BAIT2203 HUMAN COMPUTER INTERACTION
ASSIGNMENT ANALYSIS REPORT

Programme   : **RSW-Bachelor of Computer Science (Honours) in Software Engineering Year 1 Semester 3 (Intake:202205)**

Tutorial Group : **G6**

Prototype name: **Mood Mentor**

Declaration   : I/We declare that this assignment is free from all forms of plagiarism and for all intents and purposes is my/our own properly derived work.

No	Student Photo	Student Name	Student ID	Signature
1		**Hue Zhen Wei**	**22WMR05658**	zhennn
2		**Lee Wee Harn**	**22WMR05673**	Harn
3		**Kwo Chun Kit**	**22WMR05665**	KWO

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1.0 Persona

Persona: HEE, a student

- Name: Hee Choon Yew
- Occupation: Part-time, studying
- Demographic: 21 years old, lives in Bukit Damansara.

Choon Yew's story:

Hee Choon Yew is currently working as a part timer in a car modification company after graduation. As time flies, he's not interested much in working as a part timer instead he discovers a passion in studying Psychology, even from his family inspiration. A Psychologist therapy, which belongs to his career goals from. He is willing to work and study in UCSI while working as passive income in order to repay the academy fee on his own.

Challenges:

Hee Choon Yew is not great at studying, and he is getting stressed over the time that he spends his time studying in Psychology. The major challenges are his mental issues and persistence. He found that studying in Psychology is no longer easy.

What needs:

From the challenges he is facing, Hee Choon Yew definitely needs a product that aids in releasing stress, preventing academy pressure instead of depression. He is eager to look for a depression assistant app to comfort, release stress, and get rid of depression. In condition, he is eager the product must be relaxing apps and AI-built in the system, as he admitted his phone usage is demanded.

HEE CHOON YEW

"In the tapestry of life, every experience is a thread that weaves together wisdom, compassion, and growth, creating a masterpiece of understanding and connection."

PSYCHOLOGY STUDENT

Contact

- Damansara Heights, Kuala Lumpur
- 017-3525023
- choonYew.ig.com
- choonyew12@gmail.com

Personality

Extrovert
● ● ● ● ● ● ○

Feeling
● ● ● ● ● ○ ○

Intuition
● ● ● ○ ○ ○ ○

Perceving
● ● ● ● ● ● ○

Bio

- Senior at University College Sedaya International, Major in Psychology
- Passionate about understanding the human mind and mental behavior
- An active member of the university's community service club, inspiration in linguistic literature study

Goals

- Achieve academic excellence and graduate with honors
- Secure a meaningful internship in the field of psychology
- High engage in community service project and volunteer work

Education

Secondary
2015 - 2019
Sekolah Menengah Kebangsaan Kepong Baru

Diploma & Degree in Psychology
2020 - 2023
University College Sedaya International

Frustrations

- Struggling to manage coursework, part-time job, and extracurricular commitments.
- Feeling the pressure of high expectations from family and self-discipline
- Balancing finances for education, living expenses, and personal growth

Motivations

Incentive
● ● ● ● ● ● ○

Fear
● ● ● ○ ○ ○ ○

Growth
● ● ● ● ○ ○ ○

Power
● ● ● ● ● ● ○

Social
● ● ● ● ● ● ○

Figure 1.1 shows the persona template

In this persona template, we have constructed using Xtensio from the website, the persona, named "Hee Choon Yew" in real life persona is willing to share and presented via his quick impression of his lifestyle, his goals, and personality. Lastly, appreciate his handsome and extraordinary photo of his particular person.

