

DE LA SALLE-COLLEGE OF SAINT BENILDE

**Mentalit-E: The Need for an Online Mental Health
Services Platform in the Philippines**

A Capstone Project

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EXECUTIVE SUMMARY

Mental health is one of the relevant issues experiencing by Philippines nowadays. It needs to be addressed thoroughly as the COVID-19 pandemic made it more challenging to solve. This study aims to develop an online mental health services platform in the Philippines through the adequacy of technological intervention and individuals' needs of emotional support.

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INTRODUCTION

Project Context

When it comes to mental health, it is considered as a sensitive topic for many people. As we grow old, when life hits you as hasty as a bullet train, the way we handle our relationships and communications with our loved ones tend to be heavier than ever. Not only that, but problems do come unexpectedly to the point wherein it affects you, and in other circumstances, may even break you. Especially nowadays, where the world is damaged by COVID-19 pandemic, the number of restrictions the government imposes upon us are endless. Our boundaries are limited just to ensure our safety. Shang et al. (2021) stated that the pandemic has even caused long-term economic impact around the world. This is due to the costs surrounding the public health resources, human resources, implementation, and isolation of cases, resulting in declined tax revenues as well as increased expenditure. The brutality of this pandemic feared us not to indulge ourselves into the outside environment. Even so, the outbreak of COVID-19 has exacerbated problems concerning mental health for every person involved, governments and medical professionals have shifted their focus in containing the strain that the pandemic has brought (World Health Organization, 2020). In the first half of the pandemic, people were locked inside their homes for long periods of time, while frontline workers have tried to save loads of people in hospitals that have reached

their maxed capacity because of COVID-19. These factors alone can take a toll on a person's mental health and it often reaches one's breaking point (Mental Health Foundation, 2020).

According to MentalHealth.gov (2020), mental health refers to the conditions regarding our emotional, social, and psychological state. This is an aspect that should be valued in every stage of human life, starting from childhood until old age. It pertains to how a human think, acts, and feels under certain situations — same goes on how they should handle stress and decisions. However, there are also what we call mental health illnesses. These are caused by numerous factors which can be genetic, family heritage, and life experiences such as abuse and trauma.

The issue surrounding mental health has been growing around the world. In the Philippines alone, the government is trying to cooperate with the healthcare industry because of the limited capabilities to solve the rising cases of mental health, but the country cannot address this problem properly with the limited resources it can muster (Estrada et al., 2020). Furthermore, according to The World Bank (2020), the pandemic has also devastated the economy which resulted in a recession due to the lockdowns it has impeded the flow of goods that can come in and out of countries. As a result, businesses had to close and many were left forcefully unemployed. This affects a person's physical and mental well-being (Finch & Wilson, 2021).

Despite the COVID-19 pandemic, issues regarding mental health have already become prevalent. According to the National Institute of Mental Health (2017), 3.2 million people aged 12-17 years have at least one major depressive disorder, and 13.3% of U.S. teenagers both suffer from depression and anxiety disorder. The World Health Organization (2021) stated that depression is one of the most common illnesses in the world and it is considered a serious mental condition, with over 280 million (3.8%) people affected. This results to 700 000 people dying of suicide every year, with the fact that suicide is the fourth leading cause of death for young adults aged 15-29 years old.

Therefore, it is with a strong urge to say that mental health shall be valued especially in these times of world crisis. Communication should exist and be maintained in every community, family, and other social groups. According to the World Health Organization (2020), one should be supportive to others through the assistance of checking on one another. This can be done through phone calls or just by simply sending them a message. Families and friends should stay in contact with each other.

In order to understand the struggles these people have to go through, mental disorders share common impairments that affect the person's way of thought, behavior, and mood. A common example of a mental disorder that people are familiar with today is depression, According to Mayo Clinic (2018), it is a mood disorder with symptoms that consists of low mood, a loss of interest in things that

the individual typically enjoys, change in appetite, feeling of worthlessness, inconsistent sleeping patterns, restlessness, and even suicide tendencies. Depression can last for long periods of time if left untreated, this can significantly interfere a person's ability to work and interpersonal relationships. There is also the issue of diagnosing an individual of a certain mental illness, some symptoms may overlap with one another. Schizophrenia as an example in contrast to other mental illnesses may have the same mood disorder that can be associated with depression (Peterson, 2016). In some cases, it may go unnoticed because the person has kept it to themselves for a long time just to preserve dignity (Alexander, 2016).

In context of the current problems and challenges surrounding mental health, by introducing psychiatric therapy within a wider reach, this can treat individual cases on a personal level by dissecting the person's experiences and struggle that could finally strengthen an individual's character development. Casarella (2003) stated that psychotherapy is a form of mental health treatment that is also known as talk therapy. It is frequently used to treat mental illnesses, either alone or in combination with other medicines. You talk to a doctor or a certified mental health care professional during a psychotherapy session to evaluate and address emotional problems.

Purpose and Description**Significance of the Study**

The study aims to provide emotional support to individuals with mental issues, problems, and disorders and to create a platform where individuals can interact with other people who are aware of the existing problems including professionals. The following may benefit from the study:

Individuals with mental health problems. The result of the study will be beneficial to individuals with mental health problems as it will serve as a platform to support emotional needs.

Professional Healthcare Workers (Doctors, Therapists, Psychologists). The result of the study will be beneficial to healthcare workers as it will serve as a platform to connect with individuals with mental health problems.

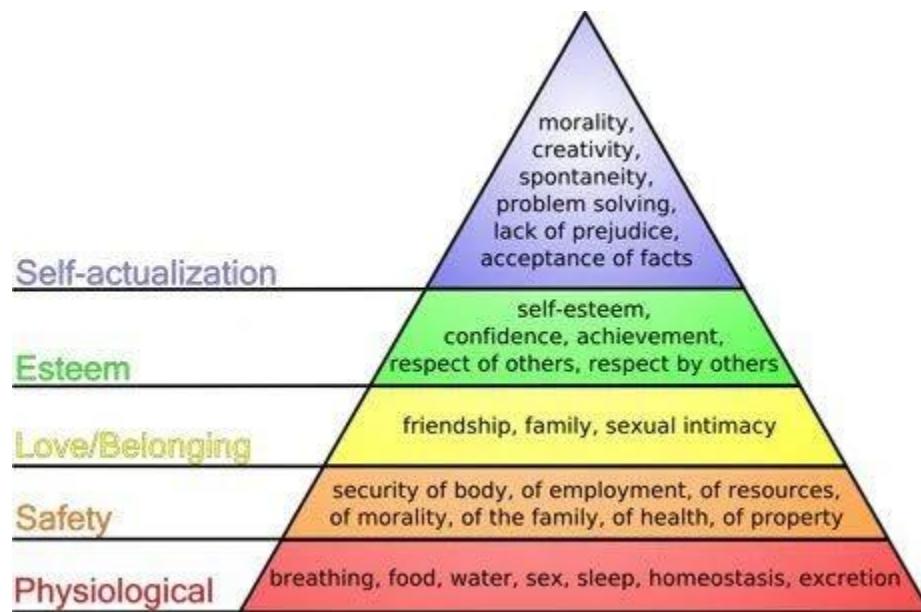
Uninformed individuals. The result of the study will be beneficial to uninformed individuals as it will serve as a platform to be conscious of mental health problems.

Future researchers. The result of the study will be beneficial to future researchers as it will serve as a guide to acquire insights and knowledge regarding the study.

Theoretical Framework

- Abraham Maslow's Hierarchy of needs

This theory was made by Abraham Maslow in 1943 which was published in a paper titled “A Theory of Human Motivation”. Also known as *Maslow's hierarchy of needs*, it states that human decision-making is supported by 5 core levels of needs, which are composed of physiological needs, safety needs, love and belonging needs, esteem needs, and self-actualization needs. Every level is essential in fulfilling human behavioral motivation (MasterClass, 2020). Maslow's hierarchy of needs is designed in a form of pyramid shape, in which the basic needs on the lowest level must be met in order for an individual to reach the corresponding & intangible needs or the higher levels. The levels are composed of the following:



Finkelstein, J. (2006). [Maslow's hierarchy of needs.png]. Wikimedia Commons.

https://commons.wikimedia.org/wiki/File:Maslow%27s_hierarchy_of_needs.svg

Figure 1.1 Hierarchy of needs

- Physiological needs - found in the lowest level, these serve as the most basic needs an individual must have. These include food and water, shelter, rest, reproduction, and health.
- Safety needs - next to lowest level, these needs refer to the individual's emotional and financial stability. From the term "safety", this also refers to the security against violence and theft.
- Love and belonging - these can be referred to as *social needs* because these are about the human social interaction that include

intimate relationships containing sexual cohesions, family bonds that comprise of parents and siblings, as well as community groups ranging from unions and clubs that are composed of workers and members.

- Esteem - these are the needs belonging to the higher levels in the hierarchy. These include the individual's realization of self-worth, or typically their *ego*; specifically involving self-respect, self-confidence, self-esteem, and self-assessment. This level is important to achieve for individuals as these give them the sense of dignity and growth.
- Self-Actualization - this serves as the highest level in Maslow's hierarchy of needs. Once an individual meets every need, he/she reaches his/her full potential or the peak of one's self. This paves the way for skills development and educational attainment in various fields such as technology, cooking, communication, music, art, and more. Moreover, this defines the achievement of one's satisfaction and enjoyment

In relation to the core problem, psychiatrists can evaluate and provide services for the mentally-challenged, specifically focusing on their safety needs as it refers to their emotional stability and well-being. People can also

understand that meeting every need is important for mental health. Our study will only include the safety needs and love & belongingness needs from the hierarchy since it serves as independent variables that support interpersonal relationships and cause & effect towards mental health in the conceptual framework. It was argued by Abraham Maslow that individuals may experience a variety of illnesses related to mental health problems when needs of each stage in the hierarchy are not met. Specifically, failure to meet the needs of the esteem, self-actualization, love and belongingness stage may lead to anxiety and depression. Failure to also meet the needs of the safety stage may lead to posttraumatic stress. Moreover, deprivation of love and belongingness needs cause loneliness. Therefore, it is important for the individual's mental well-being to fulfill the stages involved in the hierarchy (GoodTherapy.org, 2015). Interpersonal relationships involving families, friends, and spouses can be beneficial to individuals as it fulfills the love and belongingness needs in the hierarchy.

- **Social Exchange theory**

The study is based with the support of a theoretical framework Social Exchange theory which was theorized and developed by George Homans in 1958. According to George Homans (1958), Social exchange

theory is a concept based on the notion that a relationship between two people is created through a process of cost-benefit analysis. The theory has 3 core assumptions regarding human nature and the nature of the relationships. First, it assumes that people tend to look up for rewards and avoid any consequences. Second, it assumes that people only interact in order to gain profit with minimal action. Last, it assumes that people will try to calculate the risk and benefits before performing the action. Crossman (2020) stated that people will most appreciate the idea that an interaction that elicits approval from another person is more likely to be repeated than an interaction that elicits disapproval. Social exchange involves behaviors that are dependent on rewards from others, and results in mutually beneficial relationships (Cropanzano & Mitchell, n. d.). According to Psychological.research.net (n.d.), people's evaluations of perceived rewards and costs influence how satisfied they are with their relationships and the relative stability of those relationships. Cherry (2020) added that when the risks outweigh the rewards, people will terminate or abandon that relationship.

- **Communication** **Theory**

This study is anchored on the theoretical support of the Communication Theory by S.F. Scrudder (1980), stating that all living

beings existing on the planet communicate in different ways. This universal law of communication theory supports that all living beings communicate through sound, speech, visible changes, body movements, gestures and other ways to make others aware of their thoughts, feelings or information.

The communication theory consists of the following viewpoints:

- Mechanistic - communication is simply the transmission of information from different parties between sender and receiver.
- Psychological - from the psychological perspective, communication is not only the flow of information between sender and receiver but also the relaying of actual thoughts and feelings of both parties.
- Social - from the social perspective, communication is the result of the interaction between sender and receiver, stating that it is dependent on the content of how one communicates.
- Systematic - within the systematic point of view, communication relays a new and different message created when individuals interpret it in their own way and then reinterpret it to draw their own conclusion.
- Critical - from the critical perspective, communication is a way to help individuals express his/her own power and authority to other individuals.

The communication theory proposes that every living being needs to communicate with others and among themselves to survive.

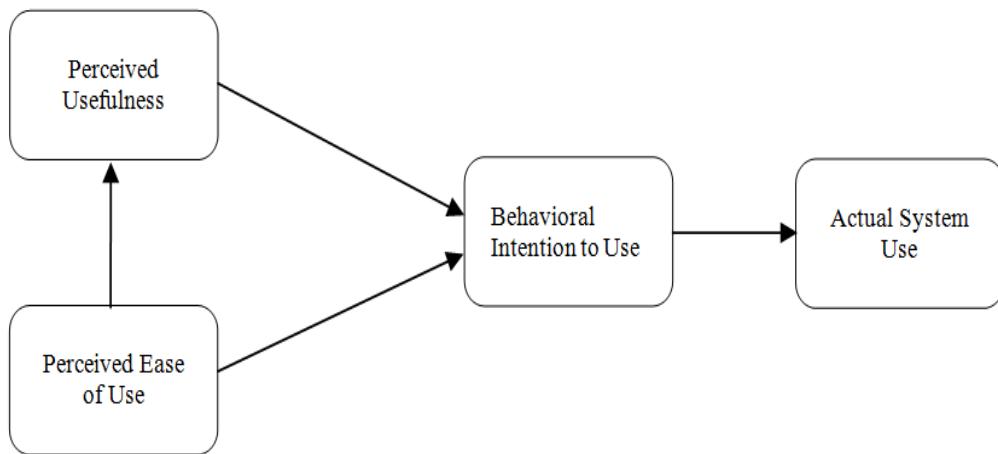


Figure 1.2 Technology Acceptance Model

This research is anchored on the Technology Acceptance Model Davis (1989) which hypothesized that there are two factors that will decide the potential user's acceptance towards the computer system. The major beliefs are the perceived usefulness and perceived ease of use, in the model it also explains that perceived ease of use would make the users more productive and more likely to use the system if it is free from mental or physical effort. By referring to this model, it coincides with today's emerging technologies and software such as mental health systems . It could

potentially assist the researchers on how to create a system that would integrate well with the field of psychotherapy.

Conceptual Framework

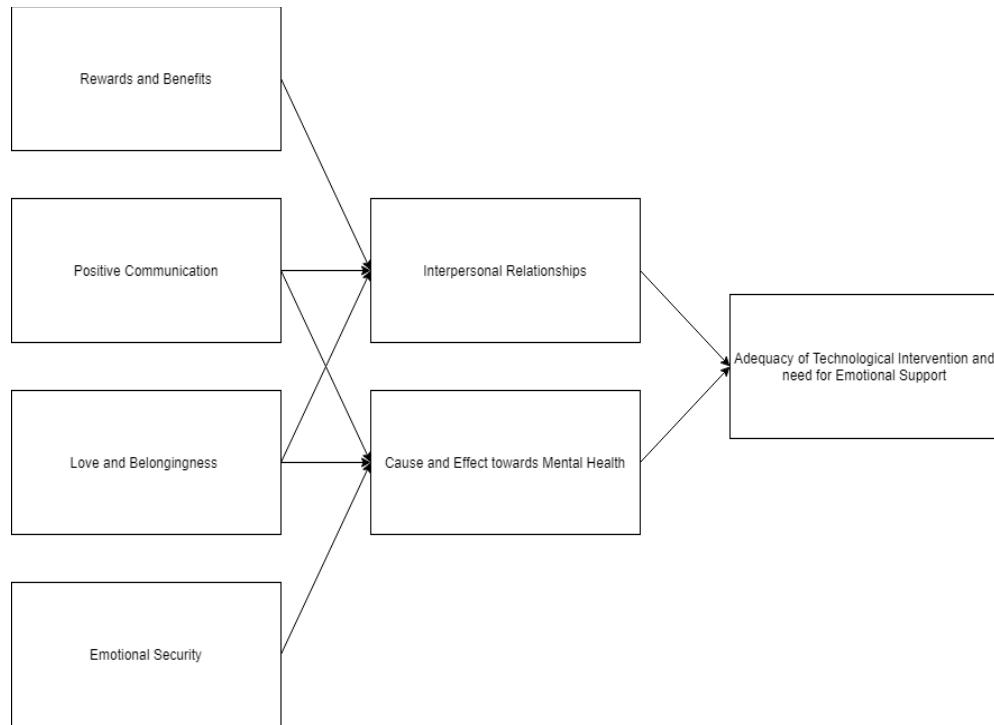


Figure 1.3: Conceptual Framework

Figure 1.3 presents the conceptual framework of the study, it consists of several variables that includes the following:

Communication as the first independent variable pertains to five different points of views relating to the Communication Theory by S.F. Scrudder where it affects the individuals' mental health. Communication is the process and interaction between the sender and receiver also viceversa which in the study represents the individual with mental health disorder and the individual conversing with the other. Both individuals relay their

thought, expression and feelings and have their own interpretation of the message. Both individuals should have a certain level of understanding the message. As both individuals should relate and respond to each other. According to an article by Ali in 2018 which is supported by a study about Nursing and Mental Healthcare: An Introduction for All Fields of Practice by Pearce, et al. (2011). Communication plays an important role in mental health, factors such as listening and giving off attention leads to better understanding and when handled properly is considered as good communication which builds a healthy relationship between individuals while poor communication can add more mental distress and impede mental health recovery. According to another article written by Donnelson in 2019, communication can also be affected by mental health as it can influence how an individual communicates whether it is verbal or non-verbal. To further support that is a research conducted by Dr. Bauman on how mental health influences communication styles indicating that particular individuals affected by mental health disorders tend to have traits and gestures when communicating. It is also emphasized in the study that society lacks to talk about mental health disorders and is considered taboo by a lot of people. The study supports that recognizing the disorder affects communication patterns is a step to improve conversations around mental health as it serves as a way to support the system for people affected by

mental health disorders and illnesses. Both articles include studies that emphasize on the importance of understanding and improving the factors contributing to communication for people to have the kind of support needed in mental health.

Next independent variable is the Risk and Reward which practices the benefit gained from a relationship. According to the study conducted by Diana, W. et al. (2020, February), social support on mental health varies on different types of relationship (friends, family and spouse). The study mentioned above found out that marital relationships ranked as the first group that receives the highest emotional support, while family comes in second and friends as the lowest recipient amongst the group. They also concluded that individuals who receive higher social support show more favorable psychological well-being and reduce the chance of breaking out. On the other hand, individuals who receive lower social support increases the chance of experiencing depression and anxiety. There is a substantial amount of evidence that receiving social support is associated with better physical and psychological health (Uchino et al., 2012). Higher levels of social support are associated with lower levels of depression and stress and higher levels of positive affect (Cohen, 1988; Uchino et al., 2012).

Furthermore, the study proved that under- benefitting will eventually interrupt the balance in an interpersonal relationship.

Thirdly, the independent variable talks about Love and Belongingness Needs. As stated in the Maslow's hierarchy of needs, the love and belongingness needs pertains to the third level which includes both of their interpersonal relationships and causes and effects towards their mental health. These serve as requirements to fulfill the said level. This level of need includes the sense of intimacy, community, and the family of an individual, important to their establishment of social relationships as part of the process. Montijo (2020) stated that interpersonal relationships serve as the type of relationship that involve people who are the closest or have the strongest connection within individuals. These include families, friends, spouses, colleagues, and relatives. According to the Mental Health Foundation (2018), individuals with social relationships have fewer mental health problems compared to people who are less connected. Factors affecting the future mental and physical behavior of children include family breakdown, neglect, and abuse. Moreover, individuals with married life or being in a relationship, especially with a high marital quality can have a positive impact on mental health, leading to less depression and lower stress. The USA and Ireland's recent studies state that individuals

encountering negative relationships and social interactions have an increased risk of anxiety, depression, and suicidal tendencies. People involved in a community with higher levels of social interaction have lower levels of mental health problems. Higher levels of well-being are associated with children who have healthy family relationships. Thus, interpersonal relationships can have an impact towards the quality of an individual's mental health in terms of its causes and effects since it correlates to the levels stated in the hierarchy. Additionally, it is important for families to be digitally connected via phones and computers especially in the pandemic. Here, they can communicate and support one another in sharing their feelings as it serves as an action in nurturing relationships during the pandemic (Mental Health Foundation, 2020).

For the final independent variable, which is Emotional Security, this stems from Maslow's Safety needs. It is sought out after the individual has obtained basic physiological needs in the form of food, water, and rest. According to Zheng et al. (2016), "Safety needs pertain to personal protection, financial security, and health & well-being". Lack of safety can also induce further anxiety and fear in an individual. This eventually leads to posttraumatic disorders (GoodTherapy, 2015). Emotional security is defined by Horney (n.d.) which states that it is "the feeling of safety,

confidence, and freedom from apprehension” and it determines the individual’s root behavior and personality. Emotional Security can also be applied to interpersonal relationships such as in areas of marital relationships. According to Nicastro (2020), emotional security establishes good intimate relationships with both partners covering each other's best interests even in some instances of disputes or other undesirable events. This serves as a buffer to be sincere with a partner without having the fear of mistrust.

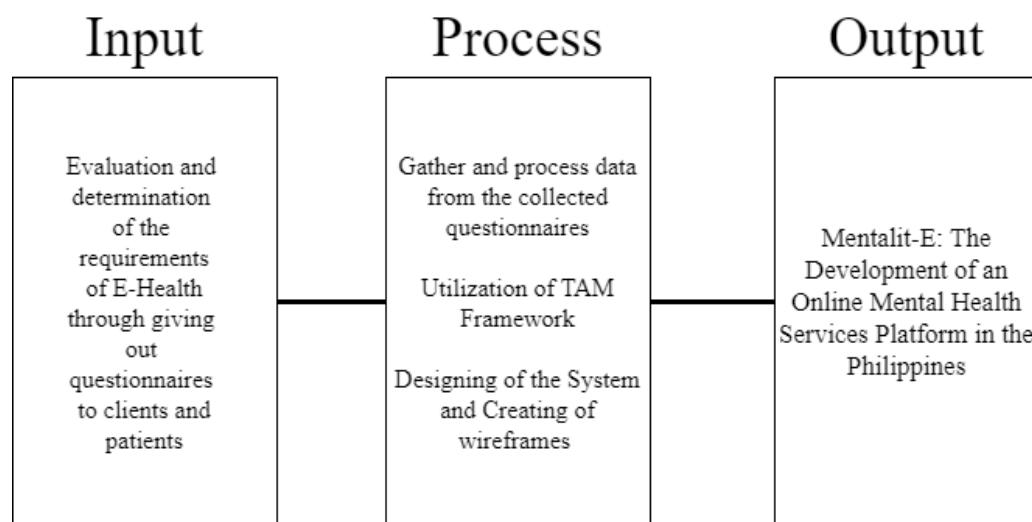


Figure 1.4. Conceptual Framework for The Need for an Online Mental Health Services Platform in the Philippines

Figure 1.4 shows the IPO model of the conceptual framework towards the development of the system. The first frame is the input where

questionnaires are held responsible for evaluating and determining the requirements and necessities in developing an e-health platform towards the provision of mental health. The process, which is in the middle of the second frame, includes collecting the data for establishing the designs of the system and creating wireframes for the platform. The third frame shows the output and its process which is the development of an online health services platform in the Philippines.

