



Appendix 1. List of Interview Questions for the Empathize Stage

Session 1: Introduction & Background

1. Could you tell me a little about your daily life? (For example, as a student or worker, your daily routine, and how busy you usually are.)
2. Have you ever felt that you have difficulty managing or recognizing your mood in your daily life?
3. How do you usually realize or notice when your mood is not good or when it is very good?

Session 2: Personal Strategies for Managing Mood

1. What do you usually do when you feel stressed, anxious, or sad?
2. Have you ever tried journaling, writing down your daily activities, or tracking your mood either manually or using a digital tool? Could you tell me about your experience?

Session 3: Needs Validation & Feature Exploration

1. In your opinion, how important is it to have an application that helps you track your daily mood? Why do you think it is important or not important?

The following are some features I am considering developing in a mood tracking application. I would like to know your opinion about each feature:

- a) Habit tracking and journaling feature to record activities and feelings, with a final output in the form of a daily mood report.
 - Do you feel this feature would help you better understand your mood? Why?
- b) A simple, clean, interactive, and easy-to-navigate interface, with data visualized in the form of graphs, calendars, or lists.
 - Do you think visualizations such as graphs or calendars would help you understand your mood patterns? Why?
- c) Reminder/notification system to encourage consistent mood tracking.
 - Do you feel you need reminders to track your mood, or do you prefer to record it spontaneously?
- d) Onboarding guidance or educational instructions when using the app for the first time.
 - Do you think usage guidance would be helpful, or do you prefer to explore the app on your own?
- e) Flexibility to record more than one mood change in a single day and add descriptions.
 - Do you think it is important to be able to record multiple mood changes in one day? Why?

f) Daily challenge feature aimed at improving mood.

- Would you be interested in small daily challenges that can help improve your mood? For example, “listen to three of your favorite songs today.”

Session 4: Expectations & Closing

1. If you could design your own ideal mood tracking application, what features or interface elements do you think are essential?
2. Do you have any concerns about using a mood tracking application? For example, related to data privacy, complexity, or anything else.
3. If an application like this were developed, would you be willing to use it? In what situations or conditions do you feel you would need to use it?



Appendix 2. Interview Results from the Empathize Stage

Source Person 1

Name	:	I Nyoman Aditya Mahendra Winaya
Age	:	24
Occupation	:	Accountant
Agency	:	Impian Property Management

Session 1: Introduction & Background

1. My daily routine at work involves preparing financial reports about the income and expenses of a villa (property). On weekends, I usually go on dates, exercise, play games, watch movies, or get enough rest.
2. Yes, I have. Sometimes I feel confused about my mood because it can be unstable. However, at the office, I still have to work and remain professional, so I tend to set aside my bad mood for a while.
3. I usually realize my mood is not good when I feel a lot of pressure and am required to work quickly. On the other hand, I realize my mood is good when my work is well-structured, there are not many distractions, and there is not much pressure. I also notice a good mood when I exercise, travel, go on dates, and do other enjoyable activities.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually try to calm myself by stopping my work for a moment, listening to music, or looking for things that can relax my mind, such as enjoying real-life views or content on my smartphone.
2. I have never written a journal or recorded my daily activities because I am not the type of person who expresses feelings through writing. I prefer to calm myself instead. I have also never used a mood tracking application.

Session 3: Needs Validation & Feature Exploration

1. I think it is important. In certain situations, it can be useful because it helps me understand my own condition, so I do not push myself too much when my mood is not good. However, I would probably use it less during working hours because I rarely use my smartphone at work. I would most likely use it in the morning before work and at night after finishing work when I have free time.

Feature Considerations:

- a) It can be helpful because I can track my mood on a daily basis and view the history, so I can understand what makes my mood better and what makes it worse.
- b) I prefer a simple design but with a cute and fun impression, such as having a character that can help improve my mood while using the app. Data visualization is a good option because it makes the information easier to understand and simpler.
- c) Notifications are necessary because when users see a notification, they can be triggered to write a journal. Without notifications, users may easily forget that they have the app and eventually uninstall it.
- d) Having usage guidance is good and important because it makes it easier to understand the app more quickly and makes the app more interactive.
- e) It is important to be able to record more than one journal in a day, but it should not be mandatory to fill it in every day. Being able to add descriptions and images when creating a journal is also good and important because it can become a memory as well.
- f) I am interested in the daily challenge feature because it makes the app better. It feels like activity recommendations that users can choose from. It can also educate users about what they should do when their mood is not good.

Session 4: Expectations & Closing

1. I focus more on the visual design, interface, and icons that are nice, cute, and attractive, so I enjoy using the application. Usually, people are first attracted by the visual appearance.
2. I do not have any major concerns, as long as I am not asked to upload my ID card photo. Other than that, I feel it is safe.
3. Yes, I would be willing to use it. I would probably feel the need to use it after coming home from work in a bad mood, then open the app and look at the available challenges so I know what activities are recommended to help improve my mood.

Source Person 2

Name	:	I Putu Nurkencana Wahyu Eka Putra
Age	:	25
Occupation	:	Project Manager, Graphic & UI/UX Designer
Agency	:	PT Dimata Sora Jayate

Session 1: Introduction & Background

1. My daily routine at the office involves designing UI/UX and sometimes attending meetings related to the progress and issues of the projects I am working on. At home, I usually do household chores, play with my pets, or rest. On weekends, I usually go to the gym or get enough sleep.
2. Yes, I have. I find it difficult to manage my mood, especially at work, for example when I meet my supervisor or when there is a sudden meeting.
3. I can usually tell whether my mood is good or bad from the way I speak. When my mood is not good, I tend to be quiet, talk less, and do not feel like doing anything. When my mood is good, I usually talk more.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually do my hobbies such as playing games, spending time with my pets, eating sweet food, sleeping, or talking with friends or my parents.
2. I have never written a journal or recorded my daily activities. I have only used a smartwatch to track my stress levels.

Session 3: Needs Validation & Feature Exploration

1. In general, I think it can be both important and not important, depending on the person. For busy people, it is usually difficult to find time to record their mood, unless the app can detect it automatically or provides predefined options for mood and activities so users can simply select them. However, for people who want to understand their daily mood and activities, it is important. Personally, I think it is important because not all moods are good, and an app can help identify which activities might worsen someone's mood. However, a journaling-based app that requires writing feels less necessary for me at the moment because I am still busy and may rarely have time to record, unless it can automatically detect mood, for example by connecting with a smartwatch or professional platforms so they can identify who may need help.

Feature Considerations:

- a) It can be helpful because people can understand what causes their mood to change. This allows users to learn and, in the future, avoid or reduce activities that make their mood worse. This is quite crucial because mood can strongly affect a person and their activities.
- b) Mood data visualization is helpful because research has shown that humans are visual beings and are more attracted to colors, shapes, and images. In terms of design, users prefer something simple, user-friendly, easy to

navigate, and not overly crowded without a clear function, especially with appropriate color choices.

- c) Notifications are necessary to help users stay consistent in making journal entries. However, it would be better to give users the freedom to set when reminders are sent (for example, through time settings).
- d) Usage guidance is necessary because many people do not know the function of certain buttons or features in an app. The main features should be explained first, while other features can be explored by users on their own.
- e) It is important to be able to record more than one journal entry in a day because mood is unstable and it is unlikely to have only one mood in a day. Having descriptions and images is also helpful.
- f) I am interested in daily challenges, but the challenges should match the user's condition. Challenges can help encourage users to change their mood and write journal entries. It would be better to have rewards after completing challenges because this can motivate users. For example, rewards could be profile borders after completing several challenges, or other types of rewards.

Session 4: Expectations & Closing

1. The application should be user-friendly, have a clean UI, clear navigation, and appropriate color choices based on a calming design philosophy so users feel comfortable using it. In terms of features, the current ideas are sufficient. In the future, if the app is further developed, it would be good to have automatic connections with smartwatches, medical devices, and professional platforms.
2. I do not have any major concerns, as long as the data does not leak.
3. Yes, I would be willing to use it. I would use it to explore something new and, in any condition, since the goal is to track mood and daily activities.

