enjing Bahasa Indonesia: Pagi	Enjing Sonten



Figure 3. 28 Final Result