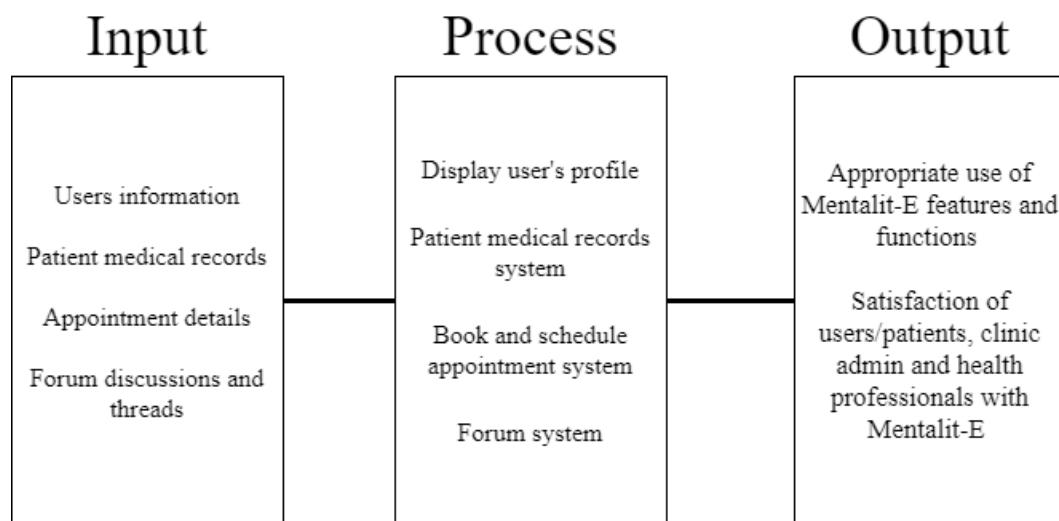


Figure 1.5. Conceptual Framework for Mentalit-E

Figure 1.5 shows the IPO model of the conceptual framework of the system towards its functions and how it works. The first frame shows the different information that the system will acquire in which input data are required. The system then acquires the data in which the system will redirect to the desired function. The second frame shows the processing stage where the data acquired in

the first frame is then processed into the output. The third and last frame shows the output in which the appropriate use of the desired features and functions as well as the satisfaction of users/patients, clinic admin and health professionals towards the use of Mentalit-E as a system.

Statement of the Problem

The purpose of the study is to provide an online mental health services platform and to address the factors affecting the inadequacy of emotional support towards mental health. The rising challenges surrounding mental health are vastly noticed especially with the limited facilities and resources the Philippines currently has, along with the increase of mental health issues in the Philippines that has a total of 3.6 million cases, according to a nationwide survey conducted by the Department of Health (2020), while the COVID-19 pandemic disrupted 93% of key mental health services globally. Moreover, the World Health Organization (2021) stated that depression is one of the most common illnesses in the world and it is considered a serious mental condition, with over 280 million (3.8%) people affected. Specifically, this study will address the following questions:

1. What is the effectiveness of an online mental health services platform to promote the factors of interpersonal relationships in terms of:
 - a. Positive Communication

- b. Rewards and Benefits
 - c. Love and Belongingness
 - d. Emotional Security
2. How effective is an online mental health service platform as a bridge between the mental health professionals and people with mental health problems?

Objectives

The study aims to provide emotional support to individuals with mental issues, problems, and disorders. The study will also focus on developing a platform for mental health professionals to be utilized for their services and for their patients. The following goals of the researchers are:

- To create a platform where individuals can interact with people who are aware of the existing problems.
- To connect individuals who are struggling with mental health issues to professionals.
- To address the needs of individuals in terms of factors contributing towards their mental health.
- To create a platform where mental health professionals can provide their services towards their patients.

Scope, Limitations, and Assumptions**Scope**

The study mainly focuses on the Need for an Online Mental Health Services Platform in the Philippines.

System

- It consists of managing patient medical records inside the clinic, online booking and transaction done by simply showing a proof of payment in the system. Also the management of employees inside the clinic itself. Lastly, the system offers community forums as an interaction between general users and health professionals.

User Access Levels

- The system will automatically provide user access to subscribed clinics until their subscription expires.
- The Clinic Administrator is in charge of assigning consultations booked by patients in their clinic to Medical Health Professional Employees. The Clinic Administrator also has

access to clinic settings from clinic information to services.

- The Clinic Employees are responsible for conducting the consultation and have access to the overall clinic consultation, clinic employees, clinic patient records, and FullCalendar.
- The General Users or the Patients have the access to the list of clinics in the manual booking. To add, the patient can also view all the personal medical records conducted by each clinic. Lastly, the patient has a journal in their profile whenever they want to express their thoughts which they can share the link to their mental health professional.
- All the users can receive notifications, file and track their own tickets, located in their respective user profiles.
- All the users with registered accounts can participate in the community forum as long as they adhere to the rules and regulations of the forum.

- The System Administrator is responsible for managing the users, clinics and maintaining a healthy environment inside the community forum.
- The System Administrator has access to the audit logs of the system.

Respondents

- The respondents of the study include general users (diagnosed and undiagnosed patients) and mental health professionals who reside in the Philippines.

Limitations**System**

- The system will only be functional after a community has been built.
- The system will only be accessible to subscribed clinics.
- The system will only record the data provided by the users.
- The system will only provide 1 clinic for 1 clinic administrator.
- Multiple clinics are not recognized by the system.

- For the payment system, the system will only request for the proof of payment through file uploading.

Respondents

- The respondents of the survey are limited to teenagers to young adults (aged 13 - 30) who are aware of mental health issues and reside in the Philippines.
- The professionals that also serve as the respondents of the survey are only limited to the ones who have worked/experienced in the field of mental health industry.

Assumptions

The platform will assume:

- Users have the basic skills in using a computer.
- Users are connected to the Internet.
- Users are registered with verified email addresses.
- Users will trust the confidential medical information to be stored and recorded inside the system.

Definition of Terms

The researchers listed down the following terminologies to provide a brief description and clear explanation for the study.

- **Mental Health** - refers to the conditions regarding our emotional, social, and psychological state.
- **Mental Health Professionals** - professionals who diagnose mental health conditions and provide treatment.
- **AES (Advanced Encryption Standard)** - a symmetric block cipher implemented in software and hardware throughout the world to encrypt sensitive data.
- **EMA (Ecological Momentary Assessment)** - the evaluation of behavior or mood of individuals that depends on daily questions.
- **HIPAA (Health Insurance Portability and Accountability)** - a law which aims to prevent fraud in the healthcare system,

improve access to the services and reduce the risk of data breach and protect the confidentiality and security of the patient's record without their own consent.

- **Captcha** - utilized in order to prevent spammers or bots to gain access to the system and it will authenticate a user whether it is a real person or not.
- **Community Forum** - a place, meeting, or medium where ideas and views on a particular issue can be exchanged.
- **Medical Record** - document that explains all details about the patient's history, clinical findings.

REVIEW OF RELATED LITERATURE / SYSTEMS

Factors contributing to mental health

Mental health includes the emotional, psychological and social well-being of an individual (MedlinePlus, n.d.). It affects how an individual acts and performs based on a certain issue and influences how a person copes up with challenges in life. Mental health is a matter of utmost importance at every stage of life especially during adolescence and adulthood. A study was conducted by Holthaus, J (n.d.) about the importance of mental health and concluded that 46% of teenagers struggle with mental health, while 19% of adults are affected and 13% are children. However, only half of the respondents of the same study is getting treated with professional help mostly because of stigma attached to mental health.

Mental health disorders including depression and anxiety are becoming recognized as major workplace concerns. As a result, businesses are now realizing that a healthy work environment not only protects employees from psychological injury, but it also has a strong impact on improving productivity and overall workplace safety (SafetyCulture, 2018). According to 2014 research by a non-profit organization that promotes good mental health called Beyond Blue, 91% of workers feel mental health in the workplace is essential, while 88 percent believe physical safety is. This states that mental safety has certainly surpassed physical safety as a major workplace concern in Australia. There was crucially a 39% difference

between the significance of mental health in the workplace and the workplace's performance on this concern, relative to the only 12% for physical safety and performance.

An estimated 10-20% of teenagers globally experience mental health conditions and remain undiagnosed and untreated. Being a teenager is a crucial period for developing mental and social health which contributes to a person's well-being. Multiple factors contribute to the mental health of teenagers which includes desire for greater autonomy, pressure to conform with peers, exploration of sexual identity, and increased access to and use of technology. It also includes quality time with their respective family and friends which greatly influences the mental health of a teenager. Teenagers with mental health problem are vulnerable and at risk of discrimination, stigma (affecting readiness to seek help), educational difficulties, risk-taking behaviors, physical ill-health and human rights violations (World Health Organization, 2020).

A human emotional desire to associate with and be accepted by individuals and groups is referred to as the need to belong, also known as belongingness. This might include the desire to join such social circles as school groups, coworkers, athletic teams, or a religious group. A sense of belonging entails more than just getting to know other people. It focuses on receiving approval, attention, and encouragement from participants while also offering the same interest to other participants (Cherry, 2021). As stated by Pillow et al. (2015), our desire to belong

pushes us to seek out secure, long-term connections with others. Moreover, it encourages us to join social organizations such as unions, sports teams, religious organizations, and community organizations.

Wickham (2019) stated that the importance of having a sense of belonging is crucial for individuals. This can be noticed in the form of families, teams, charities, spiritual groups, and more. The individuals' ability to consolidate itself is based on a sense of belonging. A sense of belonging is interconnected to our physical and psychological well-being. The social relationships that come with a sense of belonging serve as a stress-relieving factor. Adolescents who do not form a healthy connection early in life have poorer self-esteem, negative perceptions, are insecure, and may experience abandonment, according to studies. Such mental health issues linked to a loss of sense of belonging depression, anxiety, and suicide.

According to a study conducted by Starr, R. and Dubowitz, H. (2009) on Social Withdrawal and Isolation, peer relationships become increasingly important from a young age, specifically from toddlers as they grow into preschoolers. These types of relationships provide opportunities for the individual to learn how to reciprocate, cooperate in pursuing common goals, form accurate self-perceptions and foster emotional security. As it includes attachment and bonds which forms templates for future relationships (Rubin et al, 2005). It was concluded that peer relationships and friendships maintain and reinforce early behavior patterns and provide context for the development of key aspects of behavior. As it indicates that

the presence, absence, and consequences of friendships and relationships have lifelong implications.

The Lancet Commission on Global Mental Health and Sustainable Development stated a report on mental health which should be reframed as a fundamental human right and expanded to promote mental well-being as well as to prevent mental health problems, enabling recovery from mental disorders. According to an article by Ali (2018), communication is considered as a key ingredient in mental health recovery, by having effective communication is essential in building rapport and developing therapeutic relationships. However, it also supports that mental distress can affect the way of communication. Some of the factors that contribute to these are by listening and given the attention needed as it produces outcomes. Relating to two studies about Nursing and Mental Healthcare by Pearce, et al. (2011) and The Engagement and Therapeutic Communication in Mental Health Nursing by Walker (2014), that being able to communicate and relate to other people who experience mental distress is vital for intervention as human relations have impact towards the recovery in mental healthcare. As poor communication by individuals impede recovery and can add more mental distress. It encourages individuals to learn and know how to communicate with a wide range of people according to their conditions. It is concluded in the article that individuals must create time and space to actively listen and communicate with each other leading to a good and positive communication.

According to a study by Gilbert et al. (2008), a sense of trust can be established through a relationship that is free of coercion along with effective communication and cultural sensitivity. Results of a good relationship between a patient and hospital staff created a safer environment that can lessen risk. There are also factors that could obstruct positive relationships such as ineffective and negative communication, mistrust, and no security if a staff member is unable to prevent violence or the instigators themselves, and coercion.

Based on the gathered research and data findings conducted by Cleofas (2020), there is indeed a substantial link between engagement in school organizations and depression. Students who participate in more groups had lower levels of depression. Students who were active in more school groups and interacted with school entities more frequently had greater general positive affect and psychological well-being.

Getting married and staying married decreases depression in both men and women, according to research from the Department of Health and Human Services (2007). Furthermore, research in the field of physical wellbeing has found that high levels of social support might enhance prognosis in disorders like cancer and myocardial infarctions by lowering symptoms of anxiety and depression that are frequently associated with these illnesses. Patients' rehabilitation from common mental disorders may be aided by motivating them to be involved in loving and stable supportive relationships. Concentrating on interpersonal connections as a

strategy to improve depression is common in depression treatment, as shown in attachment therapy for children and interpersonal therapy for adults. Furthermore, Emotionally Focused Therapy (EFT), a therapeutic approach that focuses on changing relationships into ones that provide a sense of safety, security, and connection, has been shown to be beneficial in dramatically decreasing depression and anxiety disorders (Vallas, 2015).

A common location, interests, life experiences and histories, or a common purpose can all contribute to the formation of a community. Many individuals find that interacting with others – whether through online forums, social media, or in person – helps them to have a better mentality, a higher sense of self-worth, and a greater sense of satisfaction in life. Being a part of a community may be beneficial to one's mental and emotional health. Participating in the community gives you a sense of belonging and social connection. It may also give ordinary life a deeper meaning and purpose. Recreational groups including socially supported recreational activities have been found to alleviate stress, anxiety, and sadness, as well as Alzheimer's disease symptoms. Several research and analyses have shown links between social contact and mental health. Individuals without excellent social support were five times more likely to develop a mental disorder than those with good support, according to the Whitehall Study in the United Kingdom.⁶ In a cross portion of the public in regional and rural Victoria, there were strong correlations between social isolation and poor mental health (Australian Government

Department of Health, 2019).

EMA (Ecological momentary assessment) is the evaluation of behavior or mood of individuals that depends on daily questions, providing a better knowledge of temporal connections among factors included (Vlaescu et al., 2016). This is where individuals' present sensations, actions, and moods are assessed in a timely manner and in their real-world surroundings (Shiffman et al., 2008). By removing the necessity for face-to-face evaluations and data transmission from paper to electronic databases, which are both costly and considered as possibly error-prone operations, EMA is projected to minimize the workload on doctors related to traditional monitoring (Santangelo et al., 2014). The ability to measure certain clinically significant behavior outside of therapy sessions is one of the most major concerns with applying ABA (Applied behavior analysis) to mental health disorders that EMA has the potential to address (Sturmey, 2020).

Impact of global pandemic towards mental health

Due to the widespread effect of the pandemic caused by COVID-19, most people, especially teenagers spend their time online. From online modular learning to scrolling through the posts in their social media hinting at stress, depression,

anxiety or suicidal thoughts. Dr. Arellano-Sta Cruz of Philippine Mental Health Association stated that “Everyone is actually in one house or one home, but you don’t talk to each other because you’re all busy”, pertaining that most of the teenagers during this crisis experience loneliness and the feeling of no one to talk to even if their family resides in their household. According to the interview conducted by Lacsamana, B (2021, July) numerous teenagers experience the feeling of languishing due to social isolation. They miss out on physical activities that involve social interaction such as graduation, trips with friends, and other activities. They added that the feeling of suffocation as there is nothing to do except on studying and sleeping and zero interaction with their friends contributed to their worsening mental health.

Panchal et al. (2021) stated that COVID-19 has a significant impact towards adults, in which (36%) of them have difficulty sleeping, (32%) have difficulty eating, (12%) have increased substance use and alcohol consumption, and (12%) have chronic conditions such as stress and anxiety according to KFF Health Tracking Poll from July 2020. Another key finding states that (53%) of adults said that the coronavirus negatively affected their mental health. During the pandemic, it was reported that young adults aging 18-14 are at high risk of mental health disorder, in which (56%) of them have anxiety and depressive symptoms.

A study conducted by Figuera, A., et al. (2020, June) found out on the survey results that there is a numerous number of people who reside in the United

States, Canada and Europe showing symptoms and signs of anxiety and depression due to the pandemic, COVID-19. Some people who answered the survey stated that their depression worsened when the pandemic hit. Simultaneously, the study mentioned above disclosed that the mental health care system specifically in the United States experienced hardships and shortcomings contributed by the pandemic. The study suggested that the COVID-19 crisis made people rely on technology such as Telehealth, Mental health smartphone applications, Texting applications and Social Media to cope with anxiety and depression. However, the study found out that people with severe symptoms of depression are in need of technology that can connect them to the mental health care professionals. The study concluded that the technology can be used and serve as a platform and medium to deliver mental health services amidst the global pandemic and the social distancing measures that are observed globally.

In regards to the COVID-19 outbreak, mental health services were affected mostly by lockdowns in terms of mental and psychological practices. According to Dores et al. (2020), related the changes in the delivery of psychological services through ICT during the COVID-19 pandemic in which the results showed that psychologists have adopted ICTs to continue and provide mental healthcare during the outbreak. It was assessed that the experience of delivering psychological services through ICT tools as positive and with similar results, suggesting a change in attitudes towards the use of such tools as technology can be a viable solution to

allow the provision of health services called E-Health, which is broadly defined as the provision of services related to health and supported by safe and cost-effective use of Information and Communication Technologies (ICTs).

According to a recent WHO survey (2020), the COVID-19 pandemic has interrupted or suspended key mental health services in 93 percent of nations globally, despite rising demand for mental health care. COVID-19's catastrophic impact on mental health care access, highlighting the urgent need for additional financing, serves as the first worldwide evidence based on the study conducted in 130 nations. Based on the findings provided by the countries involved, it was stated that the disruption affected 72% of children and adolescents, 70% of older adults, and 61% of women seeking antenatal or postnatal treatments. Moreover, counseling and psychotherapy were disrupted in 67% of cases, treatments for critical harm reduction in 65%, and opioid agonist maintenance treatment in 45 % of cases.

The recent pandemic has other contributing factors that worsens the previous mental health issues. Worldwide lockdowns have brought entire populations into total isolation for long periods of time to prevent exposure from the Covid-19 virus. Children and teens alone are at risk of stress and anxiety, the limited movement has forced them to be away from friends, colleagues, and school. With only parents or other household members to give them support, although there

are other children that cannot receive the same amount of support such as those in an abusive environment (Javed et al. 2020).

Challenges in addressing mental health issues

According to Wainberg et al. (2017), more than 70% of individuals who are needing mental health care are lacking access to high-quality mental health services, wherein there is a shortage of human resources for mental health care systems worldwide. With this, people with severe mental illnesses and disorders such as depression, anxiety, and substance use are often left untreated based on the major population in LMIC (Low-to-Middle-Income Countries). There are existing challenges of integrating mental health to primary health care systems that include limited community awareness, poverty, social deprivation, people with high rates of comorbidity, and limited infrastructure.

A study conducted by Tanaka, C (2018, October) people with mental health problems face social stigma and discrimination. The study had 39 respondents collected through surveys and interviews including their career and community health volunteers that personally know them. To conclude the study, the stigma and the difficulty in addressing the mental health issue mainly lies on people with an environment whose mental health care was not readily available. Thus, the people in the community could not resolve the underlying problem. In many cases around the world there is a high percentage of mental health issues left undiagnosed or

untreated as a result. According to the World Health Organization (2020), it is estimated there are as many as 450 million individuals that suffer from mental health disorders about 90% of those cases do not receive any form of treatment or are undiagnosed.

The Philippine World Health Organization Special Initiative for Mental Health conducted a study in early 2020 which shows that 3.6 million Filipinos suffer from one kind of mental, neurological and substance use disorder. Along with the pandemic that caused a considerable impact on global mental health, most in different vulnerable groups such as older people, health care providers and people with underlying health conditions. Based on the statement of the current Health Secretary of DOH, Francisco Duque, “There is less than one mental health worker for every 100,000 Filipinos, and many are currently unable to gain access to services.” Supported that mental health must be considered as a serious affair and should not be neglected. The need to make a collective effort in order to help people that are affected with these conditions. Problems concerning mental health had significantly risen throughout the years. It was reported by the Philippine health system that there is a 16% of prevalent mental health disorders among children. A Global School-based Student Health Survey showed that 16.8% of students aged 13-16 had multiple suicide attempts during the course of the year when the survey was conducted WHO (2020). In October of 2020 the Department of Health recently released results of a nationwide survey which showed that 3.6 million Filipinos

suffer from mental health issues. 1.1 million of these people are suffering from depression with 874,145 having alcohol disorders. While the rest are diagnosed with bipolar disorder, drug addictions, epilepsy, and schizophrenia. Even though cases of mental health issues are rising in the Philippines especially in children, there is a lack of resources and facilities that can accommodate these cases. In 2020 alone there are only 60 child psychiatrists in the country Estrada (2020). As for the total number of psychiatrists there are only around 500 that are currently practicing in the Philippines (Lally et al., 2019). With only 11 facilities for each inpatient and outpatient hospitals that can accomodate children and adolescents.

According to Borgen Magazine (2020) aside from the lack of facilities and resources that cater to mental health patients. The Philippines has another issue on acquiring these services, the price for booking therapists is quite expensive. One session alone can cost around ₱4,500, in a country with a high poverty rate it is considered a privilege to afford mental health services. With poverty, it also affects the access to higher education such as medicine. The offers in the field of psychiatry aren't promising either, there are only a few fellowship programs offered and the practice of psychiatry is unpopular in the philippines. Thus most medical students would rather find better practices. Another challenge that the Philippines is facing towards mental health is that it is underfunded of resources and has underdeveloped services. Private organizations such as the Philippine Mental Health Association and the government are cooperating with one another to address these challenges.

Recently in 2018 the mental health act was passed, ensuring that all Filipino citizens have the right to access mental healthcare. The World Health Organization (WHO, 2021) stated that people with depression in countries of all income levels are often misdiagnosed or not correctly diagnosed.