Source Person 3

Name	:	Ni Made Anggraeni Karunia Dewi
Age	:	21
Occupation	:	Designer Jewellery
Agency	:	UC Silver Gold

Session 1: Introduction & Background

1. My daily routine at work usually involves designing or sketching jewelry, chatting with colleagues in the same division, and using my smartphone. On

weekends, I usually go out with my partner or friends, do household chores, and exercise.

2. No, I have not. I usually understand my own mood well. Mood swings happen often, but I know how to deal with them.
3. I usually realize my mood is not good when I go to bed late or do not get enough sleep, when there are additional activities after work, during the first day of my menstrual period, and when I feel affected by other people's words because I am sensitive.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually exercise, watch dramas or movies, talk with my parents, or get enough sleep.
2. I have never tracked my mood because I already understand my mood changes quite well. However, in the past, I often talked to myself through WhatsApp and asked for solutions to problems using Meta AI. I rarely write down my daily activities because I usually share my feelings more with my parents.

Session 3: Needs Validation & Feature Exploration

1. I think it is important when I look back on it. Since entering the working world, many problems have started to appear. When the problems are small, sometimes I feel that telling friends is unnecessary, but I still want to share. With a mood tracking app, it can become a place to express both small and big things that happen in daily life.

Feature Considerations:

- a) It can be helpful. Personally, I understand my mood, but I do not know the percentage of good and bad moods each day. It can also serve as a way to cope in the future, helping me get to know myself better.
- b) Yes, it helps. Mood data visualization helps show a clear picture of mood. A simple but interactive design is good because if an app has too many colors or too much content, it can actually make users reluctant to use it. Cheerful and bright colors are good for improving mood.
- c) Having notifications is fine because they remind me to open the app. However, I might not be able to write journals regularly and would probably only fill them in when I have free time or want to express my feelings. As a worker, I would most likely write more about negative moods experienced in daily life.
- d) Having usage guidance is very important because I have never used a mood tracking app before. Guidance would help me better understand and use the app more effectively.

- e) It is important to be able to record more than one journal entry, but it can be difficult for workers if they are required to write many entries. Having descriptions and images when creating a journal is good because it makes the journal more complete and helps people with short memory or who easily forget remember the moment better.
- f) I am interested in daily challenges because they can help improve the user's mood. Challenges can make users feel happier, and after completing them, users are not forced to immediately write a journal, which makes the experience more flexible.

Session 4: Expectations & Closing

1. In terms of features, it would be good if an app like this could include an AI-based question-and-answer feature, but limited to mood-related topics. In terms of appearance, I prefer a clean design (not too much unnecessary text or images) because I do not like reading much but enjoy writing. Pastel or bright colors would be nice.
2. I do not have any major concerns, but sometimes there is a fear of oversharing in the app and having someone else read the journal. It would be good if the app could be locked for privacy.
3. Yes, I would be willing to use it. I would probably feel the need to use it more when I feel sad, angry, or disappointed.

Source Person 4

Name	:	Ni Putu Ragita Cahya Wicaksani
Age	:	24
Occupation	:	Culinary Arts Teacher
Agency	:	SMKN 1 Kubu

Session 1: Introduction & Background

1. My daily routine at work involves teaching students and practicing together with them in the kitchen or at a restaurant. On weekends, I usually go on vacation to the city of Singaraja.
2. No, I have not. As a teacher, I am expected to always smile and remain professional regardless of my mood, so I am used to managing my mood while working.
3. It is somewhat difficult to realize when my mood is good or bad. However, when I am working, I am rarely distracted, and my mood usually depends on the situation in the workplace.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually eat sweet foods.
2. I have written a journal or diary before, but the last time was in junior high school. I have never used a digital mood tracking application, but I have used a period tracking app that also asks about my mood. When I have mood-related problems, I sometimes search for answers on Google.

Session 3: Needs Validation & Feature Exploration

1. I think it is important because, as a woman, mood swings can happen easily. It would be even better if the app could be connected to the menstrual cycle, so I can recognize when I am not feeling well and take time to refresh or give myself a self-reward to improve my mood.

Feature Considerations:

- a) It can be helpful because there are explanations about which activities influence mood changes, so users can understand what makes their condition worse and what helps them feel calmer.
- b) I am interested in having mood data visualized in a calendar format. A simple interface is good, and it is fine to have more content as long as it is truly useful.
- c) I do not really like having notifications.
- d) Having usage guidance is important because it helps users understand what features the app has.
- e) It is important to be able to record more than one journal entry and to add descriptions and images when creating a journal, as this makes the appearance more interesting.
- f) I am interested in daily challenges because the recommendations can help improve a person's mood.

Session 4: Expectations & Closing

1. A calendar feature is essential because it is useful and interesting. If possible, it should be connected to the menstrual cycle. The app's appearance can be in any style.
2. I do not have any concerns.
3. Yes, I would be willing to use it. I would probably feel the need to use it by taking advantage of the challenges in the app when my mood is not good, so I can get recommendations for other activities and avoid overthinking.

Source Person 5

Name	:	Desak Putu Ratih Indraswari
Age	:	21
Occupation	:	Applied Bachelor in Midwifery
Agency	:	Poltekkes Kemenkes Denpasar

Session 1: Introduction & Background

1. My daily routine includes attending classes, completing university assignments, doing an internship, and when I have free time, planning to do homecare work to earn extra income. On weekends, I usually read novels, watch movies, play games, or go on dates.
2. Yes, I have. Sometimes my mood changes quickly.
3. It is somewhat difficult to recognize or understand why my mood suddenly changes.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually try to calm myself, open social media, watch dramas, listen to music, or read novels.
2. I have written a journal or daily activities before, but it was a long time ago and I no longer do it because I am confused about what to write. I have only used a period tracking app, and even then, I rarely fill it in.

Session 3: Needs Validation & Feature Exploration

1. I think it is important because I can know what my mood is like throughout the day (morning, afternoon, evening, and night). Having a history also helps for self-learning in the future, so I can reduce activities that make my mood worse.

Feature Considerations:

- a) It can be helpful because I can understand what my mood is like throughout the day, which can help reduce mood swings, especially for women who experience mood swings easily.
- b) Mood data visualization can be useful because it makes it easier to understand the overall mood of the day. If the design is attractive and has unique elements that are not commonly used in other apps, it can make users enjoy using the app more.
- c) It is fine to have notifications because when users see them, they can be triggered to write a journal every day. Without notifications, the app may not be used and eventually be uninstalled.

- d) Having usage guidance is good and important because some people are not very familiar with technology, so guidance helps them understand the app. An attractive guide design would be even better.
- e) It is important to be able to record more than one journal entry and to make sure there is a history feature so users can see their past conditions and remember them as memories. Having descriptions and photos is also very helpful.
- f) I am interested in daily challenges because they make the app better. They feel like activity recommendations that users can choose from and can make users feel slightly challenged.

Session 4: Expectations & Closing

1. I prefer a cute and attractive visual design, with well-combined colors that are not monotonous.
2. As long as there is clear permission regarding data privacy and it is ensured that the data is secure, I do not have any concerns.
3. Yes, I would be willing to use it. I would probably feel the need to use it when I am not feeling well, hoping that the app can help improve my mood. I would also like to check the history to remember some of the moments I have recorded.

Source Person 6

Name	:	Putu Devi Angginova Pramitaswi
Age	:	21
Occupation	:	Bachelor of Information Technology Education
Agency	:	Universitas Pendidikan Ganesha

Session 1: Introduction & Background

1. My daily routine includes going to campus, working on my thesis, and cleaning the house. On weekends, I usually do household chores (such as washing clothes, sweeping, and mopping), visit my hometown, and read comics.
2. Yes, I have. Recently, I have been experiencing frequent mood swings and feeling more easily stressed. When I feel overwhelmed, I tend to cry.
3. I realize my mood is not good when I do not get enough sleep, eat late, suddenly remember something negative, or when my thesis work does not go smoothly. I realize my mood is good when I meet and talk with friends, eat my favorite food, and read comics.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually talk or hang out with friends, go for a run, and sleep more than usual.
2. I have written journals or daily activities before, but very rarely. I have never used a specific mood tracking application.

