

CHAPTER III

DESIGN METHODOLOGY

3.1 Research Subject

The subject of this project will be aimed towards teenagers aged 12-17, SES C-A, in accordance to the problem statement mentioned in chapter 1. This is because according to the World Health Organization, the transition between childhood and adulthood are the most influential moments in a human's growth, as teenagers often form who they will become in the future based on a multitude of reasons such as their peers, parents, or interests. Therefore, teenagers are a good candidate in keeping Sang Hyang Antaboga's story and moral value alive, and could even result to teenagers telling others or even future generations about Sang Hyang Antaboga (Yamane et al., 2021).

Another reason to why teenagers would be a suitable subject is in relation to a problem often found in teenagers, which is the frequent occurrence of self-deprecation. A study done by Chiha et al. (2023), collected 396 teenagers to find out the percentage of teenagers who think highly or think lowly of themselves. The results of this study prove that of those 396 teenagers, 65.7% of the teenagers experience low to very low self-esteem, while the other 14.7% of the teenagers consider themselves having high self-esteem. This study also shows that as a result of low self-esteem, teenagers experience severe to extremely severe levels of stress and a different study by Keane et al. (2017) suggests that low self-esteem in teenagers is a predictor of anxiety and depression in the later stages of a teenager's life. Therefore, using teenagers as the main subject of this project aligns with the moral values in which Sang Hyang Antaboga teaches, as his story explains his selfless actions towards others and understanding the potential he has in himself to be able to help those around him.

Geographically, this project will focus on teenagers in the Jakarta Metropolitan Area is because of the various ethnic groups that gather in this area as

it contains Jakarta, the capital city of Indonesia, and its surrounding cities. Therefore, reaching more ethnic groups while also being able to cater to Javanese people as the Jakarta Metropolitan Area still resides in Java. The importance of Javanese people being apart of the subject relates to Sang Hyang Antaboga's origins as this figure is created from Javanese culture and history.

Table 3.1 Research Subject

Demographic	
Age	12-17
Education	Middle school to High school
SES	C-A
Geographic	
City/Regency	Jakarta Metropolitan Area
Province	DKI Jakarta
Area	Urban
Density	Dense
Psychographic	
Attitude	Has low self-esteem
Lifestyle	Enjoys playing games or reading

3.2 Design Methodology and Procedure

For this project, the author will be using the Design Thinking method to design a visual novel about Sang Hyang Antaboga. This method is chosen over a design method such as User Centered Design because UCD focuses more on iterative usability from the user's perspective, meanwhile Design Thinking, is used to help bring out a solution towards a problem, in this project, that solution is to design a more accessible and easily understandable medium of information about Sang Hyang Antaboga to a teenage audience. Design thinking is separated into five sections, which will be explained below (Interaction Design Foundation, 2016).

3.2.1 Empathize

In this stage of the design thinking method, the author will be familiarizing themselves with the topic to fully understand the problem. As mentioned before, in this project, the focus would be towards the figure Sang Hyang Antaboga, therefore in-depth research will be conducted on learning more about this figure and its importance as well as learning more about the target audience so that they will be interested in the topic. This research can be fulfilled by doing interviews, observations, and questionnaires.

3.2.2 Define

After fully understanding the topic, the author will organize the information gathered to clearly define the problem that correlates to the topic researched in the previous phase. By defining and framing the problem, the author will be able to pin-point the issue and focus on a creative solution to solve the issue, as well as defining why a visual novel would be best suited for this problem.

3.2.3 Ideate

Once the problem has been properly defined, the next step, ideation, will focus on brainstorming an idea which will be able to solve the issue. In this case, a visual novel will be used as an interactive way to reach the target audience while giving them the information on Sang Hyang Antaboga, however the brainstorming does not end there, as this stage of the design process will also require the author to brainstorm elements such as the story, interaction, and information portrayed in this media as well as creative mechanics to innovate itself from other pieces of informative media on Sang Hyang Antaboga or other pieces of visual novels.

3.2.4 Prototype

After brainstorming and settling on concepts of what the final product would be, the prototype stage focuses on bringing those ideas to life, by creating storyboards to know how the story beats of the visual novel will go, creating sketches for the character sprites, CGs, and background Figures.

During this phase, an interactive form of the concept would also be created using the program Figma.

3.2.5 Test

With the prototype created in the previous stage, the author will be able to present the playable concept to the target audience or play testers to gather feedback on the prototype via Alpha testing as well as Beta testing. From there, the author will be able to adjust the product according to the feedback given and will continue to improve the product and iterate based on the feedback until the result forms the final form of the project.

3.3 Research Techniques and Procedure

The techniques used to research more on the topic of Sang Hyang Antaboga, utilizes the mixed method research founded by Creswell (2018). This method is a combination of qualitative and quantitative data, meaning that this research will go in-depth on the topic of Sang Hyang Antaboga while also using a research method which gathers information from several sources at the same time without going as in-depth as the qualitative data. To do this research, the author will be using observations and interviews as qualitative data on this topic, and using questionnaires as quantitative data.