In a review of literature by Burger et al. (2020) which focuses on how the medium of information and communication technology has significantly impacted the field of mental health over the decades. It was found that most of these systems exist on the world wide web which makes up 76% of platforms for electronic mental health. Furthermore 86% usually employ cognitive behavioral therapy techniques. On average the content of these systems have more treatment functions than adherence support functions. Autonomous systems with no human guidance are equally as advanced with less functions present than human guided systems. Despite having no human guidance it has nothing to compensate for it including treatment functions. The average system is informational or a system that can allow data entry with no automatic processing of data. Even though there has been an increase in mental health systems over the course of 2002-2017. Not much advancements were made in terms of technological capabilities. In conclusion the systematic review stated that the systems are more focused on therapeutic treatment than adherence support functions. The field of mental health is quite active and the growing number of systems being developed over the years supports the fact. However the technological advances and possibilities explored are rather limited.

According to the study of Ayano et al. (2021), it was found that the misdiagnosis of individuals with serious mental problems affected them (39.16%). Major depressive disorders were shown to be the often misdiagnosed condition (54.72 %). Thus, major depressive disorder (1 out of 2) is part of one of the highest rates of misdiagnosis in Ethiopia.

There are just 60 child psychiatrists, 11 inpatient and outpatient institutions for children and adolescents, and only 0.28 beds in psychiatric hospitals dedicated to them. Furthermore, it was also indicated that there are only 2.0 mental health specialists per 100,000 people, 84 general hospitals with psychiatric units, 46 outpatient facilities. Therefore, mental health issues remain as a major area of concern among children and adolescents in the Philippines since mental health facilities and human resources remain scarce (Estrada et al., 2020).

ACOG (2017) stated that a diagnosable mental illness causes some level of impairment and at least one in every five young people aged 9 to 17 has it. Anxiety, mood, attention, and other behavior issues are the most prevalent mental illnesses among teenagers. It was also stated that the second biggest cause of death among teenagers and young adults aged 15 to 24 is suicide.

According to the most recent Global School-based Student Health Study, in the 12 months prior to the survey, 16.8% of teenagers aged 13 to 17 tried to commit

suicide one or even more times. Mental health disorders have an impact on 10 to 20% of children and adolescents, and more than 50% of these cases are occurring before the age of 14 worldwide. (Estrada et al., 2020).

Technology as a means of medical intervention

Mental healthcare services were long confronted by the challenges in relation to the access to mental health promotion, prevention and treatment programs such as limited resources to accommodate needs and several barriers that include attitudinal barriers (stigma) or structural barriers (financial restrictions, work constraints or patients' conditions). According to a study conducted by Lal and Adair (2019), e-mental health has the potential to increase the reach of services for individuals not only limited to their locations but also their settings such as facing the various barriers in accessing healthcare such as transportation, patients' condition and schedule. This includes services towards the assessment and monitoring of mental health promotion, prevention and treatment through Information and Communication Technologies (ICT) which may be an effective way of improving individual access and use of mental healthcare service these platforms include the following: web-based interventions, mobile apps, video conferencing systems (telepsychology), or virtual reality systems. According to Dores et al. (2020), the advantages of using ICTs are not only for the limitations of

traditional interventions such as travelling requirements for customers or therapists, nor to their use as complementary means. The advantages associated with implementing that include the following: easy accessibility, high adaptability, flexibility and convenience, evolution at the client's pace, easy adherence and treatment monitoring, privacy and possibility of anonymity, low cost, cultural adaptability, and high potential for dissemination (spread of information). The conclusion of the study refers to e-mental health as a rapidly developing field which has recognized potential in addressing the challenges in providing access to mental health services.

Technology-based treatments have the potential to significantly increase access to evidence-based care. Clinicians and patients can use intervention software that has been created to work with existing commercial technology, and it is said that the technology is well-suited for their processes. It was also stated that smartphone applications can provide patients with evidence-based therapy and support. Specifically, Applications based on smartphone devices with operating systems of Android and iOS can be used as mobile algorithm-driven clinical decision support tools that give practical advice for stepwise patient evaluation, diagnosis, and intervention selection such as motivational interviewing, pharmacotherapy, psychotherapy and supported employment) (Ben-Zeev, 2014). Such therapies as dialectical behavior therapy (DBT) patients are taught emotion

control strategies in face-to-face sessions. Rizvi et al. (2011) stated that individuals with borderline personality disorder and substance use who have been receiving standard DBT care and being treated with mobile support technology have used daily emotion regulation skills significantly more often than those who did not have the device, and their depression and urges to use substances decreased significantly. Naslund et al. (2019) stated that there is an existing demand for conducting studies involving multiple stakeholders, as well as thorough studies showing that these technologies can successfully drive quantifiable improvements in mental health outcomes in order for digital technology to reach its importance to transform the ways we diagnose, treat, and prevent mental illnesses.

The National Institution of Mental Health (2015) stated that having mental health apps deliver a lot of advantages for both patients and clinicians. It specifically brings more services to people especially in times of emergency such as a natural disaster or terror attack, making clinicians deliver care to patients in remote regions or to large groups of people. It also introduces patients to healthcare including even those who avoided it. Furthermore, the use of technology is considered to be more appealing than traditional therapy methods for patients. Technology can also provide convenience for patients who are having trouble keeping up with personal appointments, and can emphasize accessibility as the treatment can happen at any time or any place.

Internet-based support groups like Big White Wall can be used for mental

health treatment accessible for patients who prefer to be anonymous or who do not have easy access to therapy during normal working hours. The said website offers features wherein individuals can communicate to one another, and also offers educational resources as well (Lewis, 2021). According to Mental Health Innovation Network (2014), findings state that 70% of individuals have improved wellbeing from using the Big White Wall, and it also reports that 46% of them shared an issue for the first time regarding their mental health. Users engaged to Big White Wall LiveTherapy reported 58% recovery rate as well. Lewis (2021) stated that telehealth is also applicable since it consists of applications that offer mental health services via phone or video chat. This is beneficial since it is cost-effective for its services and can give access for those patients who are struggling to keep up with physical appointments. Furthermore, virtual reality is said to be trending towards individuals' mental health. Patients suffering from depression, anxiety, and other disorders may benefit from this technology as well.

The vast majority of digital therapies are variations on cognitive behavior therapy (Andersson, 2014). The majority were derived from existing physical treatments or self-help books based on them. Some are substantially reduced versions of the original therapy and are just collections of "tools," whilst others maintain both the treatment's processes and the guidelines that limit their use. Digital technology can enhance both the distribution and understanding of evaluation questionnaires, which were previously mostly in pencil-and-paper

format and manually evaluated on the most basic level as it introduces us towards new ways in analyzing and monitoring psychopathology. Many surveys are now available in digital format and may be completed through a website or application, which enables them to be evaluated automatically in accordance with established standards. Furthermore, the scores may be passed directly to the doctor, the user, and the user's clinical record. With regards to the modes of delivery, websites and applications that are installed on devices provide access for the interventions to take place, utilizing its functions for users. (Fairburn & Patel, 2017) Research regarding digital treatment indicates that online clinics can achieve large-scale relevance and change. Specifically, an Australian online clinic called MindSpot has provided digital treatment towards 2000 adults with mental health disorders such as anxiety and depression, in which over 70% finished the therapy with minimal assistance, and their intent-to-treat result was comparable to face-to-face therapies.

In the last few years there has been a rapid rise in the field of technology related to health behaviour change and well-being (Glanz K. et al., 2008). That includes a broad range of consumer applications for monitoring and managing health (Knight et al., 2015). One of the fields is through serious games for health, games used to drive health-related outcomes and results. The majority of these are “health behaviour change games” as it has the means of using games for its ability to motivate (Baranowski et al, 2008). Considering games as systems purposely built for enjoyment and engagement (Deterding, 2015). Transforming health

communication or health behaviour change programs into games is a good way to intrinsically motivate users to expose themselves to and continually engage with it (Baranowski et al., 2008).

The approach for learning has been goal-oriented in order to encourage and engage students in a long process to acquire skills and knowledge. In the past it was always through physical means that rewards individuals and it can be in the form of a badge. To adapt present technology and as an innovative way to incorporate towards education and in a business setting a digital version of a badge is developed Alexander & Neil (2018). According to a study from the National Health Service (2015) in England, they have created their own digital badges to support young children's mental health and education. The results from the study showed that the teachers and children had a positive experience from using the digital badges. The researchers in that study evaluated that the badges had sharpened the skills of students in areas of relationships, perseverance, and acquiring knowledge.

According to a study conducted by Sinha A. et al (2018) wherein the researchers defined online health forums as a source of health information, providing patients with a safe environment to share experiences, seek information, and improve their health knowledge. Health forum users have been shown to benefit from online interventions, resulting in greater knowledge about their conditions and greater health activation, with similar efficacy to non-Internet interventions. Also it indicates that forums provide important opportunities for

social support, reassurance, and friendship. Within the conclusion of the qualitative study of online health forums for chronic cough, the researchers indicate that seeking of health information through online forums is well and that the information provided is of a good quality matching the knowledge of clinicians but to ensure the quality of information, it is still better to use medical professional-moderated forums as there are instances wherein users are always advised to reconsult with a doctor as an element of insight and responsibility. The importance of understanding good and bad information is emphasized.

Harrower (2021) stated that community discussion forums may be good places for organisations to express their influence through daily updates by giving consumers a sense of belonging. The positivity and belonging in branded discussion boards is usually substantially greater. Members are more eager to become engaged and check in on a frequent basis to see whether others have responded to their postings when there is significant dialogue. According to the study of Pendry & Salvatore (2015), their findings provided concrete proof which interprets that internet forums allow users to be truly "together, together". This can have a substantial positive impact on users' well-being, particularly for individuals who have a stigmatizing condition and prefer to avoid face-to-face interactions. Furthermore, researchers stated web use that supports community building, such as online forums, is more favorably linked with social capital than web use that is primarily for enjoyment and distraction, such as gaming or video content.

According to WebMD (2021), one of the moderate and easiest approaches to improve one's mental health is journaling. This is the activity of taking note of your own thoughts, emotions, experiences, and many more. This can be done through writing, documenting, and sketching. Researchers concluded that people with different medical conditions and anxiety who wrote online for 15 minutes three times a week for a 12-week period felt better and had less depressed symptoms after one month. Throughout the 12 weeks of writing, their mental health improved. Thus, journaling can help one feel less anxious and has been related to a reduction in mental discomfort. Early mental health treatment plays a large role in preventing psychiatric disability. While there is no specific number of respondents or subjects in the study, the age range of some patients that mental health professionals were treating are around 0-21 or 0-25 years old. Based on a meta-analysis and systematic review, early interventions can prevent further deterioration. This also makes it cost effective saving the patient from further expenses of treatment in the long term.

According to GeekforGeeks (2018), client/server systems with one or more client nodes directly linked to a central server are known as centralized systems. In many firms, this is the most popular kind of system, wherein a client submits a request to a corporate server and obtains a response in return. There are numerous advantages of having a centralized system. It is easy to secure, cost-efficient,

smooth, updates fast, and is resourceful as it stores memory, cores, and many more. It provides personal experience because the system itself is customizable to meet specific requirements. Furthermore, centralized systems can be easily used for application development because it specializes in the processes of setting up a central server and delivering client requests.

RRL Synthesis

The researchers were also able to identify the research problem with regards to the written works related to variables contributing towards the adequacy and perceived need for emotional support of individuals.

Based on the literature stated above, the researchers were able to conclude that there are not many gaps in the current methods of digital psychotherapy, however the area of emotional security has no empirical evidence that can support the claims of properly incorporating it in a digital environment. Based on an article it was stated that an individual can attain safety from technology through ‘online safety, privacy, digital citizenship, and cyberbullying prevention’ (Gerstein, 2014). In terms of technology there are currently a lot of systems that are specifically designed for mental health interventions. Despite the volume of systems created over the span of a decade, it was revealed that most are technologically the same as the earlier existing systems. Most of these systems only focus therapeutic treatment

than adherence support or other functions. There is also the matter of cost when trying to acquire mental health services from professionals. The price range is simply too high and in the Philippines alone it has a large fraction of the population that has little purchasing power over obtaining mental health services. Health platforms or systems are a good alternative that can resolve some of these issues. By utilizing platforms, mental health intervention can continue regardless of lockdowns or restrictions. It can also serve as another way of supporting individuals that are not in close reach of mental health services.

The proposed platform will be better than the existing technologies for mental health support and treatments through the features including online journaling and EMA (Ecological Momentary Assessment) that contributes towards the technological intervention and needs of problems of individuals in order to achieve the stated gaps. Overall, the researchers have come up with a solution to develop an online platform offering professional mental health services.

Review of Related Systems (RRS)

Hopeline

Hopeline is an SMS service started by the Natasha Goulbourn Foundation (NGF) with the assistance of Globe telecommunication in 2012. The purpose of it

is to serve as a 24/7 hotline that aims to prevent suicide by people who experience mental breakdowns during crucial times. The hotline has reportedly received 43,000 calls in the last two years regarding depression, suicidal thoughts, and relationship problems. The responders are registered psychiatrists and psychologists with enough knowledge and emotional capacity to handle crucial cases (Globe, 2021).



Geronimo, J. Y. (2016, September 13). National hotline for mental health assistance now open. [hopeline.jpg]. *Rappler*.

<https://www.rappler.com/nation/doh-hotline-mental-health-assistance-open-suicide-prevention>

Figure 2.1 Hopeline

KonsultaMD

KonsultaMD is an online platform that offers 24/7 telehealth services from licensed doctors to its patients done through voice or video call. It is membership-based, and however, booking for physical appointments are not offered. It offers services such as e-Prescription, e-Laboratory requests, e-Medical certificates, proper medications consultations, mental health services, and general health information. Its payment options are done via credit card, GCash, and prepaid & postpaid (Globe and TM). This is also downloadable for mobile. Users can call through the mobile number of (02) 7798 8000 for service access (KonsultaMD, 2020). According to Madarang, C. (2021), KonsultaMD has partnered with e-wallet app GCash and its application can be accessed via GCash's GLife feature. With this partnership, health plans were offered for a price of Php 6.00, in which subscribers can have free video consultations.



KonsultaMD. (2020). [thumbnail.png]. *KonsultaMD*.

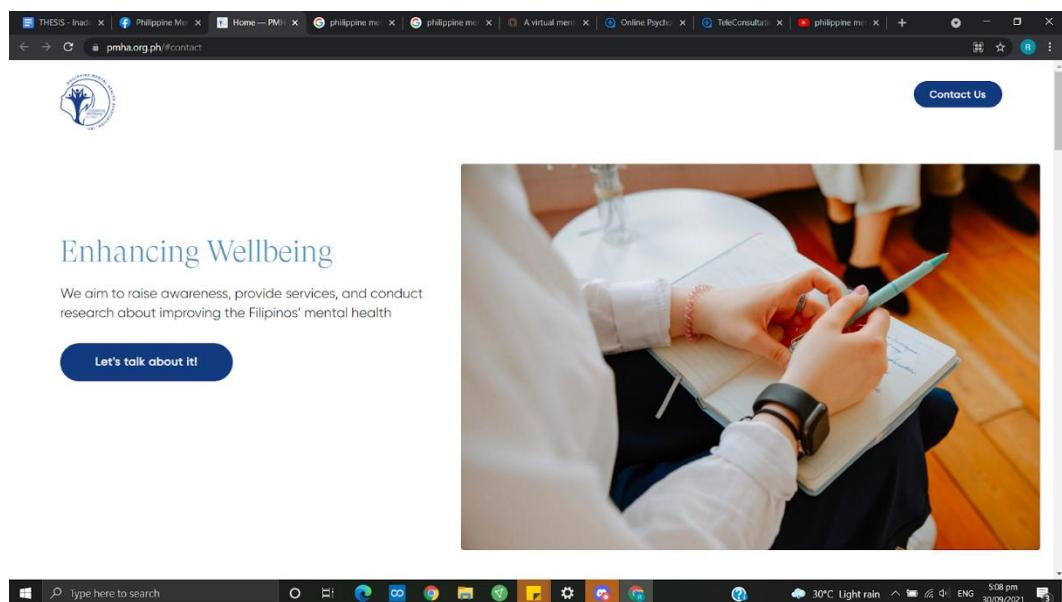
<https://konsulta.md/>

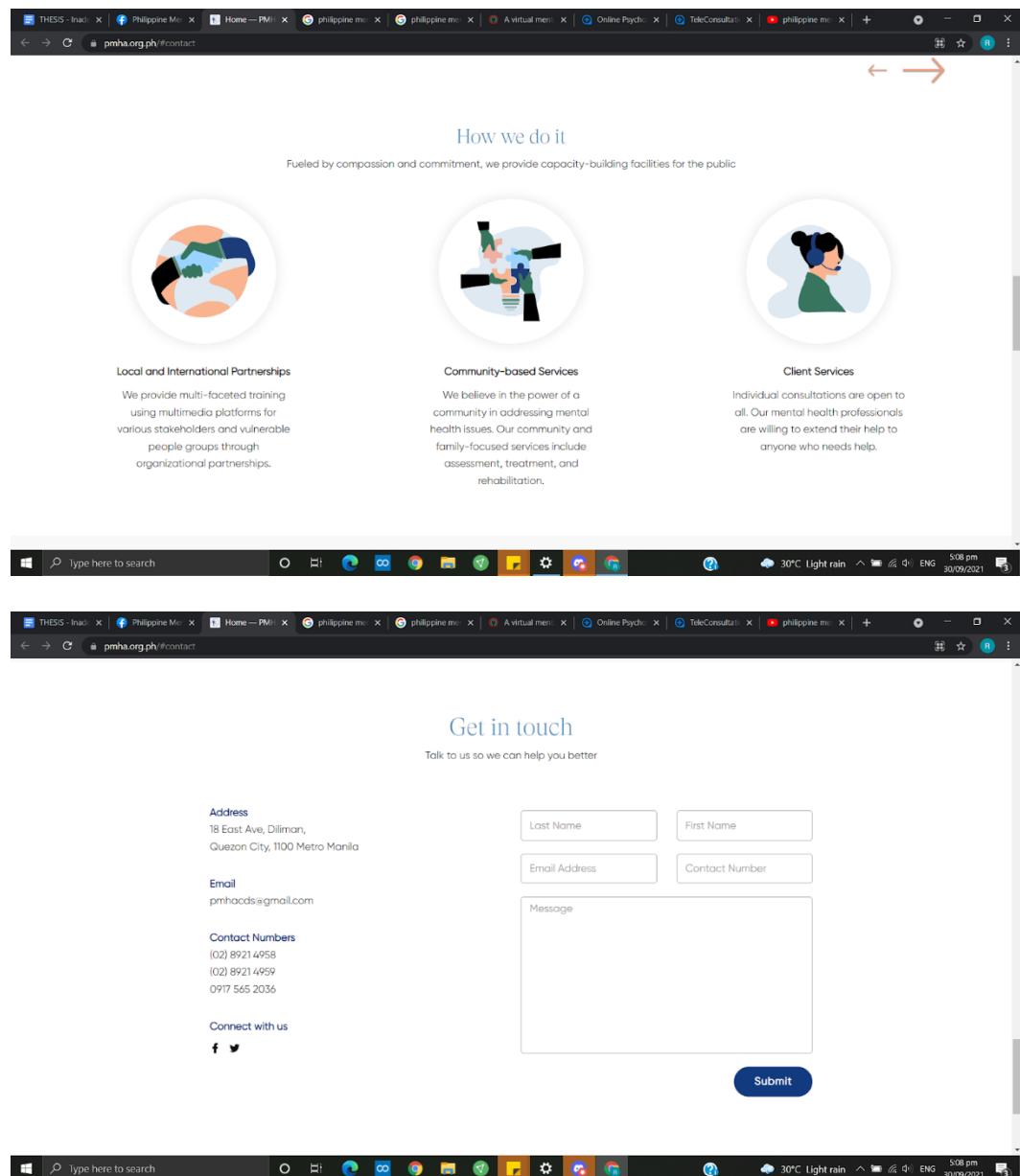
Figure 2.2 *KonsultaMD*

Philippine Mental Health Association Online Support

The Philippine Mental Health Association (PMHA) is a non-profit organization advocating awareness for mental health, creating ease of access for mental health services, and intervention. Normally PMHA handles 80 mental health patients on a weekly basis. Because of lockdowns due to COVID-19, the organization's offices had to close temporarily, following the restrictions they cannot accommodate the high number of patients the clinics typically handle. Thus

an online support platform was created as an alternative solution to reaching out to patients amidst a lockdown. In the PMHA website the user will be prompted to the homepage where the organization's advocacy is shown and the details for donation and finally contact information to book a session. According to Alto Broadcasting System and Chronicle Broadcasting Network (ABS-CBN, 2020) during the early stages of the COVID-19 lockdown PMHA were offering free online counseling. Although offers may change from time to time depending on the occasion.





PMHA Website. (n.d.). [Picture]. Philippine Mental Health Association.

<https://pmha.org.ph/>

Figure 2.3. Philippine Mental Health Association

Prescription Psychiatrists (Online Psychiatry and Psychotherapy at the Philippines)

Prescription Psychiatrists is a company consisting of a team of specialists and individuals working towards the goal of improving mental health across the Philippines. Which includes psychiatrists, psychologists, clinical social workers, marriage and family therapists (MFT), certified doctors and clinical psychologists that are licensed to perform psychiatric evaluations, prescribe medication and/or provide talk-therapy. The company offers high quality comprehensive psychological healthcare providing psychiatric and psychological services to children and adults with the range of mental health and substance abuse difficulties within Metro Manila. The company treats many conditions including and not limited to: depression, addictive disorders, bipolar disorders, anxiety, panic, phobias, post-traumatic stress, obsessive compulsive disorder, eating disorders, autism spectrum, behavior problems, anger, stress and relationship issues. The company's unique quality is that they have clinicians who are focused on patient outcomes first and foremost, no financial incentives to delay, prolong or misdiagnose conditions/treatments. The company provides online services allowing the patients to book an appointment on the website and a mental health script/receipt will be sent digitally for use in local pharmacies. Patients who opt for online services require an internet connection and mobile or computer platform

with a microphone. The booking of online appointments will be addressed 12 hours to finalize the details of the appointment. (Prescription Psychiatrists n.d.)

In relation to an article published by Prescription Psychiatrists regarding the Philippines shifting to telemedicine. Telemedicine is the result of the combination of technology and medicine branching to the field of psychiatry called Telepsychiatry. The Philippines adapted towards the needs of a platform that provides these types of services across the country adding to that is the effect of COVID19. This allowed psychiatrists to analyze the problems of individuals, diagnose conditions and offer psychiatric therapies. (Prescription Psychiatrists n.d.)



Prescription Psychiatrists and Psychologists

PSYCHOLOGIST AND PSYCHIATRIST SERVICES
IN METRO MANILA

As a mental health corporation having qualified:
Psychiatrists and Psychologists in Manila, Makati, Ortigas.
We cover a wide scope of services and conditions.