In this example, it's essential to appreciate the design that includes factors such as goals, motivations, and frustrations, all of which are extremely important to understanding and empathizing with the behavioral patterns of the persona.
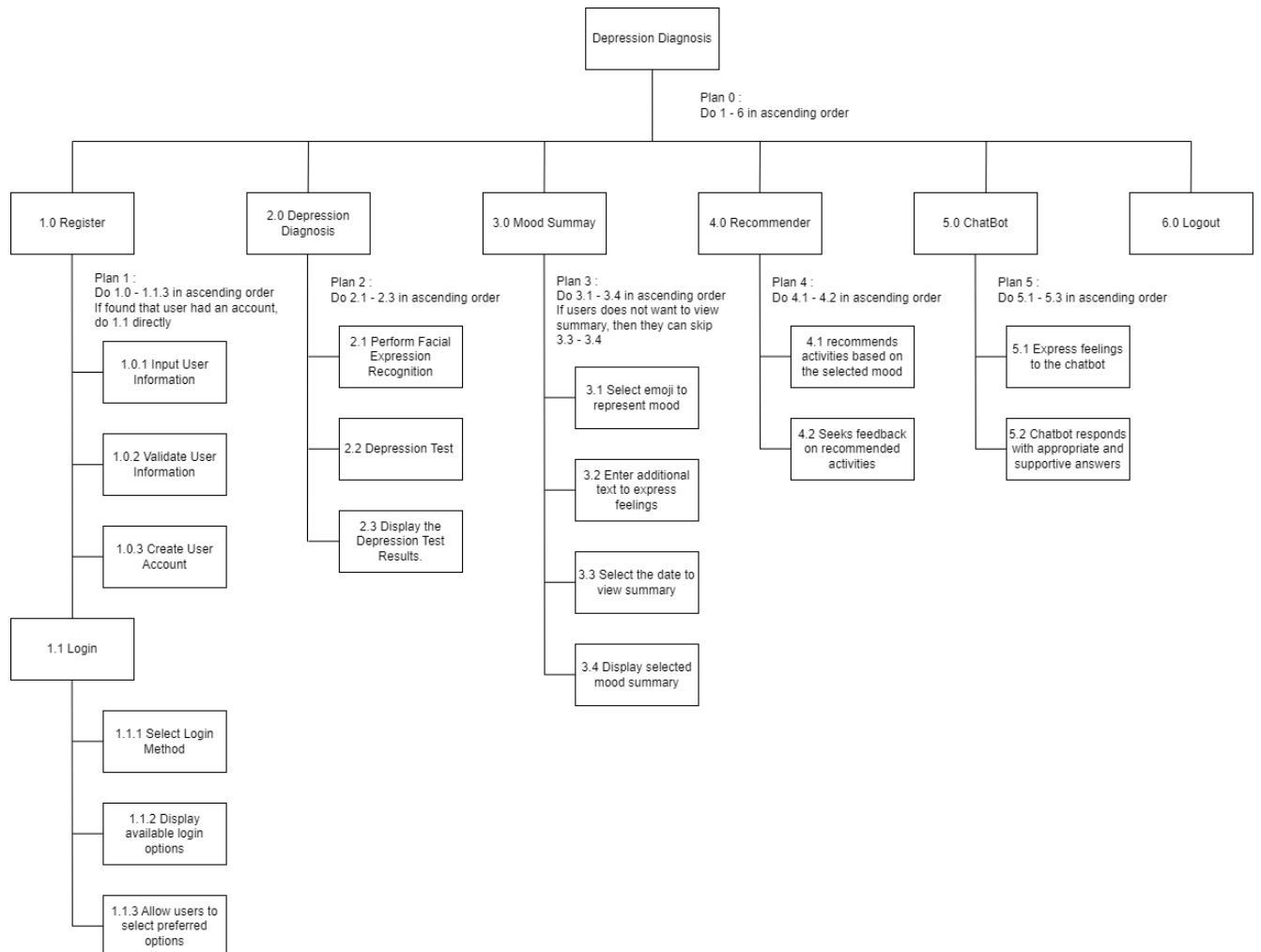
2.0 Task Analysis For Current Task

Figure 2.1 Hierarchical Task Analysis of Depression Diagnosis

3.0 Scenario of Current Task

Based on *Figure 2.1*, in order to let Choon Yew proceed with the feature of depression diagnosis, he will first need to register and log in with his valid information. For instance, when Choon Yew is registering, the system displays the registration form and requests essential information such as name, email and creates a password. After the information entered, after all, the system will validate whether the information is valid. The system also validates whether all of the required fields have been filled and verifies to make sure that every username and email is unique to prevent duplication. On the other hand, if the information is incorrect or invalid, the system also displays error messages telling Choon Yew that he has filled in invalid information. His account eventually will be created successfully and saved to the database after submitting valid information only.