3.3.1 Observation

To understand the current state of sources of information on Sang Hyang Antaboga and its representation in today's culture, the author will be traveling to two museums in relation to the topic at hand. These two museums are *Museum Nasional Indonesia*, a museum which displays various artifacts from ancient Indonesia such as statues, inscriptions, and various other relics of Indonesia's past, and *Museum Wayang*, a museum which displays the history of *pewayangan* or shadow puppets which are often used to present folklore in Indonesian culture as well as several stories which are presented using *wayang*. These two museums tie together with the topic of Sang Hyang Antaboga as he is a creation of Indonesian culture and therefore has relics seen in Indonesian history as well as his folklore being presented in *pewayangan*. During this

observation, the author will document the displays within this museum using a camera and analyze the surroundings as well as the method in which these locations display information.

3.3.2 Interview

Interviews are a form of qualitative research in which the researcher will conduct an interaction between themselves and the interview's participant. In this interaction, the author will be asking several varying questions to get a more in-depth understanding of a certain topic from the interviewee (Dursun, 2023). For this project, the author will conduct several interviews with people who are deeply knowledgeable on Indonesia's culture and history so that the author will be able to get a deeper insight into who Sang Hyang Antaboga is while also gathering the interviewee's opinion on the younger generations attitude towards the figure and in turn Indonesian culture, and what in their eyes is the appropriate medium to reintroduce said figure/Indonesian culture to the younger generation. With this information, the author is able to compile accurate information about Sang Hyang Antaboga and implement it into the story of the visual novel while also keeping in mind the interviewee's thoughts on how to convey or raise interest towards the figure and Indonesian culture to the younger generation. To do this, the author will approach the educational team from Museum Nasional Indonesia as well as a researcher focused on Javanese history to be able to go more in-depth on who Sang Hyang Antaboga is, as he originates from Javanese culture.

1. Interview with the Educational Team from MNI

For this interview, the author will conduct an interview with Mutya Widyalestari and Azhar Rizqi Nurhidayah from the educational team in Museum Nasional Indonesia. The interview will be conducted on-site at Museum Nasional Indonesia on the 23rd of February, 2025, and will be recorded using a voice recording app as well as documented using a camera. The purpose of this interview is to be able to learn more about the relics depicting Sang Hyang Antaboga and draconic figures founded

in Indonesia's history while seeing and documenting the relics face-to-face. Before the date of the interview, the author has prepared several questions that asks more on this figure and related draconic figures in Indonesian history;

1. Apakah anda kenal dengan figur Sang Hyang Antaboga atau Naga Jawa? Jika iya apakah anda bisa memperkenalkan sejarahnya?
2. Apakah asal muasal depiksi naga di pulau Jawa?
3. Apakah Sang Hyang Antaboga melambangkan apa pun?
4. Bagaimana Antaboga digambarkan dalam peninggalan bangsa Indonesia pada masa itu?
5. Sumber tertua yang diketahui tentang Antaboga berasal dari mana? (prasasti, naskah, cerita lisan, dll.)
6. Menurut anda, apakah Antaboga terus memengaruhi budaya Jawa dan Indonesia saat ini?
7. Seberapa besar peran Antaboga ini di masyarakat Jawa? kepaeknya buat apa?
8. Apakah ada artefak yang secara spesifik menggambarkan Sang Hyang Antaboga?
9. Bagaimana bentuk dan media artefak ini? (Relief, arca, naskah, dll.)
10. Terkenalnya di jawa daerah mana? kenapa terkenal?
11. Apakah simbolisme Antaboga mengalami perubahan makna dari masa ke masa?
12. Apakah cerita/tokoh Antaboga pernah direpresentasikan dalam media (film, buku, pertunjukan seni, wayang, dll)? Kalau yg media modern dan interaktif apakah pernah/ada?
13. Menurut Anda, bagaimana cara terbaik memperkenalkan kembali mitologi Antaboga kepada generasi muda?

2. Interview with Javanese History Researcher

To go further in-depth on who Sang Hyang Antaboga is and his origins, the author will interview Prapto Yuwono, S.S., M.Hum. Prapto is a retired professor from Universitas Indonesia and has taught

and researched on the history and culture of the island of Java. This interview will be conducted online using the application Zoom Meetings and recorded using Zoom's record feature. Before the interview, the author has provided questions suited for this interview which are listed below;