[QUICK BOOKING](#)

COVID19 CRISIS UPDATE:
ONLINE SERVICES ARE AVAILABLE

Online services are available by [booking an appointment here](#). Mental health script will be sent digitally for use in your local pharmacy.

Patients who opt for our online services require an internet connection and a mobile phone or computer with a microphone. Pricing is between 2000 - 2500 pesos per session. Spots are limited, payment upfront is required to secure a slot.

In-clinic appointments are temporarily suspended.

After booking your appointment online, our mental health team will call you within 12 hours to finalize the details of your appointment.

For any appointment-related queries, please call us at +639173247110 or email us at clinic@prescriptionpsychiatrists.com.ph.



[BOOK AN APPOINTMENT](#)

Contact us 



Select services

Login

Online Consultation	
<input type="radio"/> Psychiatry Initial Session - 45 mins 45 mins • P2500	(i)
<input type="radio"/> Psychiatry (follow up) 30 mins • P2500	(i)
<input type="radio"/> Couples Counseling 1 hour, 30 mins • P3000	(i)
<input type="radio"/> Psychology Initial Session - 1 hour 1 hour • P2500	(i)
<input type="radio"/> Psychology (follow up) 45 mins • P2000	(i)
<input type="radio"/> Psychology Bulk Pack (for follow ups only) 45 mins • P9000	(i)

📍 **Online Consultation**
2511 A Centuria Medical
Makati, Barangay Poblacion,
Makati City

Continue

Prescription Psychiatrists Website. (n.d.). [Picture]. Prescription

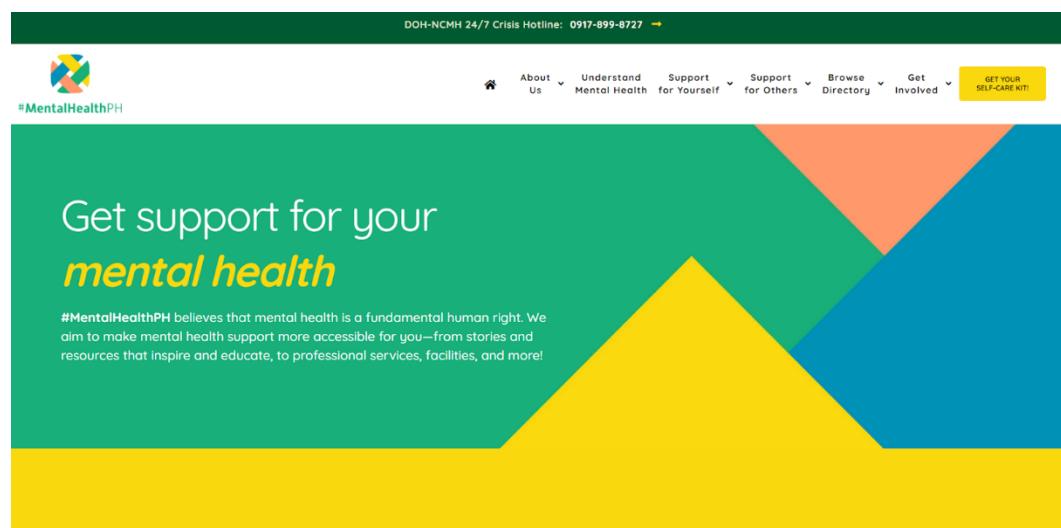
Psychiatrists. <https://prescriptionpsychiatrists.com.ph/>

Figure 2.4 Prescription Psychiatrists

Mental Health PH

Mental Health PH is a non-profit organization that aims to provide the fundamental human right to mental health. They provide professional services and create

facilities that cater to mental health in the Philippines. These services are available on their website “mentalhealthph.org”. When visiting the page, the users are prompted with a homepage filled with basic information of the organization such as a mission statement, ongoing campaigns, social media communities, and donations. Navigating through the website, there are other various resources that provide adherence support to individuals; these are in the form of books and blog posts, all of which are free material. There are also emergency mental health ready 24/7 and this service is free of charge. Users can also view locations of various validated mental health institutions across the Philippines. Lastly, users can publish their own stories through the site which will be reviewed, if it is approved by the organization there is a chance that it may be posted on MentalHealthPH’s Facebook page (Mental Health PH, n.d.).





So we've been
working hard.

We've been working to promote and protect your mental health



About Us & Our Campaigns

Read stories submitted by real



Our Database & Directory

Browse our validated directory



Opportunities to Get Involved

Join the fight to protect and

AS SEEN ON [facebook](#) [MANILA BULLETIN](#) [INQUIRER.NET](#) [ABS-CBN](#)

#MentalHealthPH

Catch our latest updates and announcements for mental health related events, campaigns, and resources!

About Us

- About Our Organization
- Our Story
- How We Work
- Meet the Team
- Media Mentions

Campaigns

- #UsapTayo
- #VoicesOfHope
- #40SecondsOfHope
- #MHTalks

Get Involved

- Add a Directory Listing
- Share Your Story
- Volunteer with Us
- Partner with Us
- Start Your Own Chapter
- Make a Donation

Join our newsletter!

Don't worry, we hate spam too!

First Name your@email.com

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Icons made by Freepik from www.flaticon.com

Join the *community!*

Catch all our updates and connect with tens of thousands of mental health champions just like you—who share our dream of a mentally healthier Philippines!

[VIEW COMMUNITY](#)

Support the Community!

#MentalHealthPH is a private, non-stock, and non-profit organization, donations and any kind of support would go a long way to help us run our campaigns! <3

[Make A Donation](#)

DOH-NCMH 24/7 Crisis Hotline: 0917-899-8727 →



#MentalHealthPH

About Us Understand Mental Health Support for Yourself Support for Others Browse Directory Get Involved [GET YOUR SELF-CARE KIT!](#)

For emergency help,
click or call:

📞 **(02) 1553**
📞 **(02) 7-989-8727**
📱 **0917-899-8727**

- ✓ Ready and Available 24/7
- ✓ For people with MH problems, in crisis, or at risk of suicide
- ✓ Luzon-wide landlines are toll-free
- ✓ The service is free but charges will be incurred for incoming calls.
- ✓ Operated by National Center for Mental Health (NCMH)

Need something else?

The screenshot shows the homepage of the MentalHealthPH website. At the top, there's a dark green header bar with the text "DOH-NCMH 24/7 Crisis Hotline: 0917-899-8727" and a yellow "GET YOUR SELF-CARE KIT!" button. Below the header is a navigation menu with links like "About Us", "Understand Mental Health", "Support for Yourself", "Support for Others", "Browse Directory", and "Get Involved". The main content area features a large banner with three smiling people and the word "Directory". Below the banner, a sub-headline reads "Browse our validated directory of mental health facilities, services, and organizations from around the Philippines." A search bar with a placeholder "Search for..." and a "SEARCH" button is prominently displayed. Below the search bar, there are buttons for "Filter Entries" and "Showing 1 - 20 of 150". To the right of the search bar are icons for sorting by title and a "Map" button. The main body of the page features a map of Southeast Asia and the Philippines, with red pins marking various locations. Below the map, there are three cards listing mental health facilities:

Facility Name	Description	Type
700 Club Asia	SUPPORT GROUP - FREE, ONLINE, PRIVATE	
Academy of Hope, One Algon Place Foundation Inc.	FACILITY - PAID, PRIVATE	
Amang Rodriguez Memorial Medical Center (Psychiatry OPD Clinic)	FACILITY - FREE	

Story Submission Form

Be the Voice of Hope, submit your stories here!

Email confirmation will be sent to you upon receipt of your story. Another notice through e-mail will be sent to you once your story gets published! Together, let's spread awareness and break the stigma on mental health!

For inquiries, contact us through hello@mentalhealthph.org, MentalHealthPH Facebook Page (@mentalhealthph), and/or (@mentalhealthph) on Twitter.

Kindly check the box if you have understood the guidelines above. *

Yes, I understood the guidelines.

Is this your own story? *

Yes, I give my consent to publish it.

No, but I have consent to share from the person this is about.

If you are not the subject of the story, how are you related to them? *

I.e. "I'm the person in the story"; "They are my family"; "They are my friend", etc.

Do you prefer to remain anonymous? *

Mental Health PH Website. (n.d.). [Picture]. Mental Health PH.

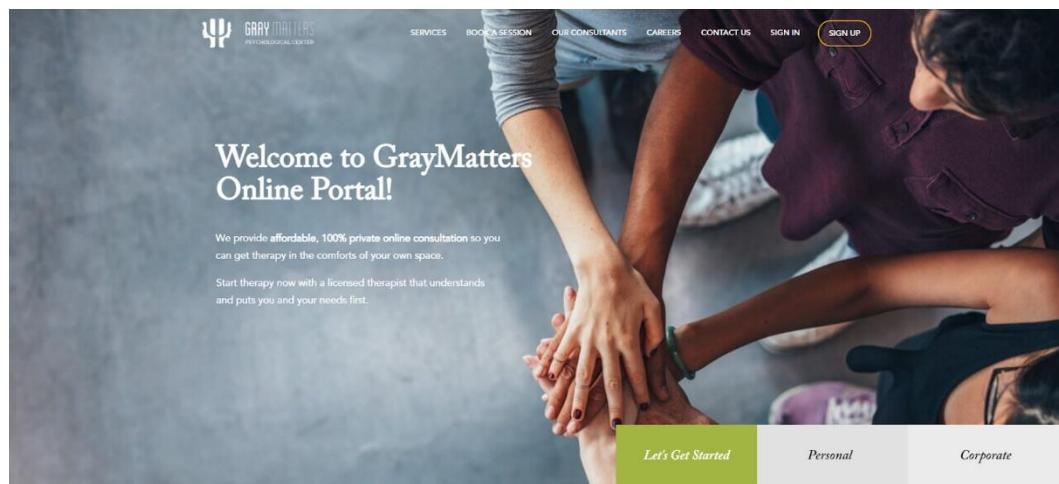
<https://mentalhealthph.org/>

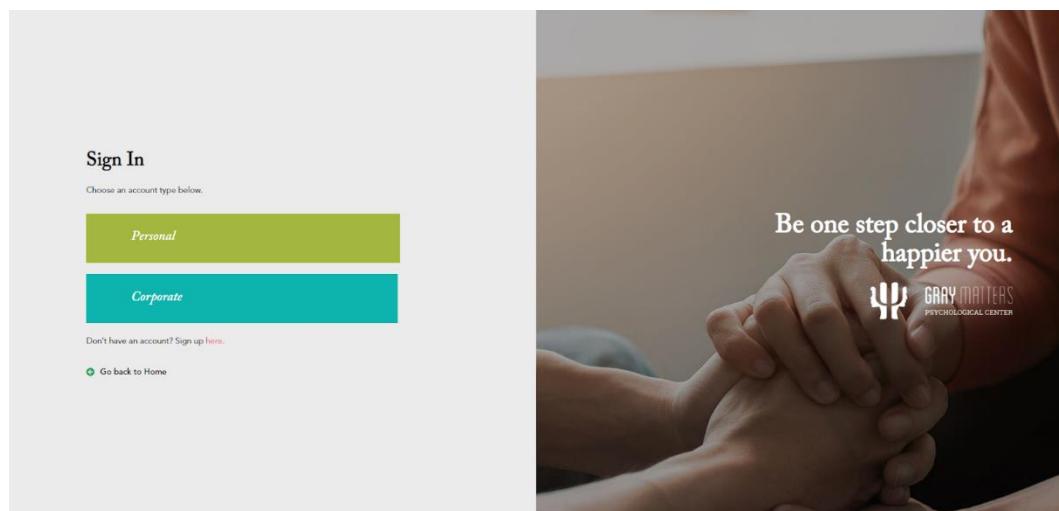
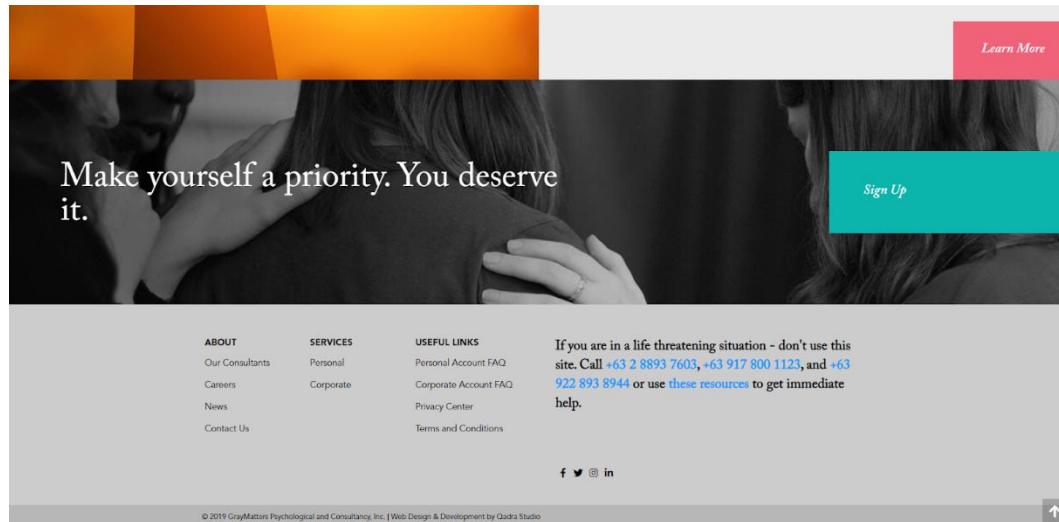
Figure 2.5 Mental Health Philippines

Gray Matters Online Portal Philippines

Gray Matters is a psychological and consultancy incorporated that provides mental health services in the Philippines through its online portal. They have a goal of erasing social stigma, raising awareness for mental health, and encouraging people to take care of their mental well-being. Navigating through their online portal, the home page is filled with information such as the mission and vision statements. At the bottom of the home page there are other resources that can redirect the user to emergency hotline services or to other pages of the website. Users can book for a session through the site

although this will require them to sign up for a personal account. A personal account authorizes the user to book for online services and resources along with workshops, training, and seminars. Another type of account is the corporate account, which is made for members or affiliates of the organization. If users have signed up for a personal account, they can also choose to complete two ecological momentary assessment tests that will evaluate the mental state of the person. The results of the tests can be used for reference in future sessions with a psychiatrist (Gray Matters, n.d.).





ONLINE ASSESSMENT AND PRICING

Home / Personal Account / Online Assessment and Pricing

The screenshot shows the 'Online Assessment and Pricing' section of the Gray Matters portal. It features two 'Free' test options: 'Free Test #2' and 'Free Test #1'. Both tests are described as self-report questionnaires designed to measure symptoms of depression and anxiety. The 'Free Test #1' page includes instructions, a list of questions, and a rating scale from 'NONE' to 'SEVERE'. A progress bar indicates '0% COMPLETE' with '0/1 Steps'.

Gray Matters Psychological Center

Free Test #1

Free Test #1

Instructions: The questions below ask about things that might have bothered you. For each question, choose the number that best describes how much (or how often) you have been bothered by each problem during the past TWO (2) WEEKS.

During the past TWO (2) WEEKS, how much (or how often) have you been bothered by the following problems?

5. Starting lots more projects than usual or doing more risky things than usual?

NONE: Not at all

SLIGHT: Rare, less than a day or two

MILD: Several days

MODERATE: More than half the days

SEVERE: Nearly every day

BACK

NEXT

Gray Matters Online Portal. (n.d.). [Picture]. Gray Matters Psychological and Consultancy inc. <https://graymattersportal.ph/>

Figure 2.5 Mental Health Philippines

TECHNICAL BACKGROUND

Hardware Requirements

A stable and fast hardware components are required for web-development specifically on the Core Processing Unit, Graphics Processing Unit, Random Access Memory, Storage. The average Core Processing Unit is intel 5 and above in order to handle numerous tasks done during the development. Meanwhile, the Graphics Processing Unit is compatible with OpenGL 3.2. (integrated graphics cards Intel HD 4000 or above) to handle the visual graphics especially on designing the User Interface. On the other hand, 8 Gigabyte of Random Access Memory is a must have in order to run multiple applications that are required simultaneously. However, bigger projects require 16 Gigabyte or even 32 Gigabyte. Lastly, the storage should at least contain 256 Gigabyte of Solid State Drive (SSD) for the faster boot up of the computer, while the files should be saved in a Hard Disk Drive (HDD) (Wirtz, B., 2020).

Software Requirements

As the study will create a web-based platform, the developers decided to use the programming language PHP: Hypertext Preprocessor which is regarded as secure as any other major server-side language. The PHP programming language utilizes the use of MVC-pattern type with their frameworks in building applications. MVC stands for Model, View, and Controller wherein the Model is

responsible for the database, View provides the user interface and the Controller is in charge of managing user requests (Hopkins, C., 2013). PHP is also well-known as a cross-platform language wherein it can run either Mac, Windows, or Linux. It also syncs with every database available such as MySql, Postgress, MongoDB and any other database. Lastly, it has a documentation website in order to provide the features of the language and assist the users whenever needed (Chris,K., 2021). For the security side of PHP, it can prevent most of web-based attacks such as Cross site scripting (XSS), SQL Injections, Directory traversal (path injection), Command injection, Code injection, Cross site request forgery (XSRF/CSRF) and Session hijacking (How to secure PHP web applications and prevent attacks?, n.d.).

To add, the developers will utilize the frameworks within the PHP language which is Laravel. Laravel is a progressive framework that follows the MVC pattern mentioned earlier in the PHP language itself. It has powerful features such as database abstraction layer, unit and integration testing, authentication and authorization and prevents injection dependencies (Laravel, n.d.).

To test the capacity, capability and the performance of the system, the developers will use and utilize XAMPP as a test server and deployment. XAMPP is an abbreviation for Cross-Platform, Apache, Mysql, PHP, and Perl. The purpose of it is to check if the application is running well and prevent any errors and bugs during the official deployment in the cloud (XAMPP, n.d.).

Encryption is a process wherein the system will use algorithms to convert

plain text messages into non-readable information. It is important especially for confidential transactions that involve personal information such as passwords and credit card information. Laravel uses AES (Advanced Encryption Standard) - 256 and AES - 128 which opens the SSL (Secure Sockets Layer) wherein websites to secure during online transactions which keeps the confidential information regarding the customer (Laravel, n.d.).

CAPTCHA shall be utilized in order to prevent spammers or bots to gain access to the system and it will authenticate a user whether it is a real person or not. This security measure can be implemented in the framework through a google service provided for free called reCaptcha McElhaney (2020). The latest reCaptcha version 3 is an improvement over its previous predecessors, it returns a score and analytics for a developer to take drastic measures reCaptcha (n.d.). For the database, an open source database manager SQL will be used while utilizing the Eloquent ORM for simple active record implementation (Laravel, n.d.).

Chat bots are used by businesses in interacting with their customers 24/7. It is mainly used to support the customers whenever they are facing a specific problem which can be answered by a bot. According to a study conducted by Folstad, A. (2020), most participants had a positive experience and were satisfied from the answers of a chatbot.

The developers will implement file uploading as the method for receiving

proof of payments. According to Nugraha (2020), proof of payment is essential for business actors as it serves as a valid proof of a transaction that occurred. Proof of payments are also used in checking audit trails for auditors to crosscheck and match transactions made by certain individuals or by the company. E-payments can be challenging for some users, especially for those that do not have access to e-payment methods such as those living in rural areas where physical cash is mostly used for transactions (Rachna & Singh, 2013).

The developers will use Microsoft Azure for its cloud computing service that will serve as a hosting site of the proposed web application's deployment. Formerly known as Windows Azure, Microsoft Azure offers computation, analytics, storage, and networking as well as other cloud services. Building and developing new apps or running existing apps in the cloud are the optional services that users may choose from this platform. Furthermore, Azure provides four types of cloud computing services, which consists of infrastructure as a service (IaaS), platform as a service (PaaS), software as a service (SaaS), and serverless. Microsoft Azure is designed to assist organizations that involve a wide range of sectors, including e-commerce and banking through supporting them with useful tools in order to achieve their objectives. This gives customers the freedom to use whichever tools and technologies they want as it is compatible with other open source platforms. For their bills and payment, the customer Azure is billed on a

pay-as-you-go basis, which means that the resources they have utilized will reflect on the monthly payment (Bigelow, 2017).

The developers will utilize MySQL for the web application's database functionality. MySQL is an open source relational database management system (RDBMS) built on Structured Query Language (SQL) that is supported by Oracle, and is most commonly linked with web applications and online publishing, despite the fact that it may be utilized in a variety of uses. MySQL is available over every platform which are Linux, UNIX, and Windows. Moreover, MySQL is a major aspect of the LAMP (Linux, Apache, MySQL, and PHP), which is an open source enterprise stack (Moore, 2018). MySQL serves as the existing database solution for websites with massive amounts of data and end-users such as Facebook, Twitter, and Wikipedia. Also, MySQL has a great feature that is used to accommodate integrated database applications (W3Schools, 2022).

Some features of the proposed web application will be implemented using Ajax. AJAX means Asynchronous JavaScript And XML, which allows web pages to be modified dynamically by sending and receiving data with a web server in the background. This implies that without refreshing the entire page, the elements of a web page can be updated concurrently (W3Schools, 2022). It is a new approach for

using XML, HTML, CSS, and Java Script to create better, quicker, and much more responsive online applications. It is also the most efficient Rich Internet Application (RIA) technology currently available since it is gaining a lot of attention in various businesses, and different toolkits & frameworks are popping up as well (Tutorialspoint, 2021). One of the libraries based on Ajax that will be developed for the web application is Datatables. DataTables of Ajax is a JQuery based external library that can read and display JSON data with the use of Ajax. Subsequently DataTables can create better accessibility of data as end users can obtain the specified information much faster. This is an open source library that can be used by any developers, it has flexible features such as quick search, easy application of bootstrap, and has a wide variety of extensions that it can implement (DataTable, n.d.). Another feature that will be developed is Full Calendar. FullCalendar can be implemented through a wide variety of javascript frameworks such as Vue, Angular, and JQuery. The main role of a FullCalendar is to provide the user events or features that can give them the ability to rearrange schedules and check any daily, weekly, and monthly activities. Developers can customize FullCalendars in different programming languages (FullCalendar, n.d.) .

For the user interface, the developers opted to use two colors, specifically shades of Green and Blue. The color Blue encourages a soothing and calm environment which stimulates clear insights and calm the mind (Wright, 1998). On

the other hand, the color Green is considered as a calming and emotionally stable color. It conveys a vibe of harmony, peace, equilibrium and universal love. Moreover, Leatrice Eiseman (2006) stated that people find the colors Blue and Green relaxing since it reminds them of the color of nature.