After Choon Yew has successfully registered, he is required to login in order to proceed with further features in the system. There are two log-in methods available for him which are facial recognition login or email and password log-in. These login methods are displayed on the login page to let Choon Yew pick his preferred one. If Choon Yew picks facial recognition as his login method, the system is required to access the device's camera and instruct him to place his face correctly. The system then captures and analyzes his face whether it is a valid user or not and only the registered user's face is allowed to log in to the system successfully. On the other hand, if Choon Yew picks an email and password as his login method, the system will prompt him to enter his email and password on the login page. The system then verifies whether the email and password are valid and only valid email and password of users only are allowed to log in to the system.

After Choon Yew has successfully logged in to the system, he proceeds with the feature of depression diagnosis. There are two steps that Choon Yew needs to do in order to complete the diagnosis. Firstly, he will need to perform facial expression recognition where the system again accesses the device's camera and instructs him to place his face correctly. The system then captures and analyzes his facial features whether he has symptoms of depression or not. Next,

Choon Yew has to complete a depression test where a list of depression test questions are displayed and he is required to answer them. The diagnosis result will be displayed after both of the steps are completed..

After the depression diagnosis, Choon Yew can proceed to a mood summary. In the mood summary, Choon Yew is able to select an emoji to represent his current mood. He can choose to write what happened on the current day or not as a diary, otherwise he can choose to ignore it when he is blue.

Based on the emoji that selected on the mood summary, the system will recommend Choon Yew activities to cheer him up. For example, if Choon Yew chose a crying emoji in the mood summary, the system will recommend hiking activities to release his negative emotions. After making recommendations, Choon Yew needs to respond to the feedback from the system. For instance, the system quickly seeks feedback from Choon Yew whether he had done the recommended activity or not. If yes, the system asks "does he like the recommended activity?". If Choon Yew enjoys the recommended activity, the system continues to recommend similar activities in the future.

Finally, Choon Yew proceeds with the system's chatbot by starting a conversation by expressing his feelings. For instance, if Choon Yew starts the conversation by saying "I am sad and disappointed as nobody in this world cares for me", the chatbot will respond with supportive answers such as "You are not alone, you are stronger than you thought". By doing this, Choon Yew's emotions will become more stable and may express what he wants without worrying about being judged.

4.0 Environment Analysis

Here is the environmental analysis for the Depression Stress System:

- The design will be constructed with gentle colors and natural lighting to provide a tranquil and quiet environment. Users will be less conscious and anxious as a result. Making it easier for individuals to relax and take a break. The overall design will be influenced by nature, with neutral and soothing colors.

- It's suitable for users to use our system during their stressful moments which take five to ten minutes. The system can be used as a quick relaxation during the moments of anxiety. Users can easily know what action needs to take in order to solve the problem. It's also flexible to use no matter anytime and where the users are.

- Rest assured that our system is designed with strict privacy policies in place to maintain the confidentiality of our customer's personal information at all times. We take pride in building trust with our users and comply with all relevant data protection laws and regulations to ensure their peace of mind.

- The device needed to be made sure all are user-friendly and easy to use, especially for the cam scanner and other related devices. Users who are stressed or depressed might find difficulty using complex or unfamiliar technology, so it is essential to ensure that they can access the system without any hassle or frustration.

- The user data and profile are all encrypted in order to ensure the confidentiality and security of the user's privacy. Users who use the system definitely do not share sensitive and personal information, such as their mood, stress level, and coping strategies. It's essential to protect their privacy and prevent any unauthorized access or misuse of their data, even ruining their working routine. After getting the result from the system, users should also have the option to delete their data if they wish to.