Session 3: Needs Validation & Feature Exploration

1. I think it is important. As a final-year student, I feel that having an app that helps track mood would be very useful. It can be used for stress management and to become more aware of and understand myself better.

Feature Considerations:

- a) It can be helpful because if feelings stay only in my mind, they are hard to remember and easy to forget. Writing them down helps. Personally, even when studying, I often take notes so things are easier to remember and understand.
- b) Mood data visualization is good and important because it allows me to see how my mood is each day. A simple, fresh, and user-friendly app design would be very good to apply.
- c) It depends on what the notifications are like. However, having reminders is actually important because they help users stay consistent in journaling. The notifications should be adjusted so they do not disturb users.
- d) Having usage guidance is good because it helps people who are not very familiar with the app understand how to use it.
- e) It is important to be able to record more than one journal entry. Having descriptions and photos is also very helpful because visuals make things easier to remember.
- f) I am interested in daily challenges because they can be a simple solution to help users improve their mood and serve as a healthy way to release emotions.

Session 4: Expectations & Closing

1. As a woman, I tend to prefer a more feminine visual style with appropriate colors and elements. If possible, having customizable colors would be even better. However, the most important thing is that the purpose of the app is achieved and that the design is not too boring or easy to get tired of.
2. I do not have any major concerns, as long as I am not asked to upload my ID card photo. Other than that, I feel it is safe.
3. Yes, I would be willing to use it. I would probably feel the need to use it quite often because I am the type of person who likes to take notes and forgets things easily. With reminders and features that match my user type,

this app would be very helpful. adanya *reminder* dan sesuai dengan tipe pengguna, maka aplikasi ini akan sangat membantu.

Source Person 7

Name	:	David Mario Yohanes Samosir
Age	:	22
Occupation	:	Bachelor of Computer Science
Agency	:	Universitas Pendidikan Ganesha

Session 1: Introduction & Background

1. As a final-year student, my daily routine is mostly spent in front of a computer and smartphone, usually exploring and working on the projects I am currently handling. When I feel bored or tired, I rest by sleeping, watching shows, listening to music, and singing. On weekends, I prefer not to be disturbed by work and focus only on playing and relaxing.
2. Yes, I have.
3. I usually realize whether my mood is good or bad after doing something. If it goes well, my mood becomes good, and if it does not, my mood becomes bad.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually message my friends to play games or hang out, make plans to go out together, watch dramas, and sing karaoke loudly to release my feelings.
2. I have never written a journal or recorded daily activities. I have used a website to track my mood before, but it was a long time ago.

Session 3: Needs Validation & Feature Exploration

1. I think it is important, but I probably would not use it very often. I would use it at certain moments when I want to understand what causes my mood to change.

Feature Considerations:

- a) It can be helpful because having a report allows users to understand the causes of their mood changes and which activities influence them.
- b) Mood data visualization is good and important, but it would be better not to combine it in the same layout with too many other elements. For example, on the home screen, it should not immediately show a full graph. Instead, only highlights should be displayed so the interface does not feel too crowded.

- c) Notifications are not very important to me and I find them slightly disturbing. Since I cannot write every day, reminders can feel like I am being forced. However, it would be fine if notifications can be turned on or off.
- d) Having usage guidance is good, as long as there is an option to skip it, because some users may already be familiar with the app interface.
- e) It is important to be able to record more than one journal entry because having more entries can affect the accuracy of mood tracking. However, I may not use it every day. Descriptions and images should be optional, so it is fine if they are not always included.
- f) Daily challenges feel more like simple suggestions, and it would be better if they match the user's preferences. If they are called "challenges," it might imply that the app should be able to record and verify whether the user actually completes them.

Session 4: Expectations & Closing

- 1. The app's interface should not be too crowded. Only highlighted and essential elements should be displayed.
- 2. I do not have any concerns as long as there is clear privacy permission.
- 3. Yes, I would be willing to use it. I would probably feel the need to use it during exam periods and at the end of the month or year when I have final projects, to understand how stressed I am.

Source Person 8

Name	:	Joe Aqilla Vandyta
Age	:	21
Occupation	:	Bachelor of Computer Science
Agency	:	Universitas Pendidikan Ganesha

Session 1: Introduction & Background

- 1. As a final-year student, my daily routine usually involves opening my laptop and working on my thesis or developing my thesis product. On weekends, I usually play games or hang out with friends.
- 2. No, I have not, because I rarely experience mood swings.
- 3. I usually realize my mood is not good when I keep coding and encounter errors, eat late, or lose a game. I realize my mood is good when I win a game, scroll through social media, or go riding alone.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually take a shower to calm myself, pray, try to step away from the source of the problem, go riding, and play games.
2. I have never written a journal or recorded daily activities. I have only written down my planned activities in Google Calendar.

Session 3: Needs Validation & Feature Exploration

1. I do not think it is very important because I rarely experience mood swings.

Feature Considerations:

- a) It can be helpful because it helps me understand which activities can make my mood better or worse, and how to deal with them.
- b) Mood data visualization is good and important because it helps in understanding mood patterns. An attractive app design is good, but it should not be too overly interactive.
- c) It is fine to have notifications as long as they can be turned on or off.
- d) Leb It is better not to have usage guidance. If there is one, it should be skippable so users do not have to go through the entire guide, as I personally find it a bit disturbing.
- e) It is important to be able to record more than one journal entry. Having descriptions and images when creating a journal makes it more interactive.
- f) Having daily challenges is good because they provide recommendations to improve mood and give a reason to write a journal.

Session 4: Expectations & Closing

1. I prefer an app interface that is not too crowded and only displays the main features, without too much content.
2. I do not have any concerns as long as there is clear privacy permission and the app does not request strange or unnecessary data.
3. Yes, I would be willing to use it, but probably only when I have free time.

Source Person 9

Name	:	Anak Agung Putri Shanti Swarupini Sadhaka
Age	:	22
Occupation	:	Bachelor of Agribusiness
Agency	:	Universitas Udayana

Session 1: Introduction & Background

1. As a final-year student, my daily routine involves working on my thesis. When I feel tired, I sometimes scroll through social media, go to a coffee shop, and do household chores. On weekends, I usually go out with my family or friends and do a major house cleaning.
2. No, I have not, because I already understand myself well.
3. I usually realize my mood is not good when things do not go according to the plans I have made. I realize my mood is good when things go as planned.

Session 2: Personal Strategies for Managing Mood

1. When I feel stressed, anxious, or sad, I usually talk to friends, scroll through social media, do household chores to distract myself, write my feelings on X (through writing), and sometimes talk to ChatGPT.
2. I do not regularly write a journal or daily activities. I usually express my feelings on X and ChatGPT. However, I am the type of person who likes to write down important dates and activities in a notebook so I do not forget them.

Session 3: Needs Validation & Feature Exploration

1. I think it is important so that I do not keep expressing my feelings on X. It would be better if the mood tracking app also has entertaining features, so I can have a dedicated application specifically for recording my mood.

Feature Considerations:

- a) Bi It can be helpful because it is similar to a period tracking app, which I have used before, although not very often. An app like this is good to use and will be useful for tracking mood in the future.
- b) Mood data visualization is good and important. In terms of design, I prefer a simple interface with not too many images, because if it is too crowded, it becomes confusing to use.
- c) I feel neutral about notifications. Sometimes they are helpful, but when I feel lazy to write, they can be annoying. It would be better if notifications can be turned on or off. Personally, I would probably not enable them.
- d) Having usage guidance is necessary because it helps users understand unfamiliar features.
- e) It is important to be able to record more than one journal entry. Having descriptions and images is very good for people who tend to overshare.
- f) Having daily challenges is interesting because they help provide suggestions to improve mood.