Audit logs are records and sets of events that track the transactions such as destination, source addresses and ip address, timestamp and user login information (Cole, B., n.d). Audit logs also provide additional security from small bugs or errors to serious security breaches and where the unauthorized access of data has occurred, and can help the system administrators to debug daily basis problems that arise within the system (Ertl, B., n.d.).

According to Nugraha D., (2020) proof of payment is essential for business actors as it serves as a valid proof of a transaction that occurred. Proof of payments are also used in checking audit trails for auditors to crosscheck and match transactions made by certain individuals or by the company. E-payments can be challenging for some users, especially for those that do not have access to e-payment methods such as those living in rural areas where physical cash is mostly used for transactions (Rachna & Singh, 2013).

According to Parekh, R. (n.d.), telepsychiatry systems require a business associate agreement in order to ensure the compliance to Health Insurance Portability and Accountability (HIPAA) of 1996. Health Insurance Portability and Accountability is a law that was signed by the Former President Bill Clinton on

August 21, 1996 which aims to prevent fraud in the healthcare system, improve access to the services and reduce the risk of data breach and protect the confidentiality and security of the patient's record without their own consent. The HIPAA is composed of 5 sections:

- 1. HIPAA Health Insurance Reform - Protects the health insurance coverage of the workers and their families who lose or change their career.
- 2. HIPAA Administrative Simplification - Prevents Health care fraud and abuse which requires the healthcare organizations to possess a safe and secure location for the data.
- 3. HIPAA Tax-Related Health Provisions - Includes guidelines regarding the tax-related medical accounts and provisions.
- 4. Application and Enforcement of Group Health Plan Requirements
 - Provides modifications for healthcare changes regarding individuals with preexisting conditions and those who seek continuous health insurance coverage.
- 5. Revenue Offsets - Includes provisions and insurance for individuals who lost their US citizenship.

In addition, Parekh, R. (n.d.) suggested that telepsychiatry have a need of FIPS 140-2 certified 256 bit standard, wherein the video conferences must not be stored or saved by any companies without the permission from the patient. 140-2

certified is an encryption technique that utilizes the use of hash standards and message authentication.

In the Philippines, the HIPAA was adopted and patterned into the Republic Act 10173 – Data Privacy Act of 2012. The act states “protects individuals from unauthorized processing of personal information that is (1) private, not publicly available; and (2) identifiable, where the identity of the individual is apparent either through direct attribution or when put together with other available information.” The two mentioned above pertains to the confidentiality and the right of privacy regarding the health information of an individual.

Network Requirements

According to Techopedia (2017), the definition of web-based applications is that it is any program that is accessed over a network connection using HTTP, rather than existing within a device's memory. Web-based applications often run inside a web browser. However, there are instances where web-based applications may be client-based, where a small part of the program is downloaded to a user's desktop, but the process is done over the internet on an external server. Health is one of the most popular fields on the Internet, with estimates of health-related Web sites running as many as 10,000 or more (Benton Foundation, 1999). Health applications available on the Internet today take

advantage of the Internet's expansive reach to enable health care organizations to interact with a growing number of online consumers (Miller and Reents, 1998).

Software Development

Agile Kanban

Agile project management and software development is an iterative method that enables teams to provide value to clients faster and with fewer difficulties. An agile team provides work in short, step-by-step procedures rather than relying on a sudden launch. Teams have a natural mechanism for adapting to change rapidly since requirements, strategies, and outcomes are assessed on a regular basis. A well-known framework for agile and DevOps software development is called *Kanban*. It implies significant communication and well-defined work status. On a kanban board made by the team, required tasks are visually depicted, in which it helps team members to view the status of each piece of work at any moment (Atlassian, 2021).

METHODOLOGY, RESULTS AND DISCUSSIONS

METHODOLOGY

Research Methods and Design/s Used

The researchers used the qualitative method as the data gathered is obtained from survey questionnaires. This will be used throughout the study based on the acquired non-numerical data that is specifically focusing on manifestations surrounding their interpersonal relationships, causes and effects towards the mental health of individuals. People's opinions, experiences, perceptions, behavior, and exchanges are studied using qualitative methods (Pathak et al., 2013). Since Gibson et al. (2004) revealed that the process of analyzing human behavior in numerical terms is monotonous, switching to qualitative research has become their viable option. Furthermore, qualitative research has been applied in a variety of disciplines, such as clinical research. This improves clinical studies by increasing user participation based on a qualitative method of examining data.

The research designs applied in this study are descriptive, relational, and causal. Descriptive research is a research design that comprises studying and documenting a subject's activities without changing or modifying it in any manner, and applies scientific approach (Shuttleworth, 2021). Relational research is a type of study analyzing the relationship between two or more variables, in which the

presence of it is noticed in the group or population (Verywell, 2020). Lastly, a research design aiming to establish the connection or link of the cause and effect between two variables is called causal research (Bhasin, 2020). Hence, the data is gathered to determine the effectiveness of integrating the adequacy of technological intervention and needs of individuals in developing the platform for the mental health industry.

Population Frame and Sampling Scheme

The permission to conduct the study was obtained by sending via Google forms wherein it is signed and answered by the respondents. Google Forms is an online tool which is a subset of Google's suite of web-based products used for creating surveys, quizzes, and other forms. It can also be used for a variety of tasks, such as gathering event RSVPs. To create a Google Form, the user is required to have a Google account. However, its settings are modifiable, removing the requirement for it (Demarest, 2021). The study's population frame consists of both mental health doctors from various hospitals, which are **5** respondents, and adolescents (ranging from teenagers to young adults aged 13-30) residing in the Philippines, which are **40** respondents. By using the purposive sampling technique, the researchers sought individuals who experience and are aware of mental health issues, as well as mental health professionals who provide treatment to patients. According to Research-Methodology (2012), "Purposive sampling (also known

as judgment, selective or subjective sampling) is a sampling technique in which a researcher relies on his or her own judgment when choosing members of the population to participate in the study.” Moreover, this includes finding and choosing primarily informed or engaged individuals or groups of persons regarding a subject of research (Cresswell & Plano Clark, 2011). The researchers chose adolescents and mental health professionals as the respondents because they will be the ones beneficial for the proposed system.

Description of Respondents

The first category of respondents are licensed mental health professionals from mental health clinics, all clinics and are accredited with their mental health practices, which makes them qualified to answer the survey questionnaire to properly evaluate the adequacy of technological intervention for emotional support. For the second category of respondents these are teenagers to young adults that have the age range of 13-30 years old.

The respondents mentioned above were randomly selected since the researchers wanted to determine and assess the need of an online platform for mental health intervention.

Instruments of the Study

In order to determine the adequacy and perceived need of technological intervention for emotional support, the data is gathered through a survey questionnaire which serves as the instrument of the study. Surveys are a good tool to collect data from individuals through their answers to questions (Check & Schutt, 2012). All respondents are provided with a letter of consent before continuing with the survey. After consenting to answer the questionnaire, the survey has questions that will measure the proper criteria for the online mental health services platform. The Likert scale was also utilized in order to interpret the responses from the respondents. Likert scales can be used to determine or measure people's opinion (Question Pro, n.d.). As shown below, it is a scale that ranges up to four points with the highest rating that interprets a strong agreement and a strong disagreement for the lowest rating.

Rating	Scale	Verbal Interpretation
4	3.26 - 4.00	Most Likely
3	2.51 - 3.25	More Likely
2	1.76 - 2.50	Less Likely

1	1.00 - 1.75	Least Likely
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Table 4.1. Scale rating used for measuring the need of an Online Mental Health

Services Platform in the Philippines for teenagers to young adults and mental health clinics.

Data Gathering Procedure

Survey administration includes questionnaires that will be given to the participants of the study via Google forms. This method is processed to achieve and collect the quality of data needed for the proposed system. Participants included are Mental Health Professionals and teenagers to young adults. A link for the online survey is provided to the respondents. The sample size for the mental health professionals will be low as there are only 500 psychiatrists that are currently practicing in the Philippines (Lally et al., 2019). After acquiring data from the survey respondents the researchers will use it to determine the essential areas that the system needs. The researchers will apply the system design, development plan, and implementation plan.

RESULTS AND DISCUSSIONS

This chapter presents the results, analysis and interpretation of data. The data gathered is represented in tabular and textual form with the aid of statistical treatment for analysis and interpretation. The data gathered were examined, analyzed and organized by the researchers based on the problems stated in Chapter

Teenagers to young adults

Demographic data

Age

40 responses

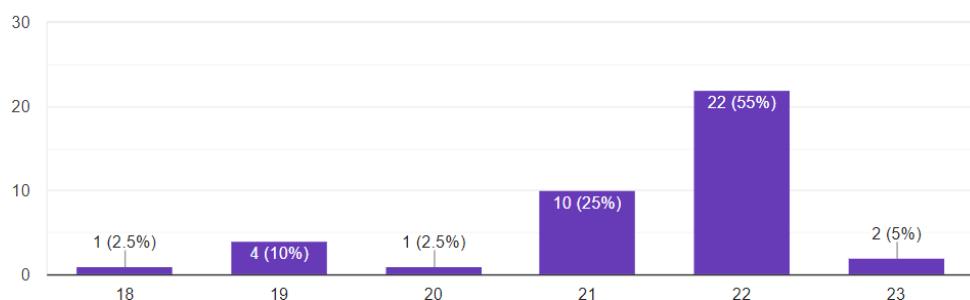


Table 4.1 Age

Table 4.1 shows that the majority of the respondents are aged 21-22, in which 22 (55%) of them are aged 22 while 10 of them are aged 21 (25%). Followed are the respondents aged 18 (1 or 2.5%), aged 19 (4 or 10%), aged 20 (1 or 2.5%), and aged 23 (2 or 5%).

1. How knowledgeable are you in terms of mental health issues?

40 responses

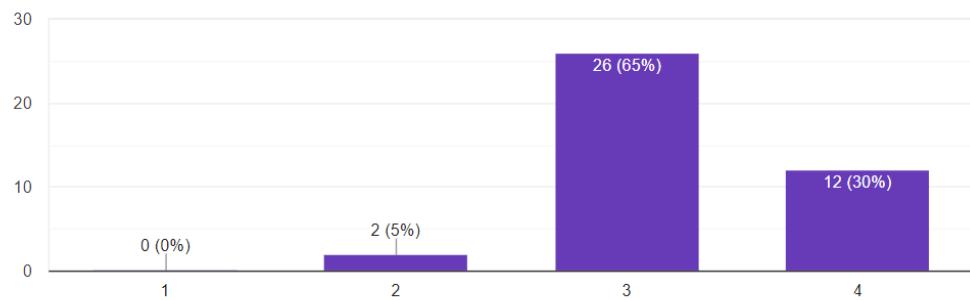


Table 4.2 How knowledgeable are you in terms of mental health issues?

As shown from the table, more than half of the respondents which are 26 or 65% of them and 12 or 30% of them are more/most likely knowledgeable about mental health issues. Followed is 2 or 5%, which are less likely.

2. How does positive communication (i.e. motivation, support, eg.) affect your mental health during mental breakdowns

40 responses

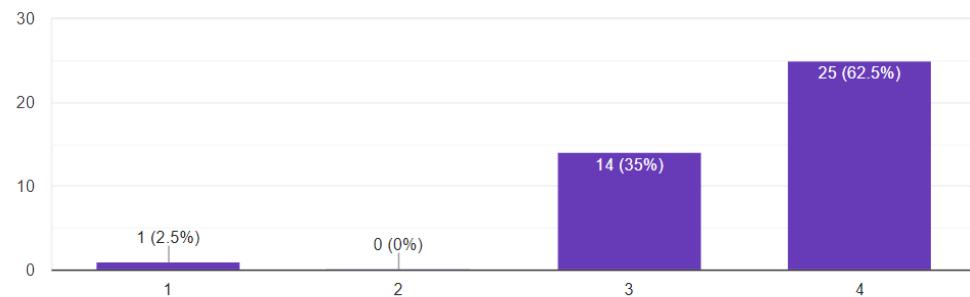


Table 4.3 How does positive communication (i.e. motivation, support, eg.) affect your mental health during mental breakdowns

As shown from the table, the majority of the respondents which are 14 (35%) of them and 25 (62.5%) of them said that positive communication more/most likely affects their mental health during mental breakdowns. Followed is 1 (2.5%) of them are least likely.

3. How does positive communication (i.e. motivation, support, eg.) affect your relationships with other people?

40 responses

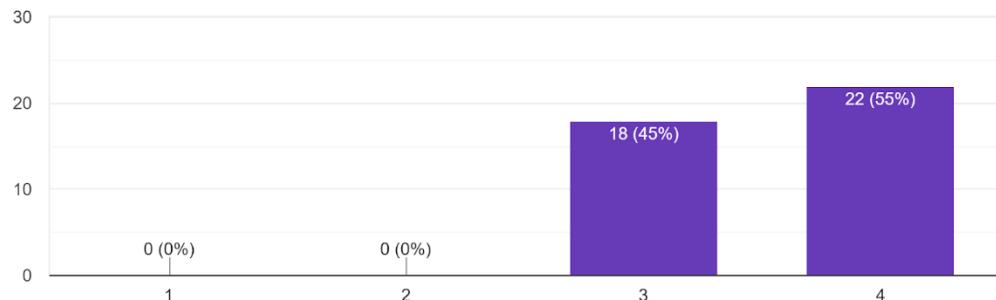


Table 4.4 How does positive communication (i.e. motivation, support, eg.) affect your relationships with other people?

The table shows that the majority of the respondents, which are 18 (45%) and 22 (55%) of them said that positive communication more/most likely affect their relationships with other people.

4. How does getting any kind of e-achievement (i.e. badges, certificates, eg.) motivate yourself?

40 responses

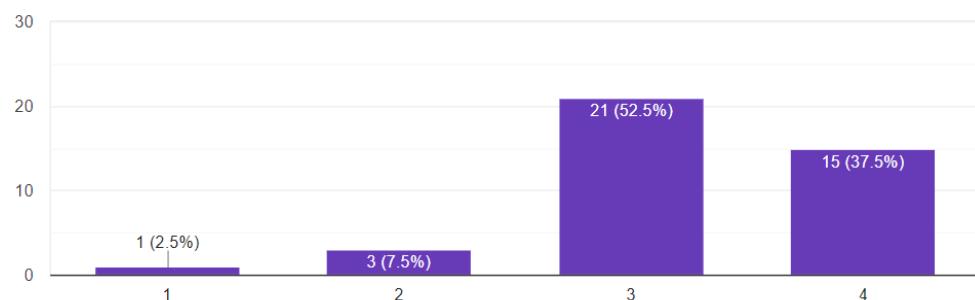


Table 4.5 How does getting any kind of e-achievement (i.e. badges, certificates, eg.) motivate yourself?

As shown from the table, the majority of the respondents, which are 21 (52.5%) and 15 (37.5%) of them said that e-achievement more and most likely motivates them. Followed are 3 (7.5%) and 1 (2.5%) said that it less/least likely motivates them.

5. How does getting any kind of e-achievement (i.e. badges, certificates, eg.) make you feel good and motivate you to interact with other people?

40 responses

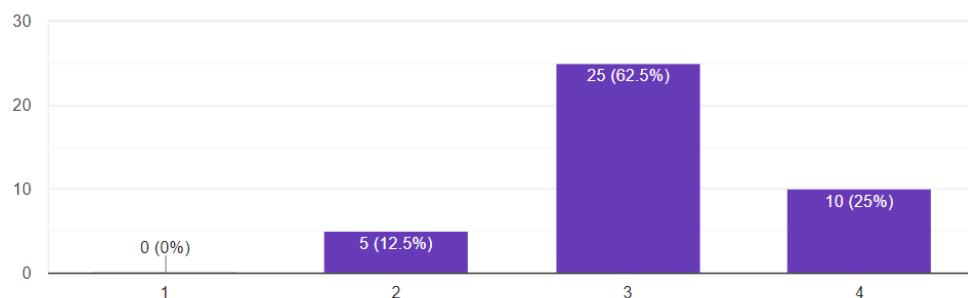


Table 4.6 How does getting any kind of e-achievement (i.e. badges, certificates, eg.) make you feel good and motivate you to interact with other people?

As shown from the table, the majority of the respondents, which are 25 (62.5%) and 10 (25%) of them stated that any kind of e-achievement more/most likely makes them feel good and motivates them to interact with other people. Followed is 5 (12.5%) said that it less likely motivates them.

6. How does writing/expressing your own thoughts (i.e. journals , activities, hobbies, eg.) help you during mental health breakdowns?

40 responses

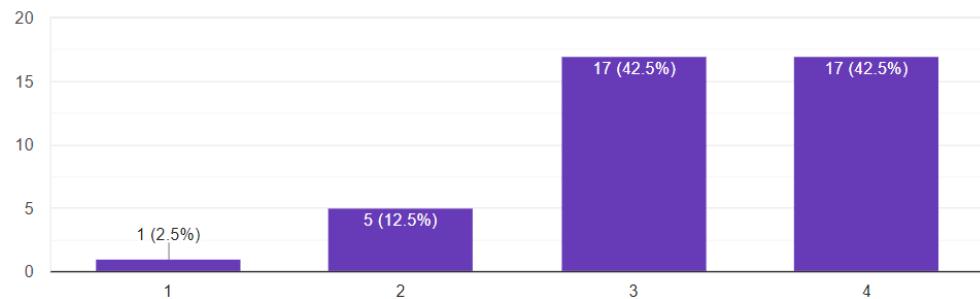


Table 4.7 How does writing/expressing your own thoughts (i.e. journals, activities, hobbies, eg.) help you during mental health breakdowns?

As shown from the table, the majority of the respondents, which are 17 (42.5%) and 17 (42.5%) of them stated that writing/expressing their own thoughts through journals, activities, hobbies, etc. more/most likely help them during mental breakdowns. Followed are 5 (12.5%) and 1 (2.5%) said that it less/least likely help them.

7. How does receiving daily assessments (such as EMAs) assist you in recognizing your current mental health state?

40 responses

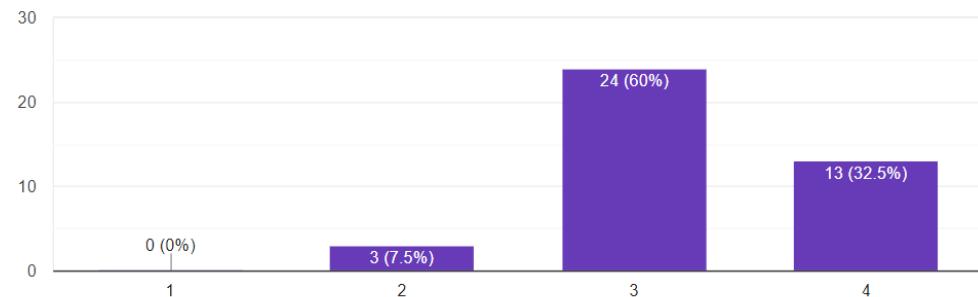


Table 4.8 How does receiving daily assessments (such as EMAs) assist you in recognizing your current mental health state?

As shown from the table, the majority of the respondents, which are 13 (32.5%) and 24 (60%) of them stated that receiving daily assessments such as EMAs more/most likely assist them in recognizing their current mental health state. Followed is 3 (7.5%) said that it less/least likely assist them.

8. How does confiding in a private space (consultation/session with friends/health professional) make you feel more secure and comfortable to open up to others?

40 responses

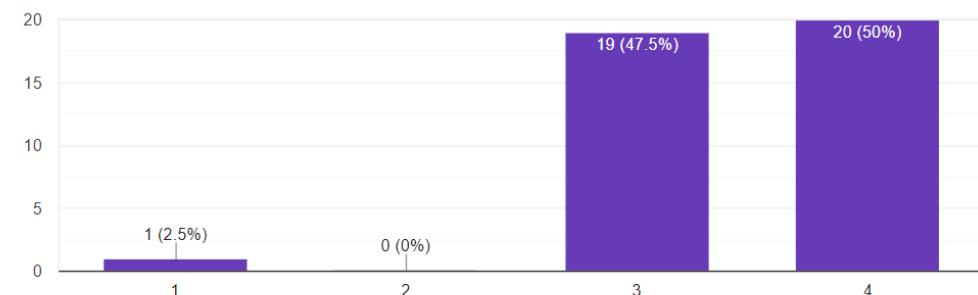


Table 4.9 How does confiding in a private space (consultation/session with friends/health professional) make you feel more secure and comfortable to open up to others?

As shown from the table, the majority of the respondents, which are 19 (47.5%) and 20 (50%) of them stated that confiding in a private space (consultation/session with friends/health professional) make them feel more secure and comfortable to open up to others. Followed is 1 (2.5%) said that it least likely less/least likely provide them the said feeling.

9. How does confiding in a private space (consultation/session with friends/health professional) make you feel the sense of belongingness and inclusiveness?

40 responses

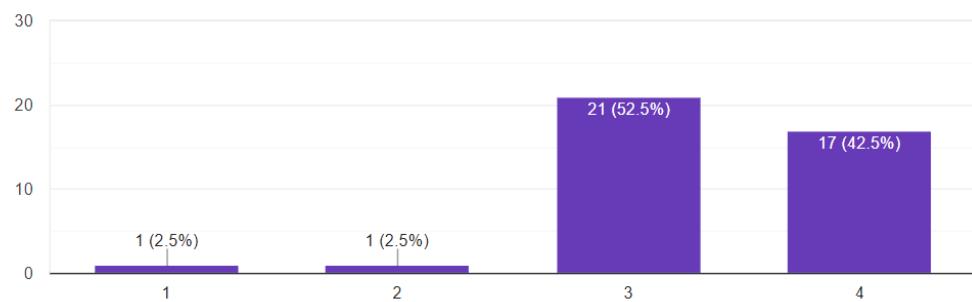


Table 4.10 How does confiding in a private space (consultation/session with friends/health professional) make you feel the sense of belongingness and inclusiveness?

As shown from the table, the majority of the respondents, which are 21 (52.5%) and 17 (42.5%) of them stated that confiding in a private space

(consultation/session with friends/ health professionals) more/most likely feel the sense of belongingness and inclusiveness. Followed are 1 (2.5%) and 1 (2.5%) stated that it less/least likely provide them the said feeling.

10. Have you considered seeking professional help in relation to Mental Health?

40 responses

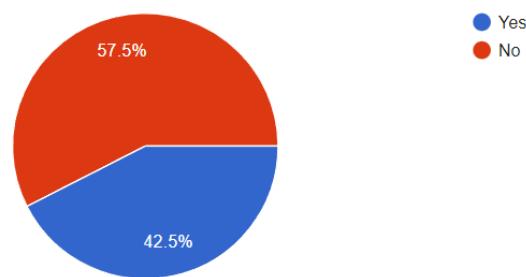


Table 4.11 Have you considered seeking professional help in relation to Mental Health?