1. Apakah anda kenal dengan figur Sang Hyang Antaboga atau Naga Jawa? Jika iya apakah anda bisa memperkenalkan sejarahnya?
2. Apakah asal muasal depiksi Sang Hyang Antaboga atau naga di pulau Jawa?
3. Apakah Sang Hyang Antaboga melambangkan apa pun?
4. Apakah ada mitos atau cerita yang menunjukkan pentingnya Antaboga dalam adat Jawa, dan bisakah Anda menjelaskannya secara singkat?
5. Dari cerita itu, apakah ada moral yang dapat diungkapkan dari perilaku atau kehadiran Antaboga?
6. Terkenalnya di Jawa daerah mana? kenapa terkenal?
7. Menurut anda, apakah Antaboga terus memengaruhi budaya Jawa dan Indonesia saat ini?
8. Apakah ada nilai moral yang masih relevan bagi generasi muda saat ini? Nilai moral muncul dari karakter atau ceritanya? kalau dari cerita/kisah, cerita yang mana?
9. Apakah simbolisme Antaboga mengalami perubahan makna dari masa ke masa?
10. Apakah cerita/tokoh Antaboga pernah direpresentasikan dalam media (film, buku, pertunjukan seni, wayang, dll) di masa modern?
11. Seberapa sering cerita tentang Antaboga muncul dalam pertunjukan wayang atau kesenian tradisional lainnya?
12. Menurut Anda, bagaimana cara terbaik memperkenalkan kembali mitologi Antaboga kepada generasi muda?

3.3.3 Questionnaire

Questionnaires will be used as a quantitative research method in which a set of various questions will be distributed to its participants to gather a collection of data within a short amount of time from various individuals (Sharma, 2022). For the purposes of this project, this questionnaire will be used to gather data on teenager's awareness towards Sang Hyang Antaboga in the current year of 2025 as well as their thoughts towards interactive media. This questionnaire is divided into three sections and are listed below;

A. First Section

The first section of this questionnaire serves as a sort of introduction of the participants who will be filling in the questions. The data collected in this section will show the age of the participants and where they are from.

Table 3.1 First Section of Questionnaire

Question	Type	Category
Usia	Multiple Choice	<12
		12-13
		14-15
		16-17
		17>
Domisili	Multiple Choice	Jabodetabek
		Luar Jabodetabek
Kelas Berapa?	Multiple Choice	Kelas 7
		Kelas 8
		Kelas 9
		Kelas 10
		Kelas 11
		Kelas 12

B. Second Section

The second section of this questionnaire goes in-depth on the participants understanding of the topic, starting from a base level understanding of Indonesian history to dragons in Indonesia, to the figure itself, Sang Hyang Antaboga.

Table 3.2 Second Section of Questionnaire

Question	Type	Category
Apakah anda tertarik dalam topik budaya Indonesia	Linear Scale	1 (Sangat Tidak Tertarik)
		2
		3
		4 (Sangat Tertarik)
Jika anda tertarik dalam topik budaya Indonesia, mengapa?	Multiple Choice	Tertarik dengan sejarahnya
		Tertarik dalam cerita Rakyat
		Untuk melestarikan budaya Indonesia untuk masa depan
		Tidak tertarik
Apakah anda kenal atau pernah mendengar tentang Naga Jawa	Multiple Choice	Kenal
		Tidak Kenal
Dimanakah anda mendengar tentang Naga Jawa?	Multiple Choice	Museum
		Sekolah atau Kelas Seni dan Budaya
		Internet
		Teman atau Keluarga
		Tidak Kenal
Apakah anda kenal atau pernah mendengar tentang Sang Hyang Antaboga	Multiple Choice	Kenal
		Tidak Kenal
Dimanakah anda mendengar tentang Sang Hyang Antaboga	Multiple Choice	Museum
		Sekolah atau Kelas Seni dan Budaya
		Internet
		Teman atau Keluarga

		Tidak Kenal
Seberapa baik pengetahuan Anda tentang Sang Hyang Antaboga?	Linear Scale	1 (Sangat Tidak Baik)
		2
		3
		(Sangat Baik)

C. Third Section

The third section consists of questions on what media the participants regularly use and to see their interest towards a piece of media such as the product which will be designed for this project.

Table 3.3 Third Section of Questionnaire

Question	Type	Category
Media apakah yang anda sering menggunakan?	Multiple Choice	Sosial Media
		Website
		Youtube
		Buku
		Lainnya
Dari mana Anda biasanya mendapatkan informasi tentang budaya Indonesia?	Multiple Choice	Buku
		Website/Blog
		Youtube
		Sosial Media
		Guru
Saya lebih tertarik pada pengalaman interaktif daripada mempelajarinya melalui mulut ke mulut.	Linear Scale	1 (Sangat Tidak Setuju)
		2
		3
		4 (Sangat Setuju)

3.3.4 Existing Study

To get a better understanding on pieces of media related to the topic focused in this project, the author will seek and analyze published works which

discusses the figure Sang Hyang Antaboga. This is done to be able to compare between the published work and the authors work so that the author may be able to find a novelty in their work and understand the portrayal of information about Sang Hyang Antaboga within the published work. Within this analysis, the author will analyze the 5W+1H of the published work as well as a SWOT analysis (Learned & Philip, 1965), so that the author will be aware of what this piece of media does well and what to avoid.

3.3.5 Reference Study

To improve the media that this project will create, the author will analyze published works in relation to visual novels. In this analysis, the author may take inspiration from such works to get a better understanding of the medium and help improve the final product. For this purpose, the author has chosen three pieces of media in relation to visual novels to be able to compare and use as a point of reference in making a visual novel as well as analyzing these works using the SWOT analysis method.