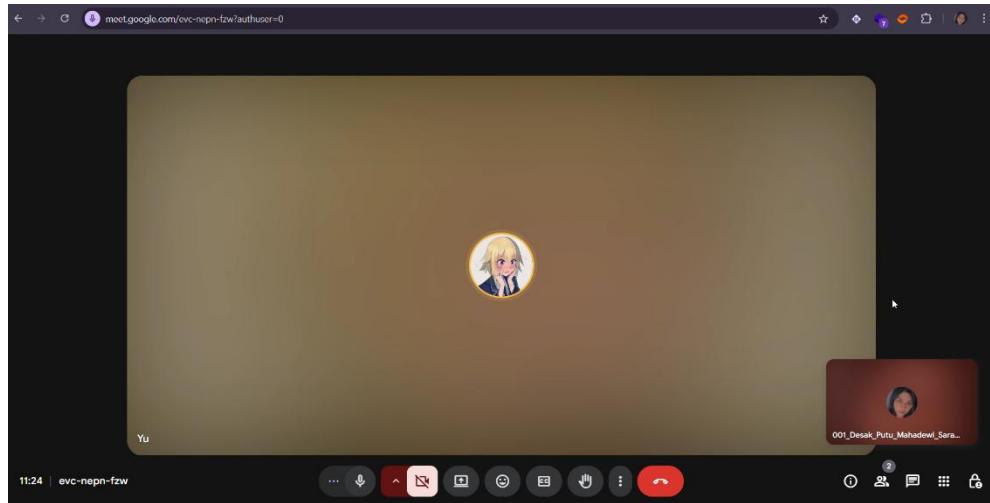
Session 4: Expectations & Closing

1. I prefer an app design with calming and refreshing colors. If possible, the app could provide inspiring quotes based on the user's mood and be easy to use.
2. I have slight concerns about data privacy and the possibility of data leaks, but overall, I do not have any major concerns.
3. Yes, I would be willing to use it. I have previously downloaded apps for mental health healing, and I would most likely feel the need to use an app like this when my mood is not good.



Appendix 3. Interview Documentation at the Empathize Stage





Appendix 4. User Persona



Wahyu Eka Putra
Project Manager, Graphic & UI/UX Designer
PT Dimata Sora Jayate

“

If the app can automatically detect my condition, I'd use it more often.

”

Background

25-year-old project manager, graphic and UI/UX designer at PT Dimata Sora Jayate. Has a tight work schedule involving meetings and design tasks, with downtime spent with pets or at the gym.

Goals and Ambitions

- Manage emotional responses during unexpected work pressures.
- Use digital tools to support self-regulation.

Frustrations

- Too busy for manual tracking.
- Prefers visual, intuitive, and auto-detect features.
- Finds journaling time-consuming.



Aditya Mahendra Winaya
Accountant
Impian Property Management

“

Bad moods can come suddenly, but I have to stay professional and keep working.

”

Background

24-year-old accountant working at Impian Property Management. Weekdays are spent making financial reports about the income and expenses of the villa (property), while weekends are filled with dates, sports, gaming, watch movie, or relaxing.

Goals and Ambitions

- Maintain emotional balance and professionalism at work.
- Identify triggers for good and bad moods.

Frustrations

- Limited smartphone use during work hours.
- Unfamiliar with journaling or mood tracking.
- Finds it difficult to express feelings in writing.



Anggraeni Karunia Dewi
Designer Jewellery
UC Silver Gold

“

Sometimes I want to talk but feel like the issue is too small. A mood tracker could be a safe space.

”

Background

21-year-old jewellery designer at UC Silver Gold. Understands her mood patterns but struggles with external triggers. Often uses digital platforms to vent or self-reflect.

Goals and Ambitions

- Have a private space to offload emotions.
- Track how daily life affects emotional health.

Frustrations

- Sensitive to others' comments.
- Worries about privacy when oversharing.
- Not consistent with journaling.



Ragita Cahya Wicaksani
Culinary Arts Teacher
SMKN 1 Kubu

“

**As a teacher, I have to keep smiling no matter what.
Sometimes it gets tiring.**

”

Background

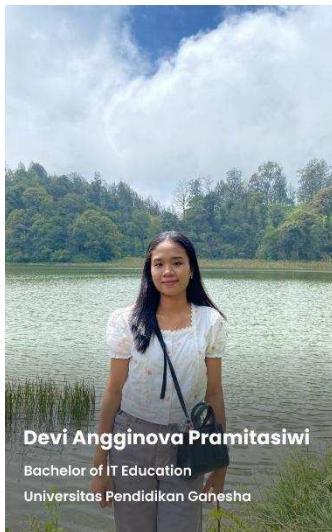
24-year-old culinary arts teacher at SMKN 1 Kubu. Leads practical classes with students and spends weekends on short vacations.

Goals and Ambitions

- Remain emotionally composed while teaching.
- Understand mood changes related to hormonal cycles.

Frustrations

- Rarely recognizes mood shifts.
- Finds mood influenced by school environment.
- Doesn't like intrusive notifications.



Devi Angginova Pramitaswi
Bachelor of IT Education
Universitas Pendidikan Ganesha

“

If I don't write down my feelings, they pile up and I forget why I felt that way.

”

Background

21-year-old IT education student at Universitas Pendidikan Ganesha. Currently working on her thesis. Struggles with stress and mood swings.

Goals and Ambitions

- Reduce thesis-related stress.
- Improve memory and emotional awareness through writing.

Frustrations

- Easily forgets emotional triggers.
- Lacks motivation for consistent journaling.
- Needs appealing design to stay engaged.



Shanti Swarupini Sadhaka
Bachelor of Agribusiness
Universitas Udayana

“

I'd rather vent in a safe app than post my feelings on social media.

”

Background

22-year-old agribusiness student at Universitas Udayana. Balancing between thesis and daily tasks at home. Often journals privately or uses ChatGPT to express thoughts.

Goals and Ambitions

- Have a safe platform for emotional expression.
- Track meaningful moments without fear of data leaks.

Frustrations

- Concerned about data privacy.
- Doesn't like mood tracking notifications.
- Needs visual calmness and easy usability.



Ratih Indraswari
Applied Bachelor in Midwifery
Poltekkes Kemenkes Denpasar

“

My mood changes quickly and sometimes I don't even know why.

”

Background

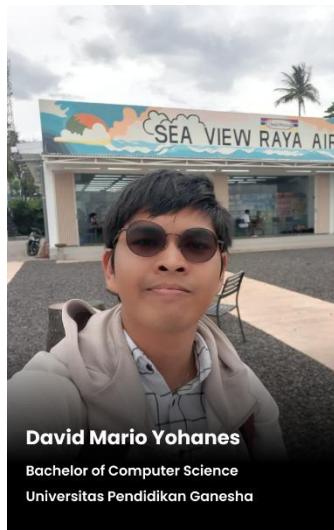
21-year-old midwifery student at Poltekkes Kemenkes Denpasar with a packed schedule of classes and internships. Spends leisure time reading novel, watch film, gaming, or dating.

Goals and Ambitions

- Learn more about mood patterns to improve emotional stability.
- Avoid activities that worsen emotional states.

Frustrations

- Hard to identify causes of mood swings.
- Unsure what to write in journals.
- Needs gentle reminders to track mood.



David Mario Yohanes
Bachelor of Computer Science
Universitas Pendidikan Ganesha

“

Sometimes I want to know why my mood changed, but I don't want to be forced to log it daily.

”

Background

22-year-old computer science student at Universitas Pendidikan Ganesha. Loves gaming and entertainment after long hours of coding.

Goals and Ambitions

- Understand what influences mood shifts.
- Have a low-effort reflection method.

Frustrations

- Doesn't like pushy reminders.
- Prefers simplicity and flexibility.
- Needs journaling to be optional, not required.



Joe Aqilla Vandyta
Bachelor of Computer Science
Universitas Pendidikan Ganesha

“

My mood is generally stable, but sometimes I just need to vent.

”

Background

21-year-old computer science student at Universitas Pendidikan Ganesha. Currently, focused on his thesis. Relaxes through games and hangouts.