As shown from the table, less than half of the respondents, which are 42.5% of them, have considered seeking professional help in relation to their mental health while 57.5% of them have not.

11. If yes from the previous question, which platform do you utilize in acquiring mental health services?

40 responses

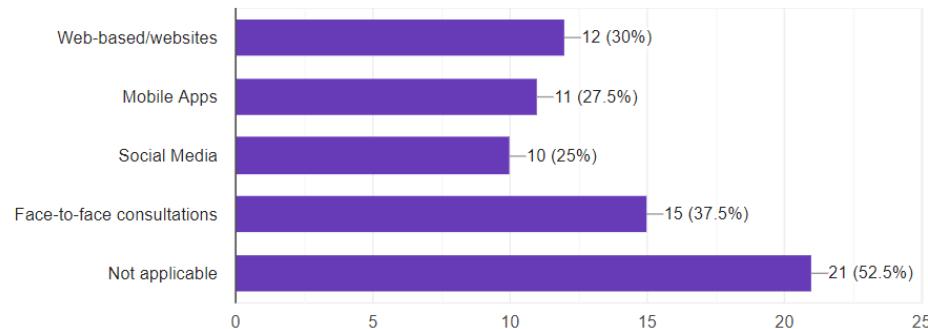


Table 4.12 If yes from the previous question, which platform do you utilize in acquiring mental health services?

With regards to the platform the respondents utilize in acquiring mental health services, 12 (30%) said that they use websites, 11 (27.5%) use mobile apps, 10 (25%) use social media, 15 (37.5%) prefer face-to-face consultations, while 21 (52.5%) do not use any, as shown in the table.

12. How do you reach out to Mental Health care services?

40 responses

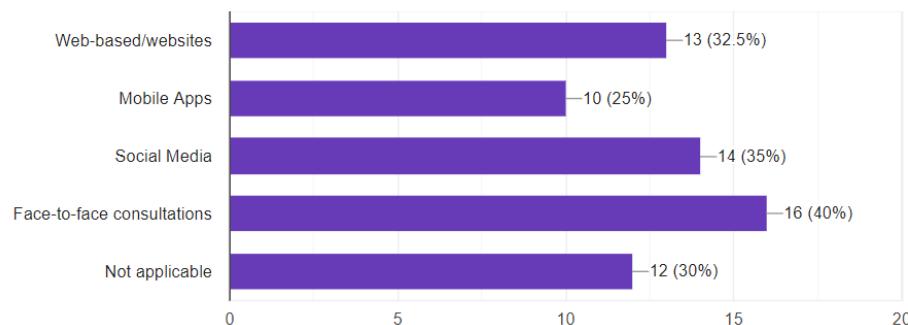
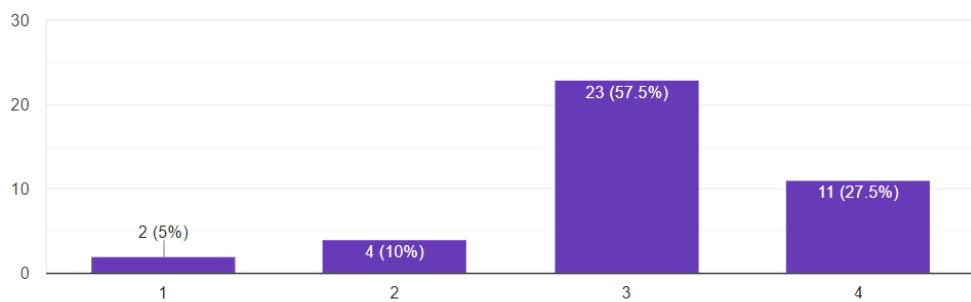


Table 4.13 How do you reach out to Mental Health care services?

With regards to the channels on how the respondents reach out to mental health services, 13 (32.5%) said that they use websites, 10 (25%) use mobile apps, 14 (35%) use social media, 16 (40%) prefer face-to-face consultations, and 12 (30%) do not use any, as shown in table.

13. How likely are you going to engage with other individuals and mental health professionals through an online mental health services platform?

40 responses

*Table 4.14 How likely are you going to engage with other individuals and mental health professionals through an online mental health services platform?*

As shown from the table, more than half of the respondents, which are 23 (57.5%) and 11 (27.5%) of them stated that they are more/most likely going to engage with other individuals and mental health professionals through an online mental health services platform. Followed are 4 (10%) and 2 (5%) said they are less/least going to engage with the stated platform.

14. How likely are you going to use an online mental health service platform?

40 responses

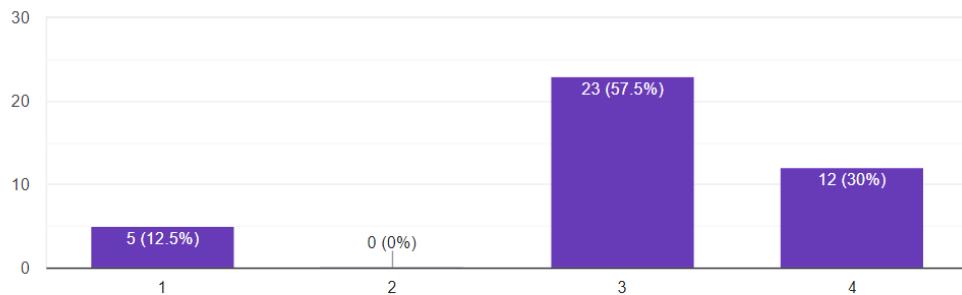


Table 4.15 How likely are you going to use an online mental health service platform?

As shown from the table, more than of the respondents, which are 23 (57.5%) and 12 (30%) of them stated that they are more/most likely going to use an online mental health services platform. Followed are 5 (12.5%) said least likely going to use the stated platform.

15. Are you willing to pay for a mental health professional's services through our online platform?

40 responses

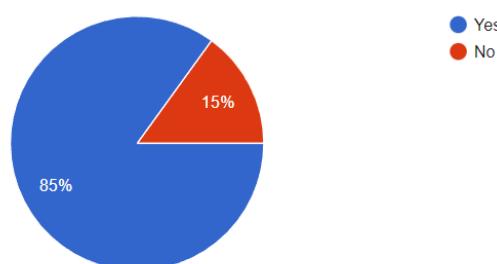


Table 4.16 Are you willing to pay for a mental health professional's services through our online platform?

As shown from the table, the majority of the respondents, which are 85% of them, are willing to pay for a mental health professional's services through our online platform while 15% of them are not.

16. Are you willing to disclose your information to mental health professionals through our online platform?

40 responses

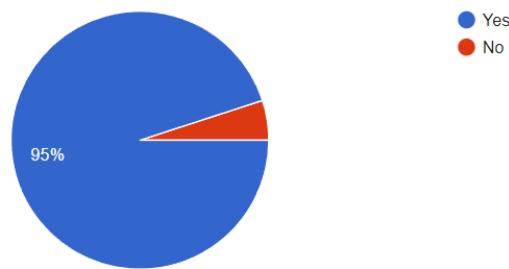


Table 4.17 Are you willing to disclose your information to mental health professionals through our online platform?

As shown from the table, the majority of the respondents, which are 95% of them, are willing to disclose their information to mental health professionals through our online platform while 5% of them are not.

Mental health professionals

Demographics

Name of the Hospital / Clinic

5 responses

Westgate Clinic/The Premier Medical Center/ Las Piñas Doctors Hospital

PGH

VLMC

TMC

Sta rosa community hospital

Table 4.18 Mental Health Clinic/Hospital

Position in the Hospital / Clinic

5 responses

Consultant Psychiatrist

Nurse

resident physician

Consultant

Medical Officer 3

Table 4.19 Mental Health Professional Specialization

1. How do you schedule your consultations?

5 responses

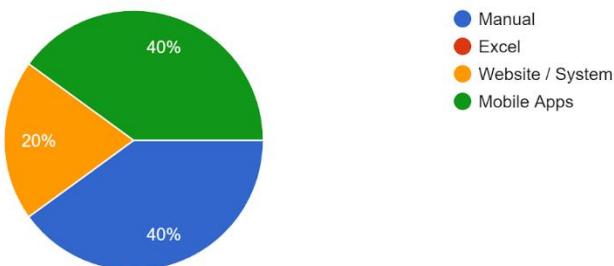


Table 4.20 How do you schedule your consultations?

As shown from the table, most of the respondents schedule their consultations by manually writing it down or through the use of mobile apps with each having 2 per answer (40%). As for websites or systems, we only received 1 (20%) respondent. While Excel has no score, no clinic has been ever using it for scheduling consultations.

2. Does your hospital/clinic/company have an existing booking system?

5 responses

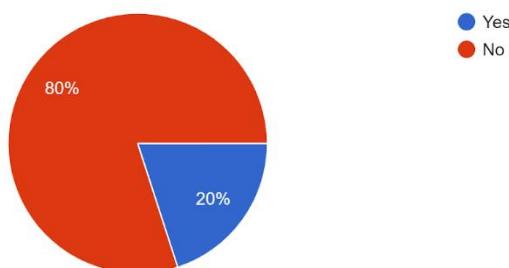


Table 4.21 Does your hospital/clinic/company have an existing booking system?

As shown from the table, 4 (80%) clinics do not have an existing booking system. On the other hand, only 1 (20%) clinic from the survey has an existing booking system of their own.

3. If yes from the previous question, state the name of the system?

1 response

Konsulta MD

Table 4.22 If yes from the previous question, state the name of the system?

Based on the result from 1 clinic, they use KonsultaMD, a telehealth service which needs subscription for the use of consultations and booking for sessions.

4. If not, would you find it easier to use an application or system to schedule a patient's consultation?

5 responses

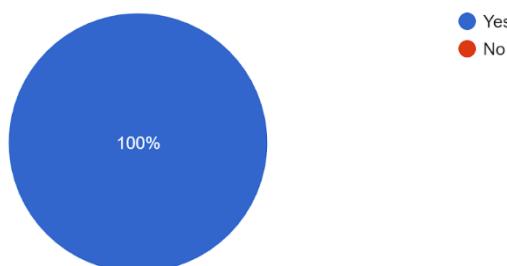


Table 4.23 If not, would you find it easier to use an application or system to schedule a patient's consultation?

As shown from the table, all of the respondents (100%) of the survey agreed that using an application or system can provide more convenience in terms of scheduling appointments with their patients.

5. Do you experience delay during the scheduling process?

5 responses

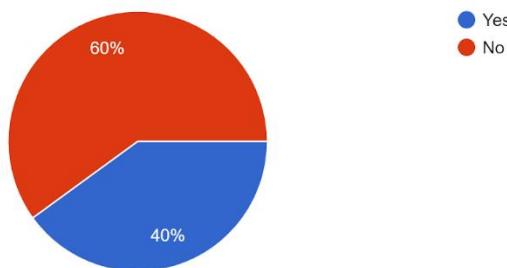


Table 4.24 Do you experience delay during the scheduling process?

As shown from the table, 3 (60%) of the respondents haven't experienced some sort of inconvenience or delay from the scheduling process, while two (40%) respondents experienced any delay from their scheduling processes.

6. How much time do you spend managing the list of schedules of consultation?

5 responses

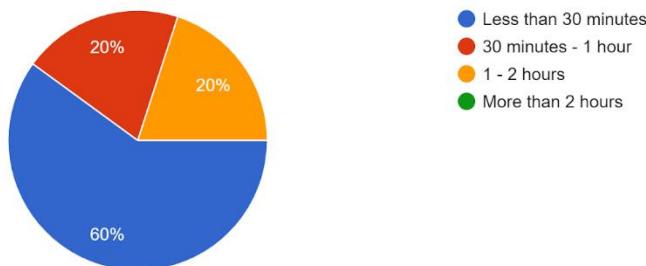


Table 4.25 How much time do you spend managing the list of schedules of consultation?

Based on the results, a majority of respondents, 3 (60%) only spend about less than 30 minutes managing the list of schedules. One (20%) respondent from the survey manages their schedule from 30 minutes to an hour. Lastly 1 (20%) manage to schedule their list of appointments from 1 - 2 hours long.

7. How do you relay information to the patient if there is an emergency or delay to their appointment?

5 responses

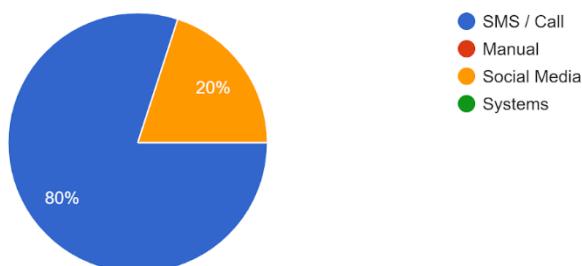


Table 4.26 How do you relay information to the patient if there is an emergency or delay to their appointment?

Based on the results, in case of emergencies or delays regarding their appointments 4 (80%) reach out to their patients through SMS or calls. One respondent (20%) relay the information through the use of social media.

8. Please specify any problems encountered when scheduling a patient's consultation (either online or face-to-face). if none answer n/a'

5 responses

None if secretary is able to efficiently inform them

N/A

Hospital protocol during covid

None

Cannot fully examine the patient thru online consultation

Table 4.27 Please specify any problems encountered when scheduling a patient's consultation (either online or face-to-face). if none answer n/a

Based on the results, there not many problems with scheduling patients online or in a face to face scenario, unless a secretary was not able to efficiently inform the patient. It also shows that COVID-19 protocols hampered patient scheduling. In an online setting, the clinics cannot examine the patient even further due to physical

constraints.

9. What is your most preferred type of scheduling consultation?

5 responses

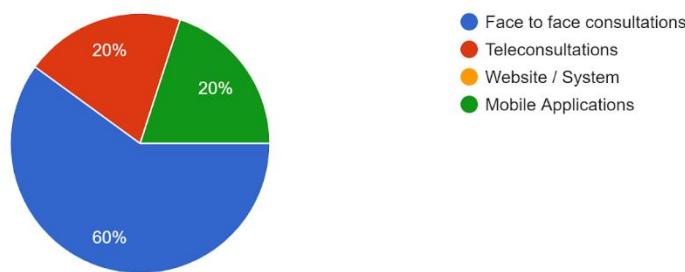


Table 4.28 What is your most preferred type of scheduling consultation?

Based on the results, the majority of which are 3 (60%) the respondent chose face-to-face consultations as their most preferred type of consultation. Next are the teleconsultations and mobile applications both having 1 (20%) respondent each. Lastly, website/systems scored none.

1. How do you manage patient records?

5 responses

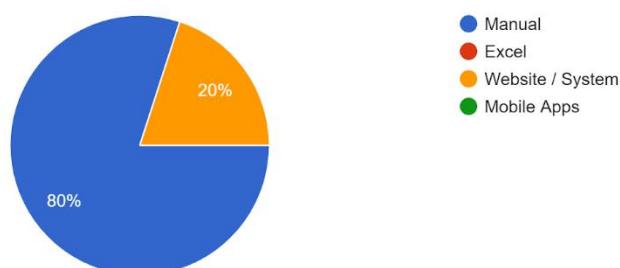
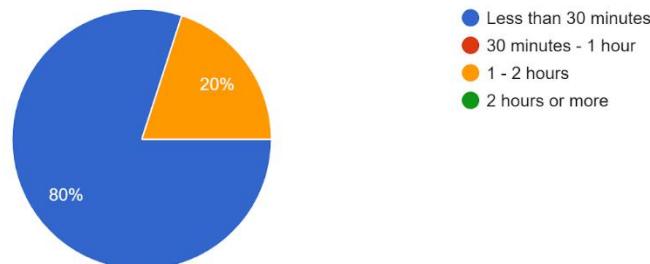


Table 4.29 How do you manage patient records?

As shown from the table, most of the respondents which are 4 out of 5 clinics (80%) manage patient records manually, while 1 (20%) respondent manages patient records via a website/system.

2. How much time do you spend managing the patient's medical records?

5 responses

*Table 4.30 How much time do you spend managing the patient's medical records?*

Based on the results, 4 of the respondents manage patient medical records in less than 30 minutes. Lastly, 1 respondent manages the medical records in 1-2 hours.

3. Do you experience delays during the managing of patients' medical records?

5 responses

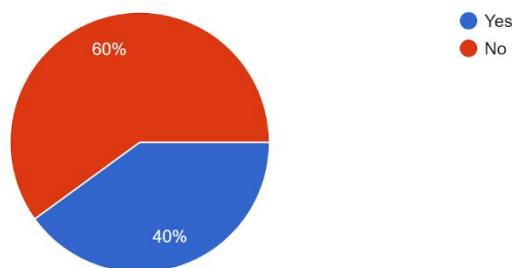


Table 4.31 Do you experience delays during the managing of patients' medical records?

As shown from the table, most of the respondents (60%) do not experience delays in managing patient medical records, while 2 (40%) respondents experience inconvenience or delays with managing patient medical records.

4. If yes from the previous question, state the reason why.

3 responses

Sometimes I'm unable to type in patient's records right away, after the session.

N/A

Difficult to retrieve patient's file if they are visiting for ff up check up

Table 4.32 If yes from the previous question, state the reason why.

Based on the results, the respondents experience delays in managing patient medical records because of lack of time to create input for patient records due to session taking up time. Another respondent stated that there can be difficulty in retrieving a medical record if the patient is visiting or going for a check up.

5. Do you have access to the patient records?

5 responses

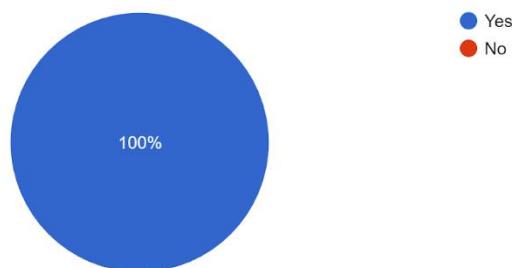


Table 4.33 Do you have access to the patient records?

Based on the results, there are no restrictions with mental health professionals accessing patient records.

7. Does your clinic let the patient access their own medical records?

5 responses

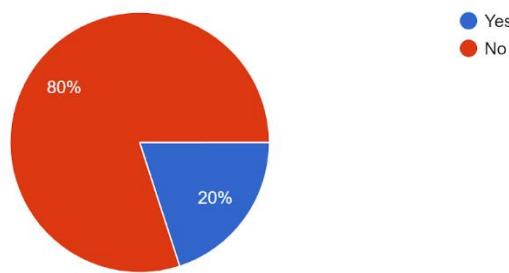


Table 4.34 Does your clinic let the patient access their own medical records?

Based on the results, most respondents, which makes up 4 out of 5 (80%) answered that the clinic does not let the patients access their own medical records. One respondent answered that their clinic gives the patients access to their own medical records.

8. If yes from the previous question, how can the patient access their own medical records?

2 responses

Via requested medical certificates or abstracts only

N/A

Table 4.35 If yes from the previous question, how can the patient access their own medical records?

Based on the results, patients can request for a medical abstract, a simpler summary of their own records or a medical certificate that is based on the patient's records. Because medical records are written in medical jargon that cannot be understood by normal individuals other than mental health professionals.

9. If no from the previous question, state the reason why.

4 responses

Confidentiality

No request from patients

Data privacy and confidentiality

Table 4.36 If no from the previous question, state the reason why.

Based on the results, clinics cannot let their patients access their own medical records because of data privacy and confidentiality. Another reason is that a clinic may not accept requests from patients.

10. What is your most preferred type of storing medical records?

5 responses

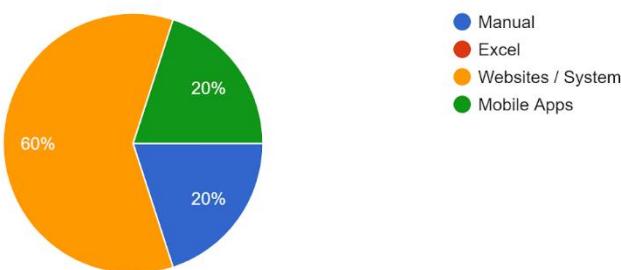
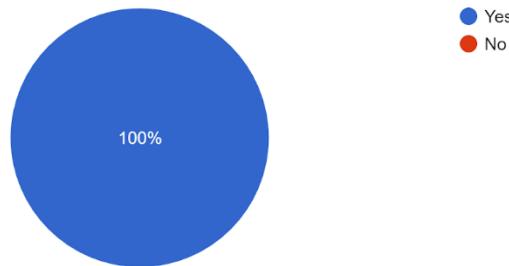


Table 4.37 What is your most preferred type of storing medical records?

As shown from the table, 3 (60%) respondents would rather use websites or a system as their own preference for storing medical records. One (20%) respondent prefers to use mobile apps for record storage, while 1 respondent prefers the manual storage of data via physical means.

1. Do you think that an interaction between individuals and mental health professionals (through online community forums) will be beneficial for both parties?

5 responses

*Table 4.38 Do you think that an interaction between individuals and mental health professionals (through online community forums) will be beneficial for both parties?*

Based on the results, all of the respondents (100%) agree that interaction between patients and mental health professionals can be beneficial for both parties.

2. Do you think that e-achievements and badges will motivate individuals and boost their mental health state?

5 responses

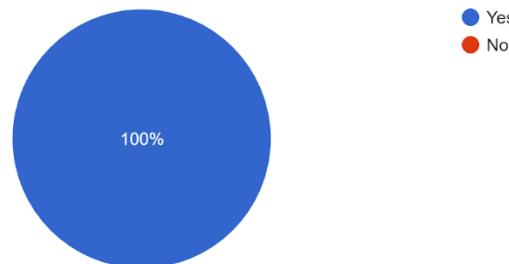


Table 4.39 Do you think that e-achievements and badges will motivate individuals and boost their mental health state?

Based on the results, all of the respondents (100%) agree that e-achievements can benefit individuals and that it can motivate and boost a person's mental health.

3. Do you think that a pre-assessment exam answered by individuals can help them?

5 responses

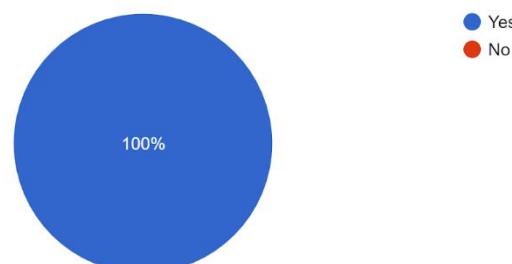


Table 4.40 Do you think that a pre-assessment exam answered by individuals can help them?

Based on the results, all of the respondents (100%) agree that pre-assessment exams that can evaluate individuals before a consultation can aid them.

4. How do you manage your financial data?
5 responses

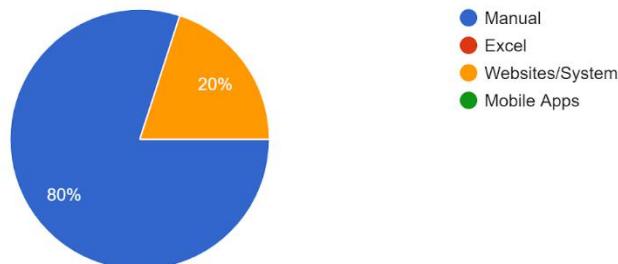


Table 4.41 How do you manage your financial data?

Based on the results, 4 out 5 (80%) of respondents manage financial data through manual records, while 1 (20%) manage financial data through website or system.

5. Do you think that an online mental health service platform that can provide statistics and data regarding the consultations by your clinic will be effective in managing your financial data?
5 responses

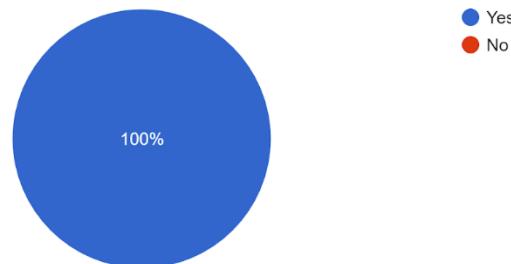


Table 4.42 Do you think that an online mental health service platform that can provide statistics and data regarding the consultations by your clinic will be effective in managing your financial data?

Based on the results, all of the respondents (100%) most likely agree to the concept of an online mental health services platform providing statistical data regarding the consultations conducted in their clinics that can effectively manage

financial.

data.

1. I believe that having an online mental health service platform will be an effective way to bridge individuals with mental health professionals.

5 responses

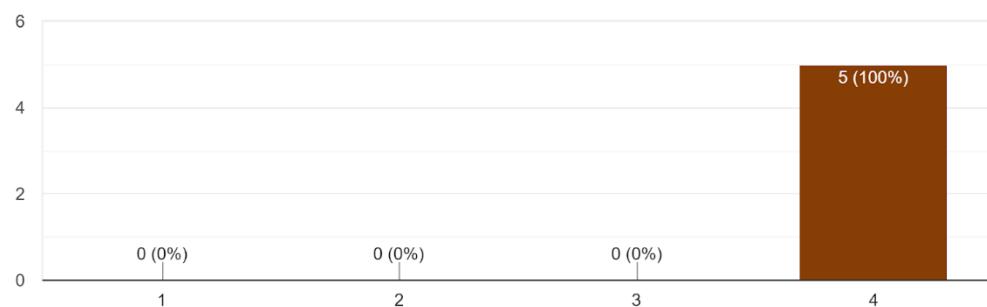


Table 4.43 I believe that having an online mental health service platform will be an effective way to bridge individuals with mental health professionals.

As shown from the table, all respondents (100%) believe that an online mental health services platform will most likely be another effective way of connecting or bridging individuals with mental health professionals.

2. I believe that having an online mental health service platform will effectively raise mental health awareness among individuals in the Philippines.

5 responses

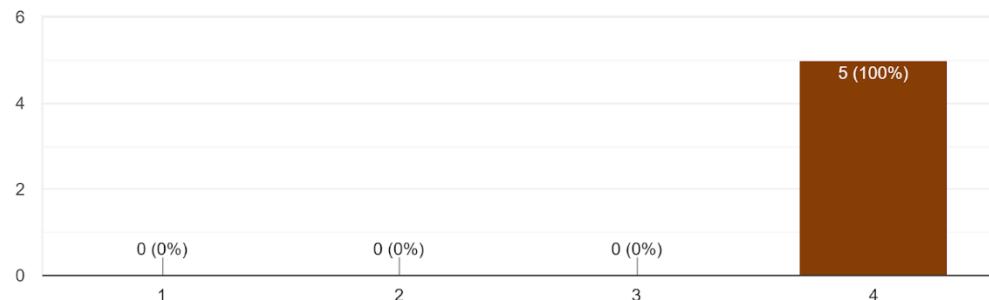


Table 4.44 I believe that having an online mental health service platform will effectively raise mental health awareness among individuals in the Philippines.

As shown from the table, all respondents (100%) most likely believe that an online mental health services platform can create and raise awareness for mental health among individuals in the Philippines.

3. I believe that having an online mental health service platform will be effective in terms of managing a patient's schedule.

5 responses

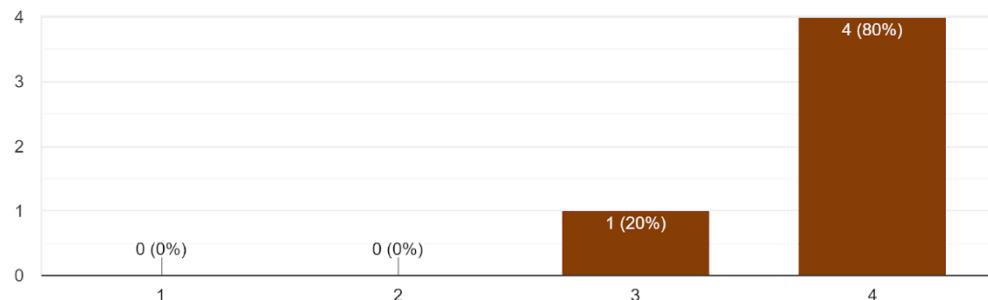


Table 4.45 I believe that having an online mental health service platform will be effective in terms of managing a patient's schedule.

As shown from the table, most of the respondents, 4 out of 5 (80%) most likely agree that an online mental health services platform can be effective for managing patient appointments. One (20%) respondent likely agrees to the concept of an online mental health services platform effectively managing patient scheduling.

4. I believe that having an online mental health service platform will be effective in terms of managing a patient's medical records.

5 responses

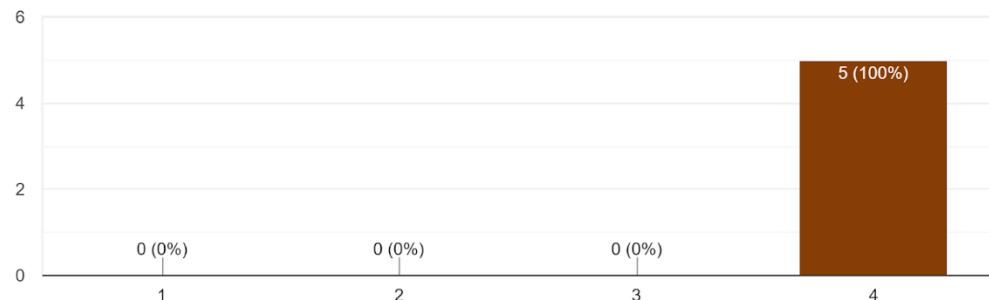


Table 4.46 I believe that having an online mental health service platform will be effective in terms of managing a patient's medical records.

As shown from the table, all of the respondents most likely believe at the concept of having an online mental health service platform can be effective for managing a patient's medical record.

5. I believe that having a community forum inside the online mental health service platform will be effective to the mental health awareness of the individuals.

5 responses

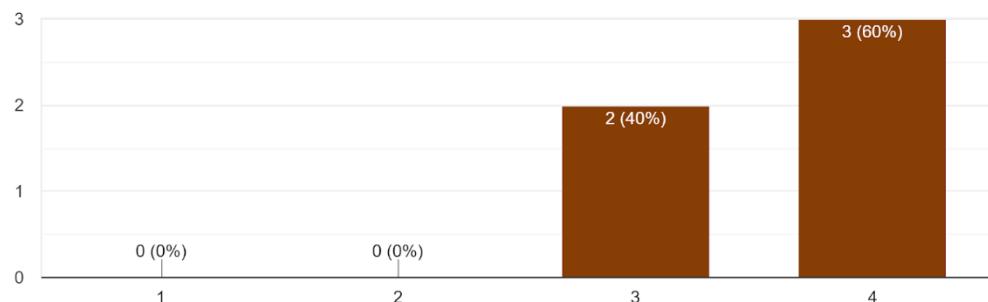


Table 4.47 I believe that having a community forum inside the online mental health service platform will be effective to the mental health awareness of the individuals

As shown from the table, 3 (60%) respondents most likely agree that a forum integrated to an online mental health services platform can be effective in raising mental health awareness among individuals, while 2 (40%) respondents likely agree with the same concept.

6. I believe that having an online mental health service platform will effectively streamline the payment processes.

5 responses

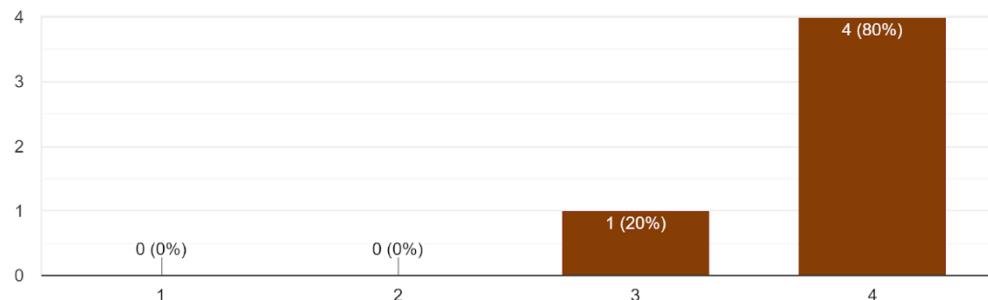


Table 4.48 I believe that having an online mental health service platform will effectively streamline the payment processes.

As shown from the table, 4 (80%) respondents most likely agree that an online mental health services platform can streamline payment processes, while 1 (20%) respondent likely agrees that payment processes can be streamlined through an online mental health services platform.

1. Would you be interested in using an online-mental health service platform "Mentalit-E" once it is ready to implement?

5 responses

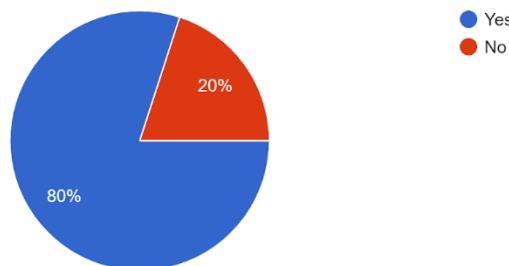


Table 4.49 Would you be interested in using an online-mental health service platform "Mentalit-E" once it is ready to implement?

Based on the results, 4 (80%) respondents would be interested in using Mentalit-E, an online mental health services platform.

2. How much are you willing to pay in order to use the functionalities provided by the "Mentalit-E" (scheduling, managing of patient's records, com...on consultations conducted) on a MONTHLY basis?

5 responses

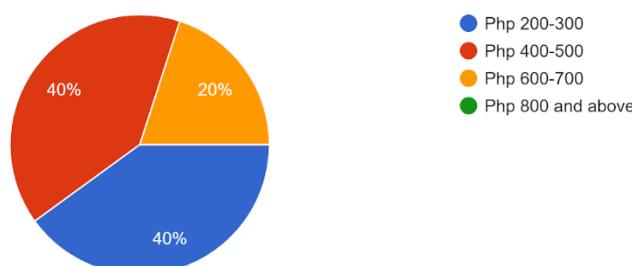


Table 4.50 How much are you willing to pay in order to use the functionalities provided by the "Mentalit-E" (scheduling, managing of patient's records, community forum, financial statistics data based on consultations conducted) on a MONTHLY basis?

Based on the results, 2 (40%) respondents wanted a price range of Php 200-300 for a monthly subscription. Another 2 (40%) respondents prefer the price of 400-500, lastly 1 (20%) respondent is willing to pay for Php 600-700 for a monthly subscription.

Requirements Analysis

The section included the high-level features of Mentalit-E in the form of Use Case Diagrams and the Functional and Non-Functional Requirements.

Use Case Diagrams

The illustration shows the possible sequence for interaction between the different types of users and the system. It also shows some use cases that were expanded.