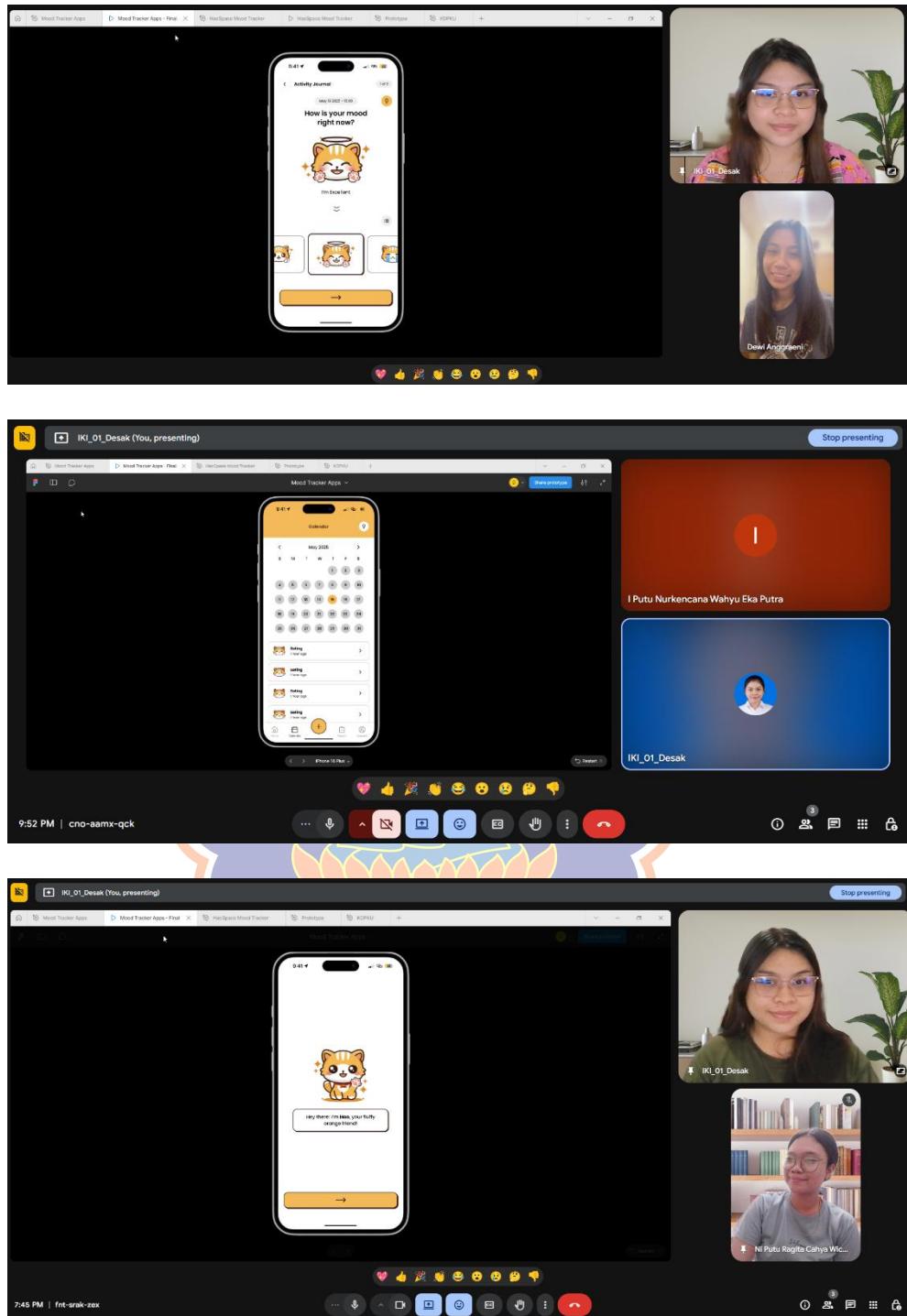
Goals and Ambitions

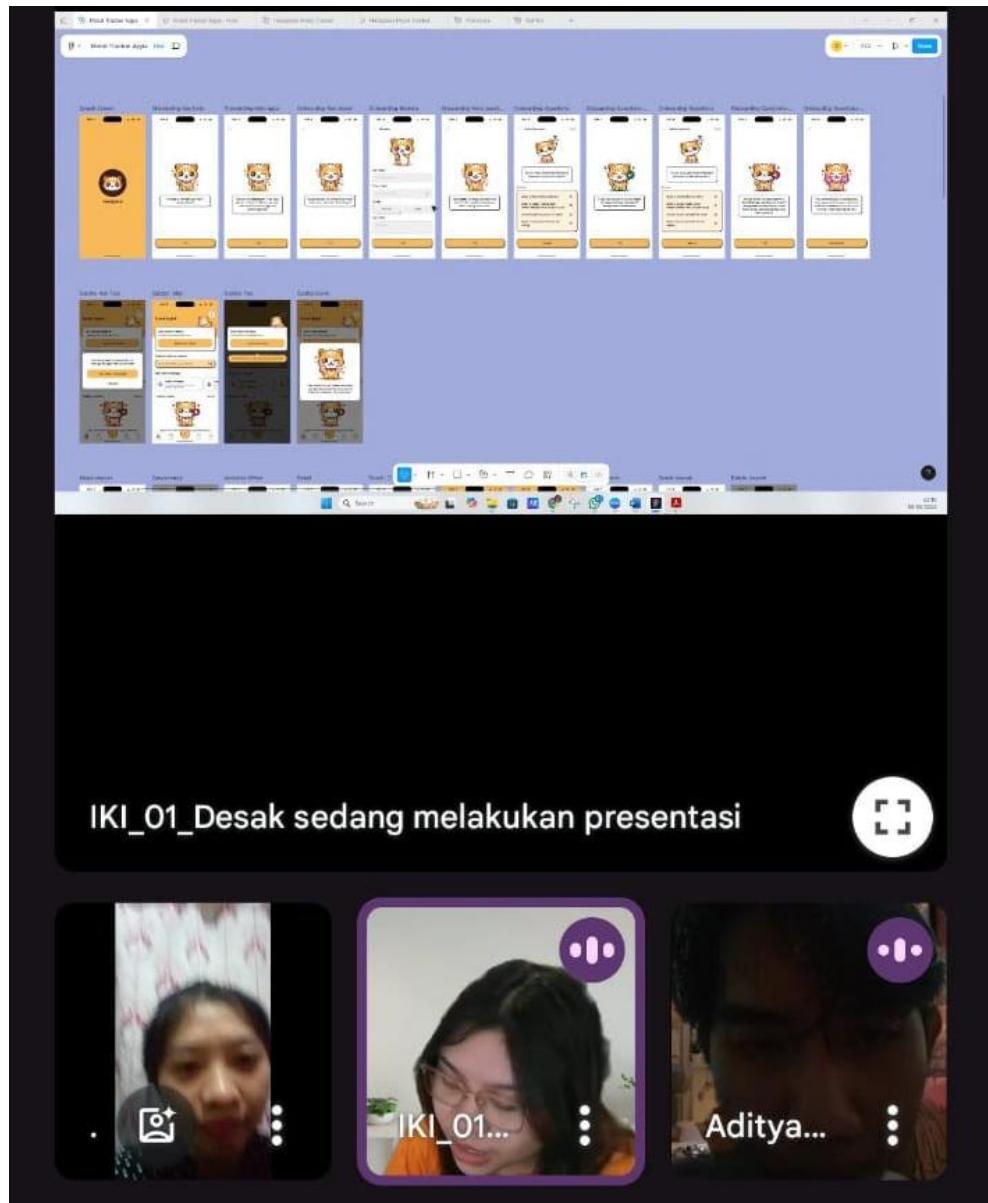
- Use the app occasionally when feeling overwhelmed.
- Have access to mood records without being overloaded.

Frustrations

- Distracted by apps with too much content.
- Dislikes mandatory tutorials.
- Needs opt-in features for flexibility.

Appendix 5. User Testing Process Documentation





Appendix 6. Expert Evaluation Request Letter



KEMENTERIAN PENDIDIKAN TINGGI,
SAINS, DAN TEKNOLOGI
UNIVERSITAS PENDIDIKAN GANESHA
FAKULTAS TEKNIK DAN KEJURUAN
Jalan Udayana Nomor 11 Singaraja Bali
Laman: <http://ftk.undiksha.ac.id>

Nomor : 1919/UN48.11.1/KM/2025
Perihal : Surat Permohonan Uji Ahli

Singaraja, 21 Juli 2025

Yth. Dekan Fakultas Ilmu Pendidikan Undiksha
c.q. Dr. Dewi Arum Widhiyanti Metra Putri, S.Psi., M.A., M.Psi., Psikolog
di tempat

Dengan hormat, sehubungan dengan proses penyelesaian Tugas Akhir/Skripsi, maka melalui surat ini kami mohon Bapak/Ibu berkenan memberikan data yang terkait dengan data yang dibutuhkan. Adapun mahasiswa yang akan melakukan pengambilan data seperti tersebut di bawah ini:

Nama : Desak Putu Mahadewi Saraswati
NIM : 2115101001
Program Studi : Ilmu Komputer
Jurusan : Teknik Informatika
Data yang dibutuhkan : Melakukan Uji Ahli Isi dan Media
Judul Penelitian : Mobile App Development For Tracking and Classifying Mood On-Device
Artifical Neural Network Model

Demikian kami sampaikan, atas perhatian dan kerjasamanya, diucapkan terima kasih.

a.n Dekan
Wakil Dekan Bidang Akademik.



KEMENTERIAN PENDIDIKAN TINGGI, SAINS DAN TEKNOLOGI



UNIVERSITAS PENDIDIKAN GANESHA

FAKULTAS TEKNIK DAN KEJURUAN

JURUSAN TEKNIK INFORMATIKA

Jalan Udayana Singaraja-Bali Kode Pos 81116

Tlp. (0362) 22570 Fax. (0362) 25735

Laman: www.undiksha.ac.id

Nomor : 399/UN48.11.5/KM/2025
 Perihal : Surat Permohonan Pengambilan Data
 Lampiran : -

Singaraja, 21 Juli 2025

Yth. Dekan FTK
 Universitas Pendidikan Ganesha
 Di tempat

Dengan hormat,
 Sehubungan dengan proses penyelesaian Tugas Akhir / Skripsi yang dilaksanakan oleh saudara
 mahasiswa:

Nama	:	Desak Putu Mahadewi Saraswati
Nim	:	2115101001
Prodi/Jurusan	:	Ilkom/ Teknik Informatika
Instansi yg ditujui	:	Fakultas Ilmu Pendidikan Universitas Pendidikan Ganesha
Jabatan yang dituju	:	Dr. Dewi Arum Widhiyanti Metra Putri, S.Psi., M.A., M.Psi., Psikolog
Data yang dibutuhkan	:	Sebagai Uji Ahli Isi dan Media
Judul	:	MOBILE APP DEVELOPMENT FOR TRACKING AND CLASSIFYING MOOD WITH ON- DEVICE ARTIFICAL NEURAL NETWORK MODEL

Bersama ini kami mohonkan kepada Bapak untuk berkenan memfasilitasi kebutuhan data untuk
 Tugas Akhir / Skripsi mahasiswa yang bersangkutan.
 Demikian kami sampaikan. Atas perhatian dan kerjasama Bapak, kami ucapkan terima kasih.

Ketua Jurusan Teknik Informatika,



Putu Hendra Suputra
 NIP. 198212222006041001

Catatan :

- UU ITE No. 11 Tahun 2008 Pasal 5 ayat 1 "Informasi Elektronik dan/atau Dokumen Elektronik dan/atau hasil cetaknya merupakan alat bukti hukum yang sah"
- Dokumen ini tertanda ditandatangani secara elektronik menggunakan sertifikat elektronik yang diterbitkan BapE
- Surat ini dapat dibuktikan keasliannya dengan menggunakan *qr code* yang telah tersedia



Balai
 Sertifikasi
 Elektronik

Appendix 7. Psychological Validity Evaluation of the HaoSpace Application Prototype

**PSYCHOLOGICAL VALIDITY TESTING OF PROTOTYPE DESIGN
MOBILE APP DEVELOPMENT FOR TRACKING AND CLASSIFYING
MOOD WITH ON-DEVICE ARTIFICIAL NEURAL NETWORK MODEL**

Name : Dr. Dewi Arum Widhiyanti Metra Putri, S.Psi., M.A., M.Psi., Psikolog
Profession : Guidance and Counseling Lecturer
Test Date : 5 / 8 / 2025

Form Completion Guidelines:

Please place a check mark (✓) in the column that best reflects your assessment. If you have any suggestions or feedback, kindly write them in the provided column.

Rating Scale Description:

1. Not Acceptable
2. Needs Improvement
3. Acceptable
4. Highly Acceptable

No	Indicator	Evaluation Statement	Score			
			1	2	3	4
1	Mental Model	The interface layout supports the formation of accurate mental models for users			✓	
2	Visual Perception	Visual elements (e.g., colors, icons, shapes) intuitively communicate feature functionality and reflect psychological design principles			✓	

No	Indicator	Evaluation Statement	Score			
			1	2	3	4
3	Cognitive Load	The design avoids overwhelming the user with too much information or complexity				✓
4	Visual Hierarchy	The visual hierarchy effectively directs the user's attention to key elements				✓
5	Affordance & Signifier	Interactive elements clearly communicate their functions (e.g., buttons appear clickable)				✓
6	Clarity & Disambiguation	The design avoids perceptual or functional ambiguity during use			✓	
7	Emotional Comfort	The design creates a sense of psychological comfort and ease on first impression			✓	
8	Cognitive Fatigue	The design does not lead to excessive cognitive fatigue during prolonged interaction				✓
9	Consistency & Familiarity	The interface feels familiar and aligns with common user expectations and standards				✓
10	Psychological Alignment	Overall, the design aligns well with cognitive and perceptual principles of HCI (Human-Computer Interaction)				✓

Additional Questions for Psychological Validation

1. In your professional opinion, to what extent can the journaling feature in this application assist adolescents in recognizing, managing, and expressing their emotions? Please elaborate from a mental health perspective.

Answer:

Melalui penggunaan aplikasi ini, remaja dapat terfasilitasi dalam mengenali suasana hati pada kesehariannya, dapat membantu meningkatkan kesadaran dirinya tentang emosinya dan memberikan makna bagi aktivitas yg. dilakukannya. Hal ini penting sebagai proses refleksi pd. remaja terhadap kondisi suasana hatinya dalam keseharian, stg. (bila diperlukan) dapat segera mencari bantuan bila terindikasi mengalami permasalahan.

2. Do you consider the journaling feature provided in this application to be psychologically appropriate as one of the approaches to address mental health issues among adolescents?

Answer:

Teknik journaling sebenarnya merupakan salah 1 teknik yg. digunakan berdampingan dengan intervensi (bimbingan atau konseling) pada permasalahan yg. tentu, stg. dgn. pengembangan aplikasi ini dapat menjadi salah satu cara yang lebih terstruktur bagi konselor/ profesional lain untuk memonitoring dinamika suasana hati konsepi yg. tadi. tahapan yg. intervensi dapat dirancang dan diimplementasikan secara lebih tepat sasaran.

Suggestions for Improvement:

.....

Conclusion:

Circle one of the following options:

1. Feasible for prototype design testing without revision
2. Feasible for prototype design testing with revision based on suggestions
3. Not feasible for testing

Singaraja, 5 August 2025

Psychology Expert,



Dr. Dewi Arum Widhiyanti Metra Putri, S.Psi., M.A., M.Psi., Psikolog

NIP. 198008012006042001

Appendix 8. Question Suggestions for Quick Educational Questions

ONBOARDING QUESTIONS LIST

1. What is mood?

Reason: To introduce the definition of mood.

2. What is the difference between mood and emotion?

Reason: To explain that mood lasts longer and may not have a clear trigger, while emotion is more specific and reactive.

3. Is it possible to experience more than one mood in a day?

Reason: To help users understand that moods fluctuate and it's normal for them to change.

4. Can daily activities like sleeping, exercising, and eating affect your mood?

Reason: To show that mood is influenced by things users can control.

5. Why is it important to recognize mood patterns over time?

Reason: To emphasize that understanding your mood patterns can help you take care of your mental health.

Appendix 9. Documentation During Expert Testing with a Psychologist



Appendix 10. Black-Box Testing Result

Respondent Profile 1

Name : I Putu Nurkencana Wahyu Eka Putra
 Age : 25
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	

No	Scenario	Result	Problem
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 2

Name : Ni Putu Ragita Cahya Wicaksani
 Age : 24
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	

No	Scenario	Result	Problem
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	

No	Scenario	Result	Problem
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 3

Name : I Nyoman Aditya Mahendra Winaya
 Age : 25
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	

No	Scenario	Result	Problem
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the	Y	

No	Scenario	Result	Problem
	notification to initiate the creation of an activity journal.		
15	The user is able to view their account profile details.	Y	

Respondent Profile 4

Name : Anak Agung Putri Shanti Swarupini Sadhaka
 Age : 22
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	

No	Scenario	Result	Problem
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 5

Name : David Mario Yohanes Samosir
 Age : 23
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3-5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date .	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	

No	Scenario	Result	Problem
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 6

Name : Ni Made Anggraeni Karunia Dewi
 Age : 22
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user	Y	

No	Scenario	Result	Problem
	registration, and an educational quiz, before accessing the Home page.		
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days.	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	

No	Scenario	Result	Problem
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 7

Name : Putu Devi Angginova Pramitaswi
 Age : 22
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	

No	Scenario	Result	Problem
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	

No	Scenario	Result	Problem
15	The user is able to view their account profile details.	Y	

Respondent Profile 8

Name : Joe Aqilla Vandyta

Age : 22

Status : Student/Worker

Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been	Y	

No	Scenario	Result	Problem
	created. The daily report displays the average daily mood and graphical visualizations.		
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 9

Name : Desak Putu Ratih Indraswari
 Age : 21
 Status : Student/Worker
 Gender : Female/Male

No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and access the App Tour again through the Guide button on the Home page.	Y	
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	

No	Scenario	Result	Problem
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

Respondent Profile 10

Name : I Putu Gede Dharma Saputra
 Age : 22
 Status : Student/Worker
 Gender : Female/Male

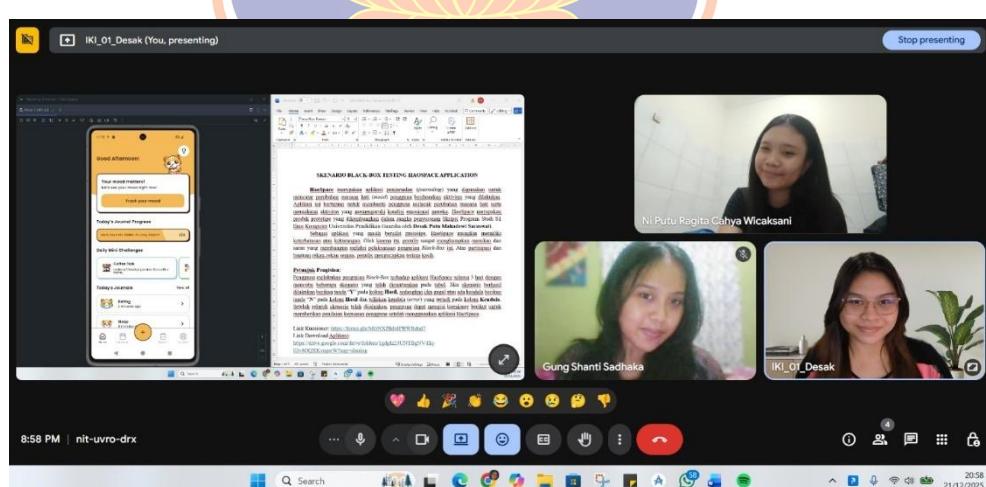
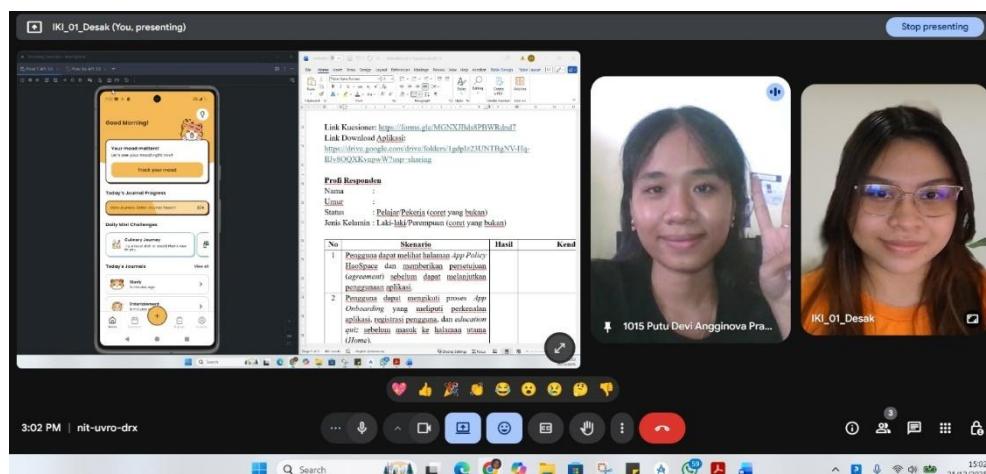
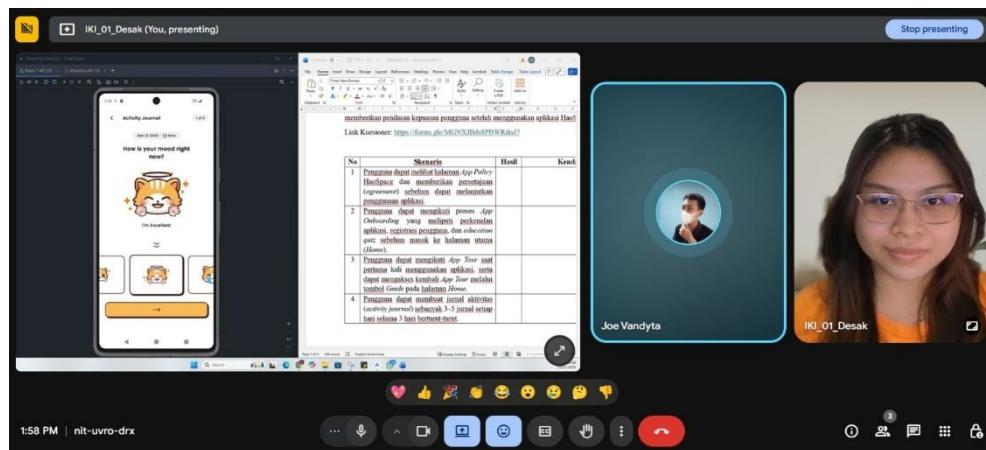
No	Scenario	Result	Problem
1	The user is able to view the HaoSpace App Policy page and provide consent (agreement) before proceeding to use the application.	Y	
2	The user is able to complete the App Onboarding process, which includes application introduction, user registration, and an educational quiz, before accessing the Home page.	Y	
3	The user is able to follow the App Tour during the first use of the application and	Y	

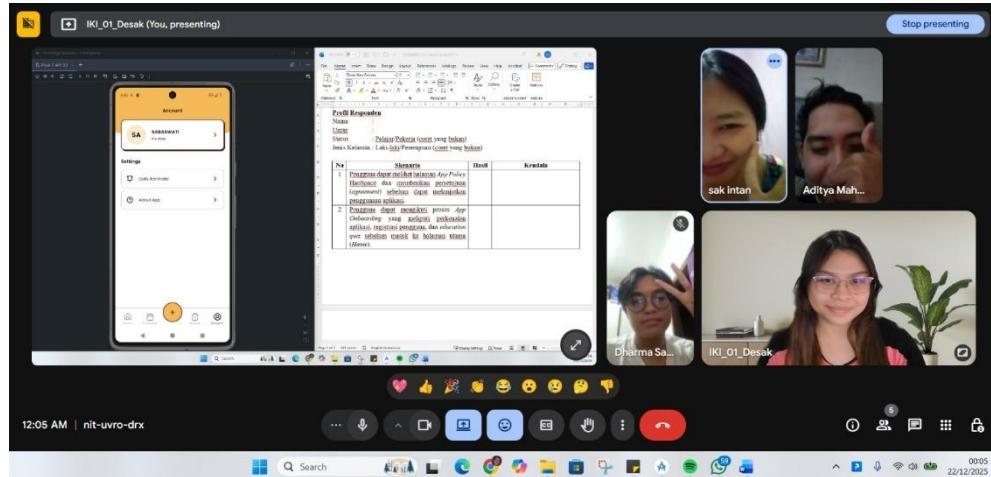
No	Scenario	Result	Problem
	access the App Tour again through the Guide button on the Home page.		
4	The user is able to create 3–5 activity journal entries each day for three consecutive days .	Y	
5	The user is able to view a list of activity journals based on date through the Calendar View and open the details of a selected journal.	Y	
6	The user is able to edit and delete activity journal entries on the same day as their creation date.	Y	
7	The user is able to view a daily report on the following day (H+1) after the activity journals of the previous day have been created. The daily report displays the average daily mood and graphical visualizations.	Y	
8	The user is able to view three (3) different daily challenge recommendations each day to support mood improvement.	Y	
9	The user is able to complete a challenge and create an activity journal after the challenge has been completed.	Y	
10	The user is able to view the list of completed challenges for the current day on the Home page.	Y	
11	The user is able to ensure that the HaoSpace application has permission to display reminder notifications.	Y	
12	The user is able to add custom reminders according to the desired time.	Y	
13	The user is able to activate one or more available reminders.	Y	

No	Scenario	Result	Problem
14	The user receives notifications based on the active reminders and can tap the notification to initiate the creation of an activity journal.	Y	
15	The user is able to view their account profile details.	Y	

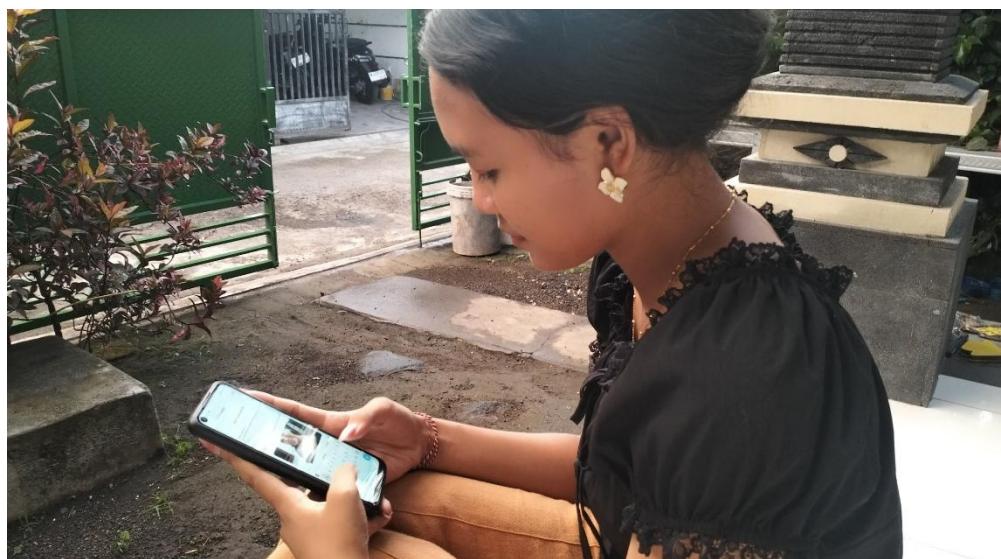
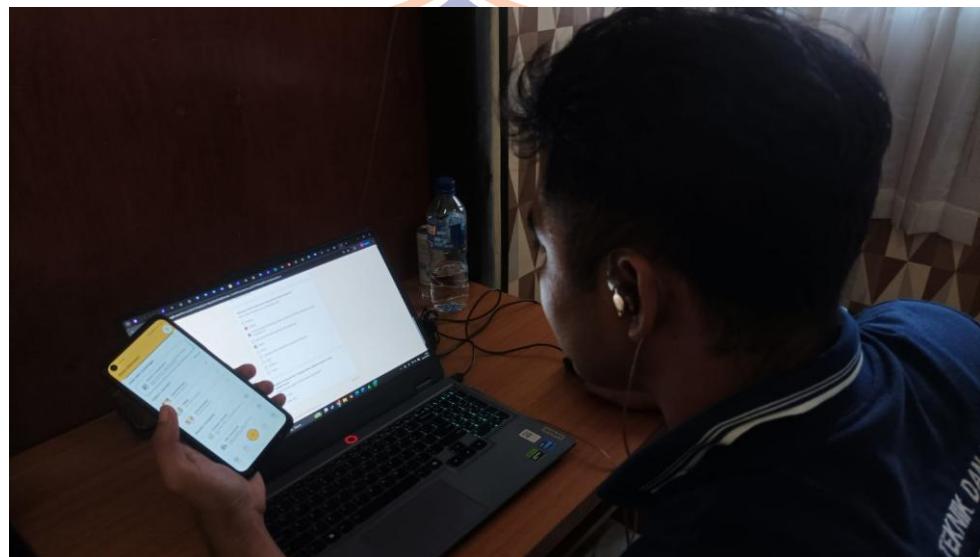
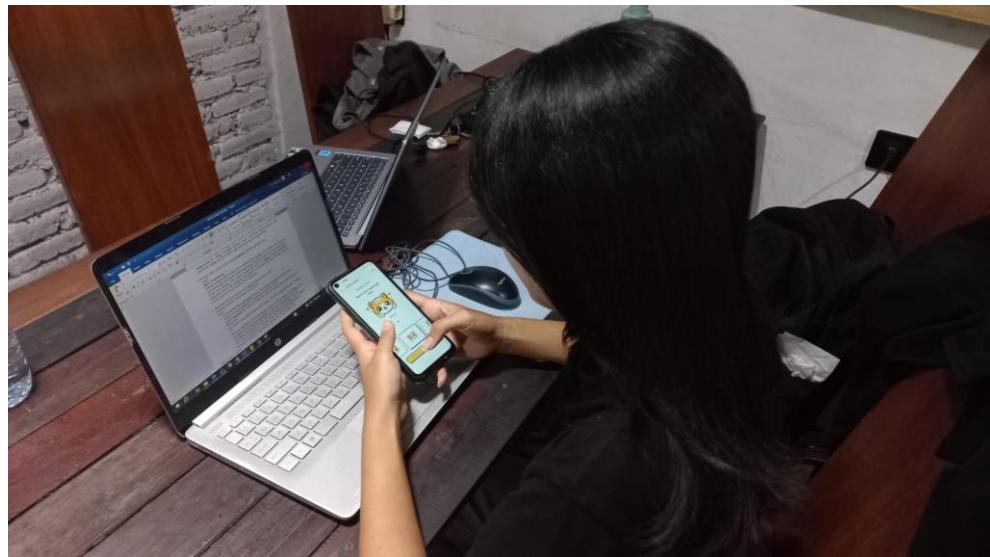


Appendix 11. Documentation of Explained Black-Box Testing Procedure





Appendix 12. Documentation of Users Trying the HaoSpace Application



Appendix 13. HaoSpace Application Resources

GitHub : https://github.com/sarasvatidpm11/HaoSpace_Project.git

Figma : <https://www.figma.com/design/k0naUfzT7F5BMVL1zGHDPC/HaoSpace-Mood-Tracker?node-id=0-1&t=vVtlf1S7LvTKRr4t-1>

Demo App : <https://youtu.be/p8VphhvPzwk>



BIOGRAPHY



Desak Putu Mahadewi Saraswati was born in Singaraja, Buleleng, on December 11, 2002. The author is an Indonesian citizen and follows Hinduism. The author currently resides in Tangeb Village, Mengwi District, Badung Regency. The author completed elementary education at SD N 1 Buduk and graduated in 2015, junior secondary education at SMP N 3 Mengwi in 2018, and senior secondary education at SMA N 1 Kuta Utara in 2021. The author was enrolled in the Undergraduate Computer Science Study Program at Universitas Pendidikan Ganesha from 2021 until the completion of this undergraduate thesis.