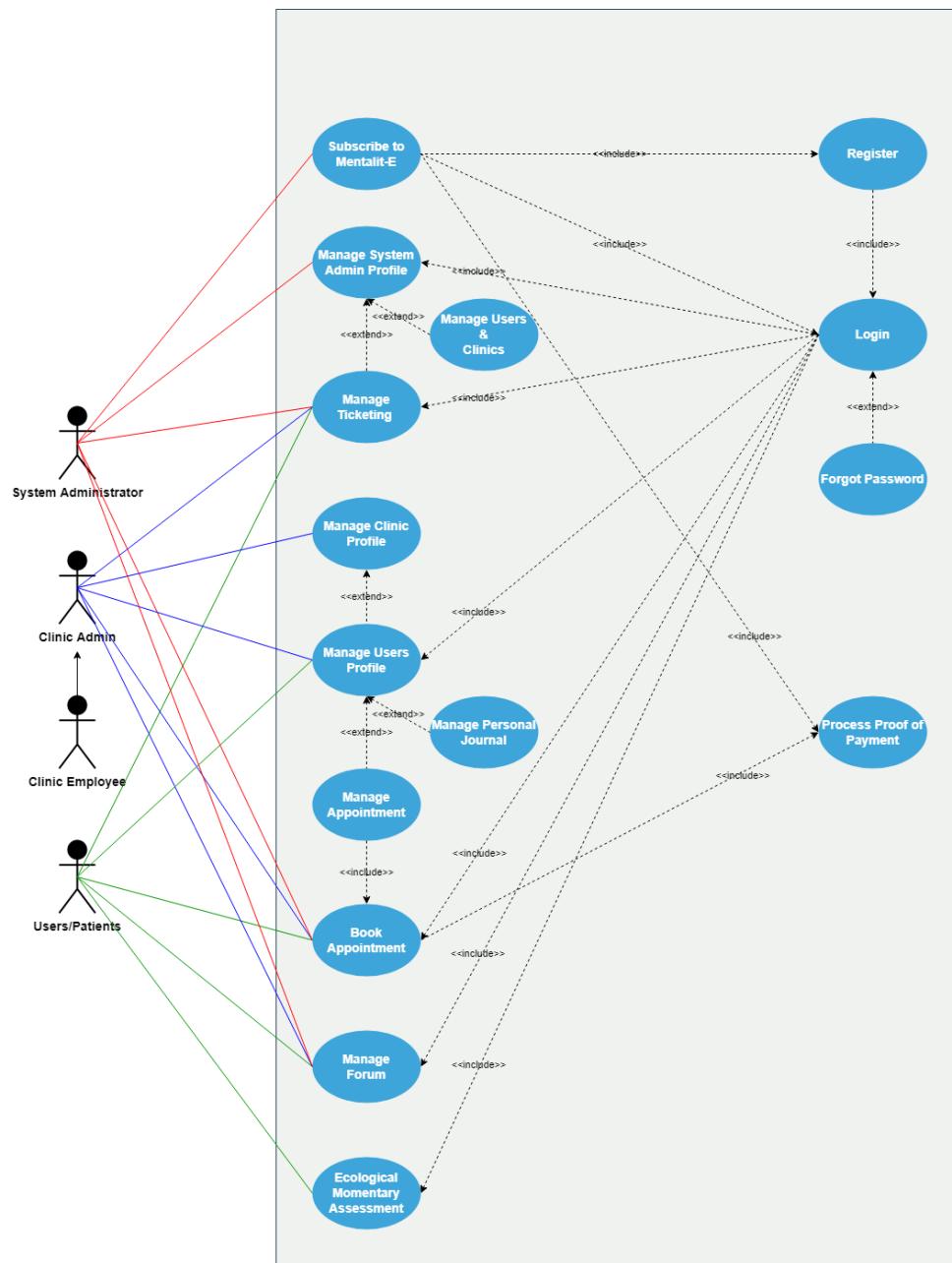


Figure 4.1 Use Case Diagram for Mentalit-E

Use Case Diagrams for System Administrator

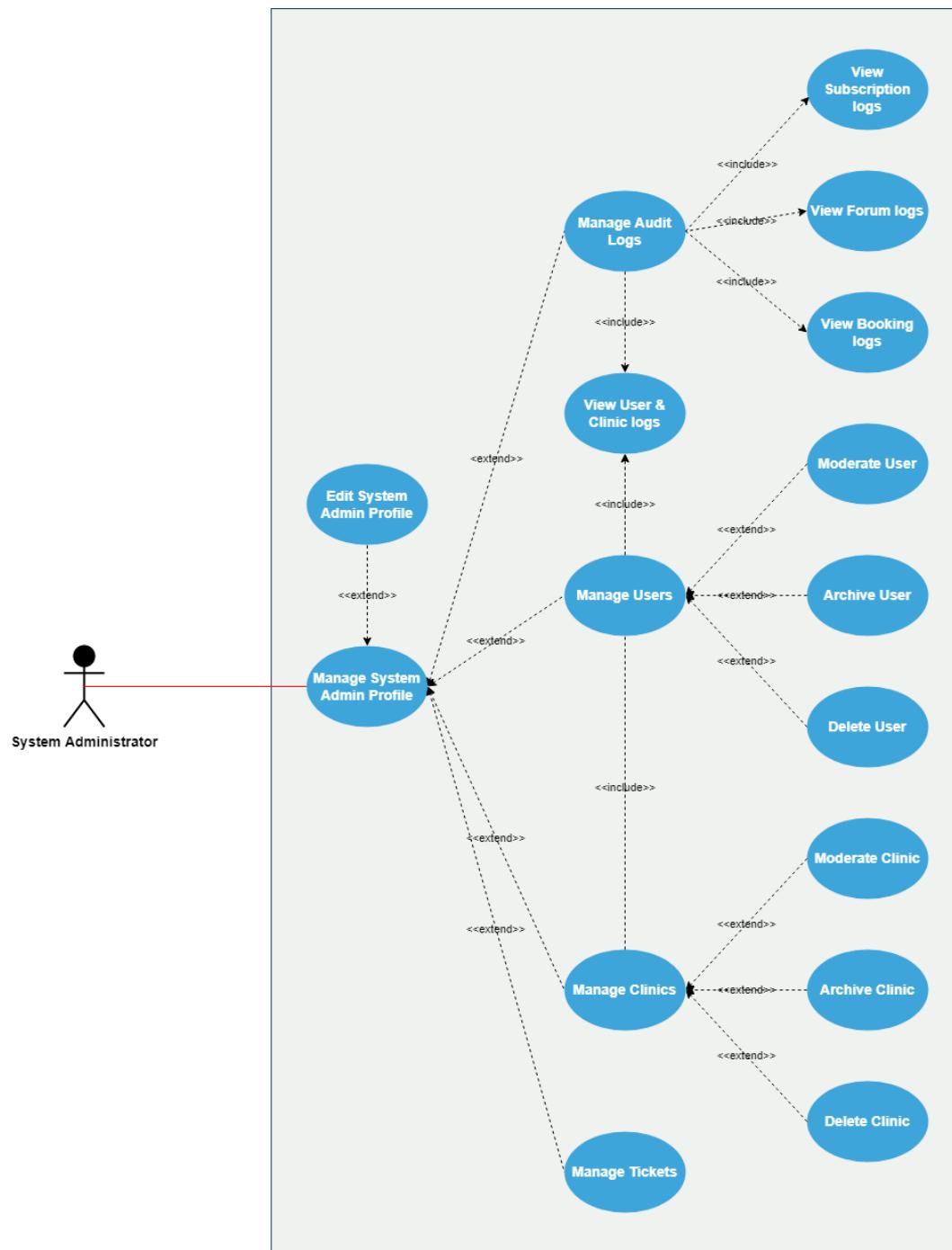


Figure 4.2 Use Case Diagram for Manage System Administrator Profile

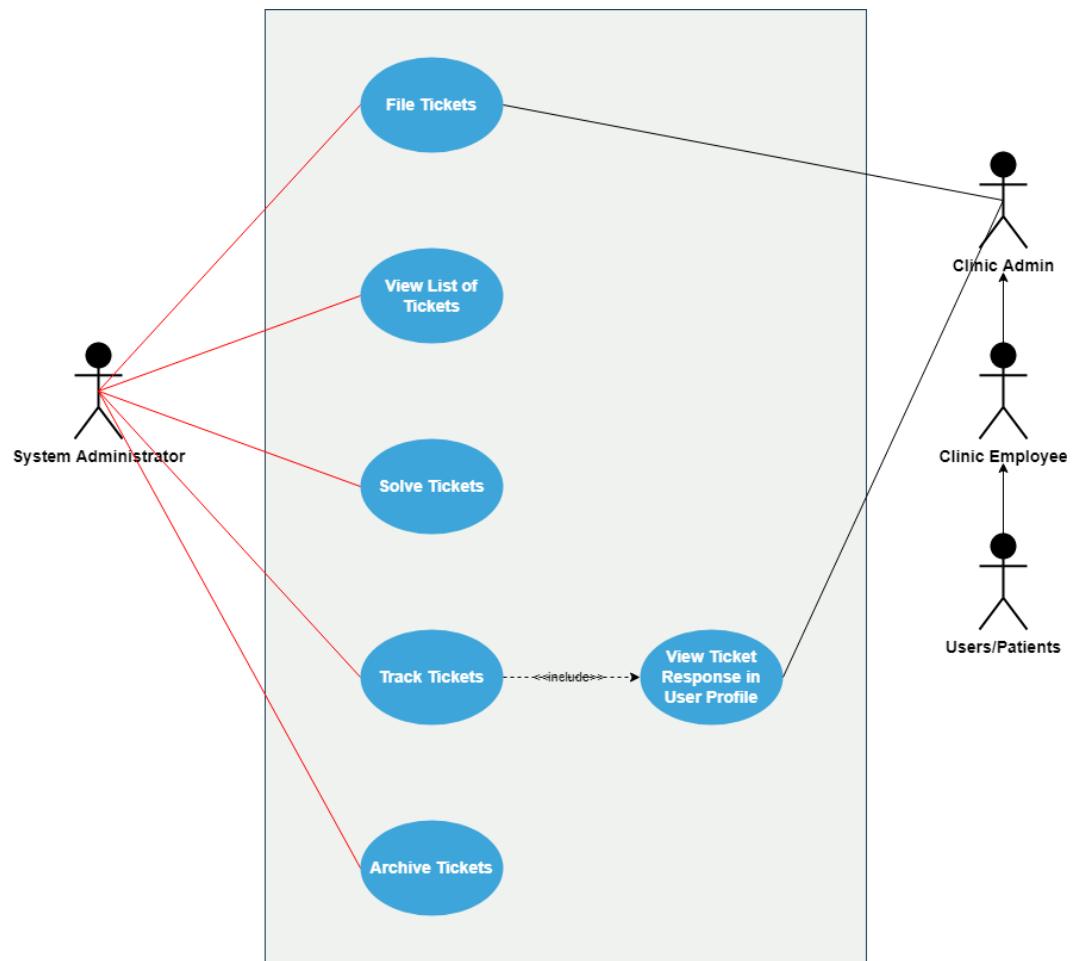


Figure 4.3 Use Case Diagram for Manage Tickets Expanded

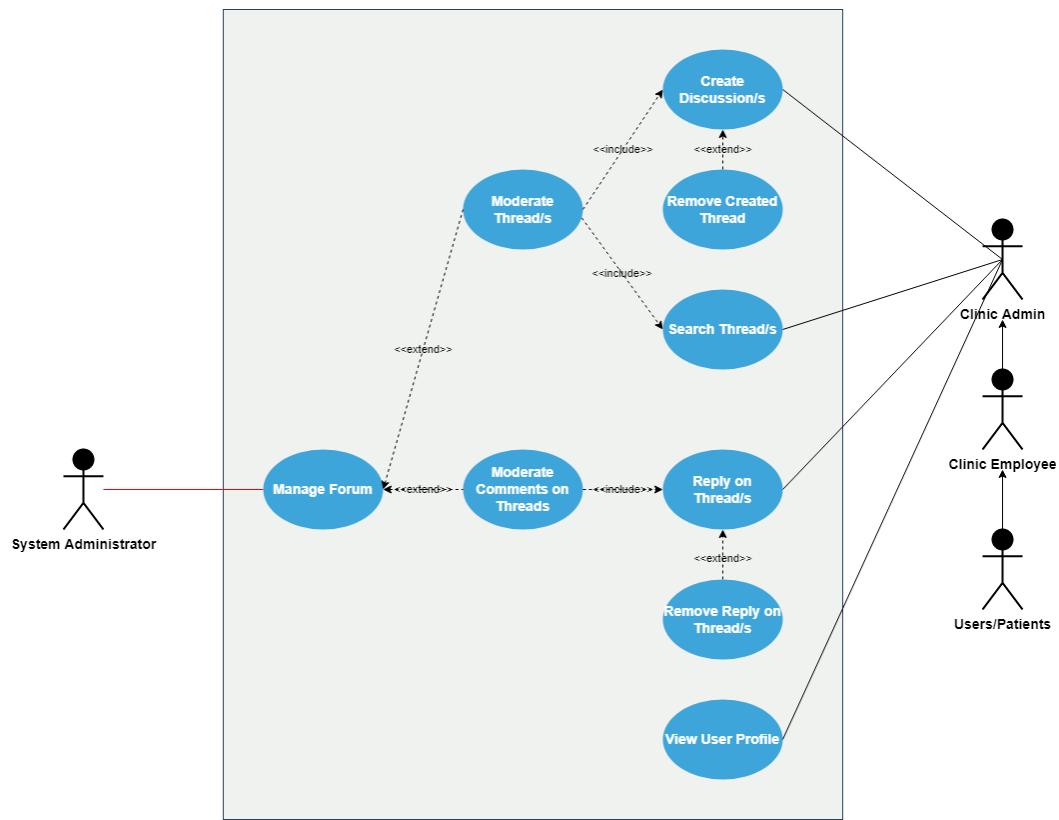


Figure 4.4 Use Case Diagram for Manage Forum

Use Case Diagrams for Clinic Admin/Clinic Employee

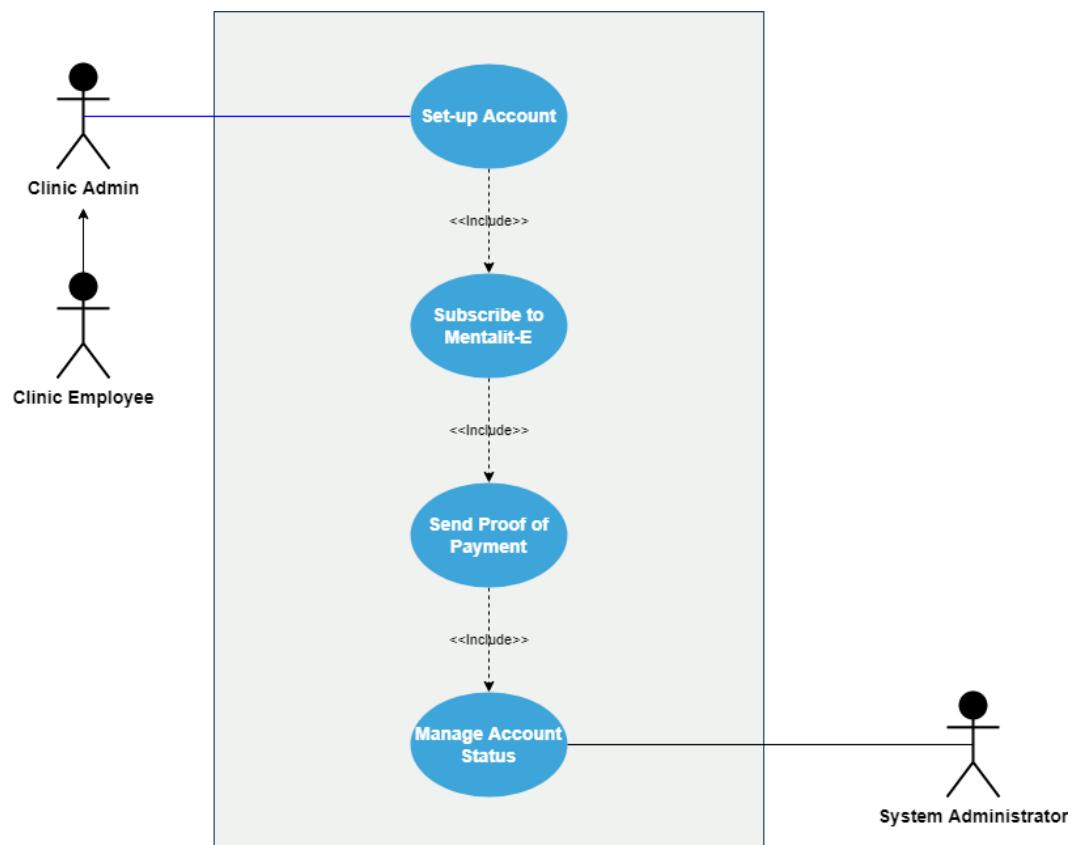


Figure 4.5 Use Case Diagram Subscription to Mentalit-E Expanded

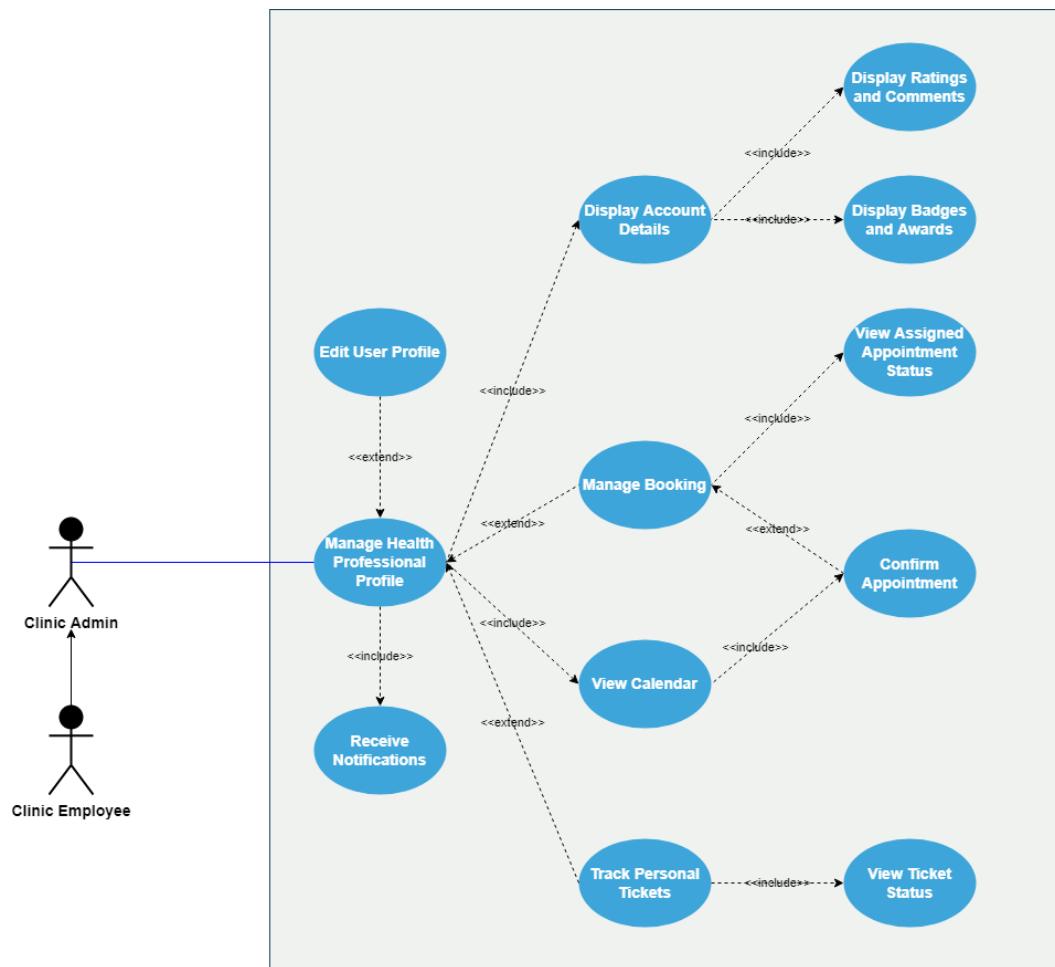


Figure 4.6 Use Case Diagram for Clinic Admin/Clinic Employee Profile

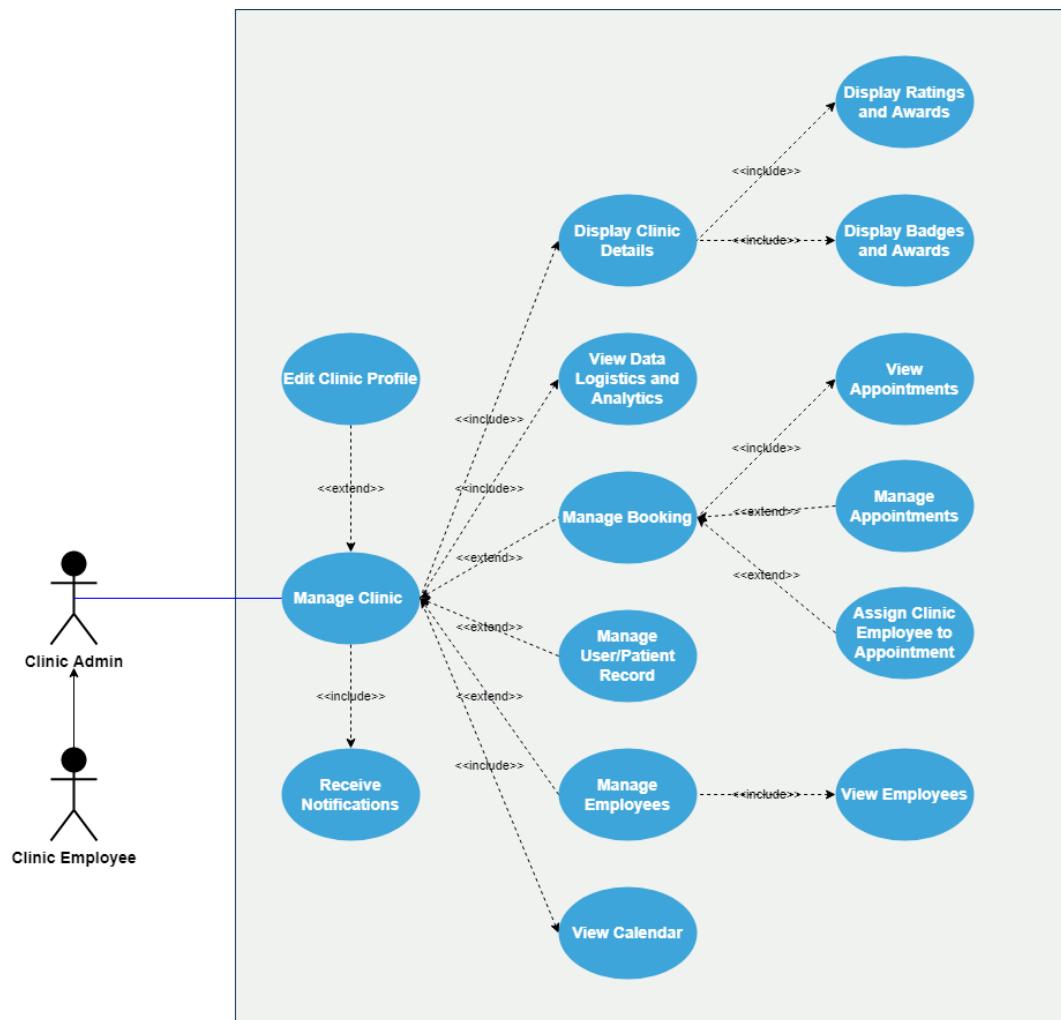


Figure 4.7 Use Case Diagram for Clinic Profile

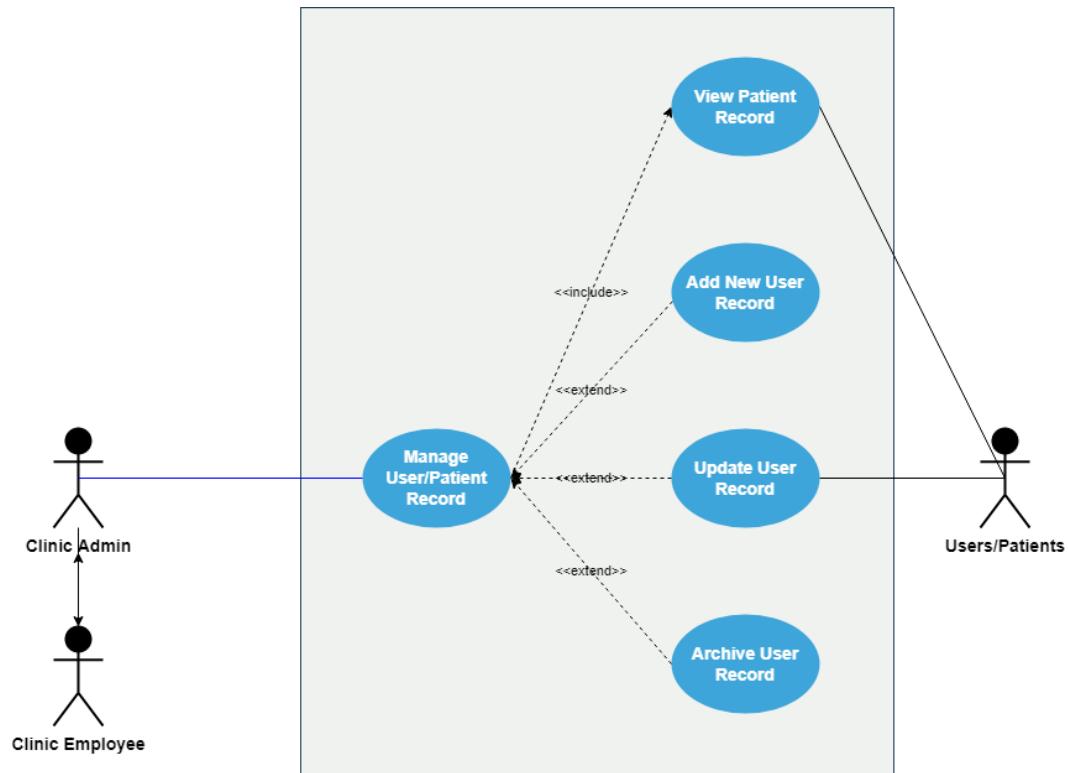


Figure 4.8 Use Case Diagram for Manage Users/Patients Record Expanded

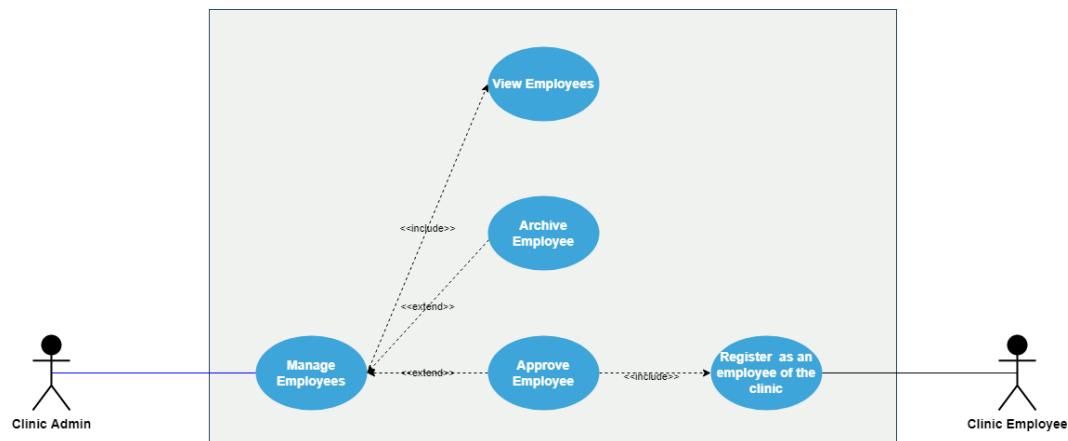


Figure 4.9 Use Case Diagram for Manage Employees Expanded

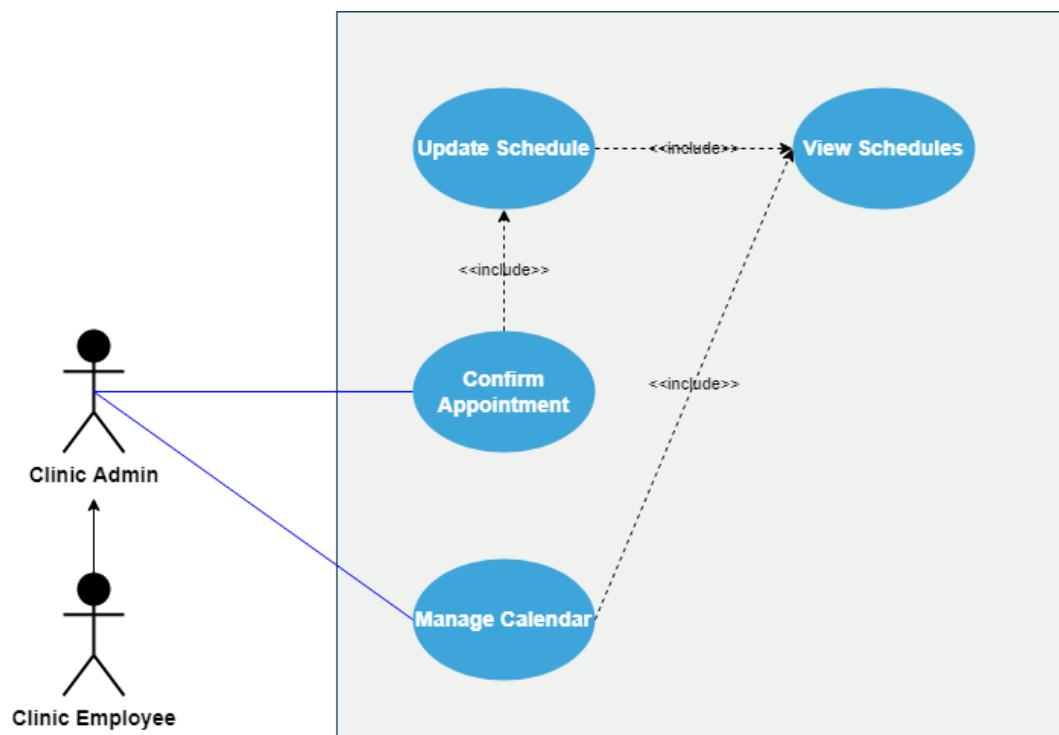


Figure 4.10 Use Case Diagram for View Calendar Expanded

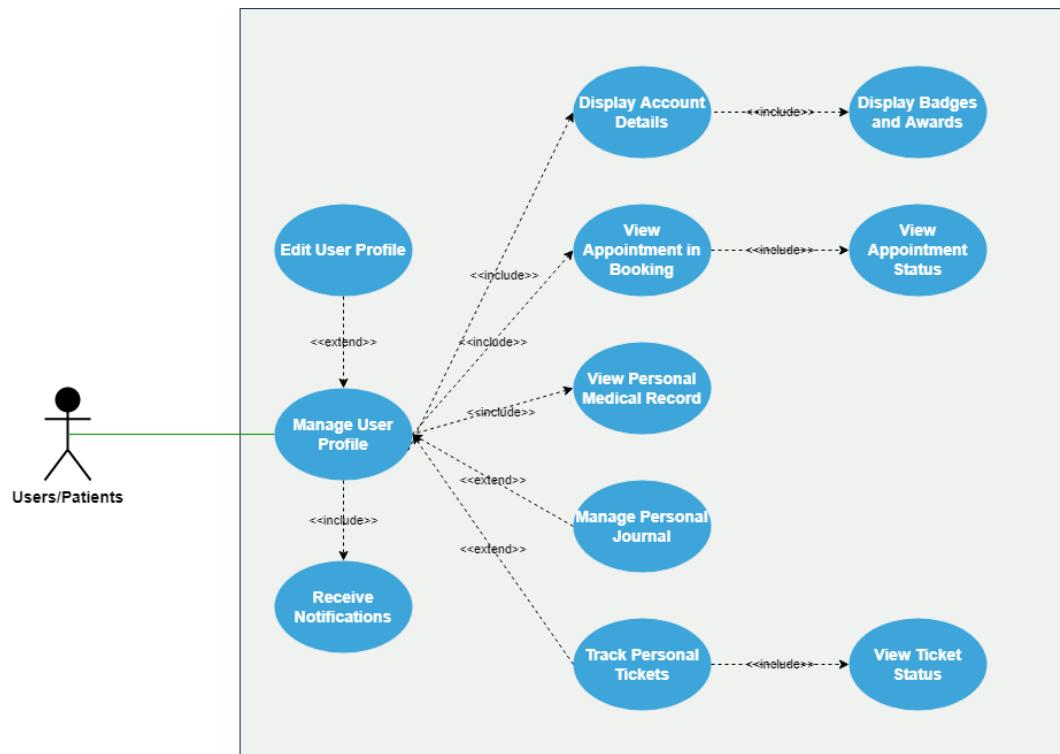
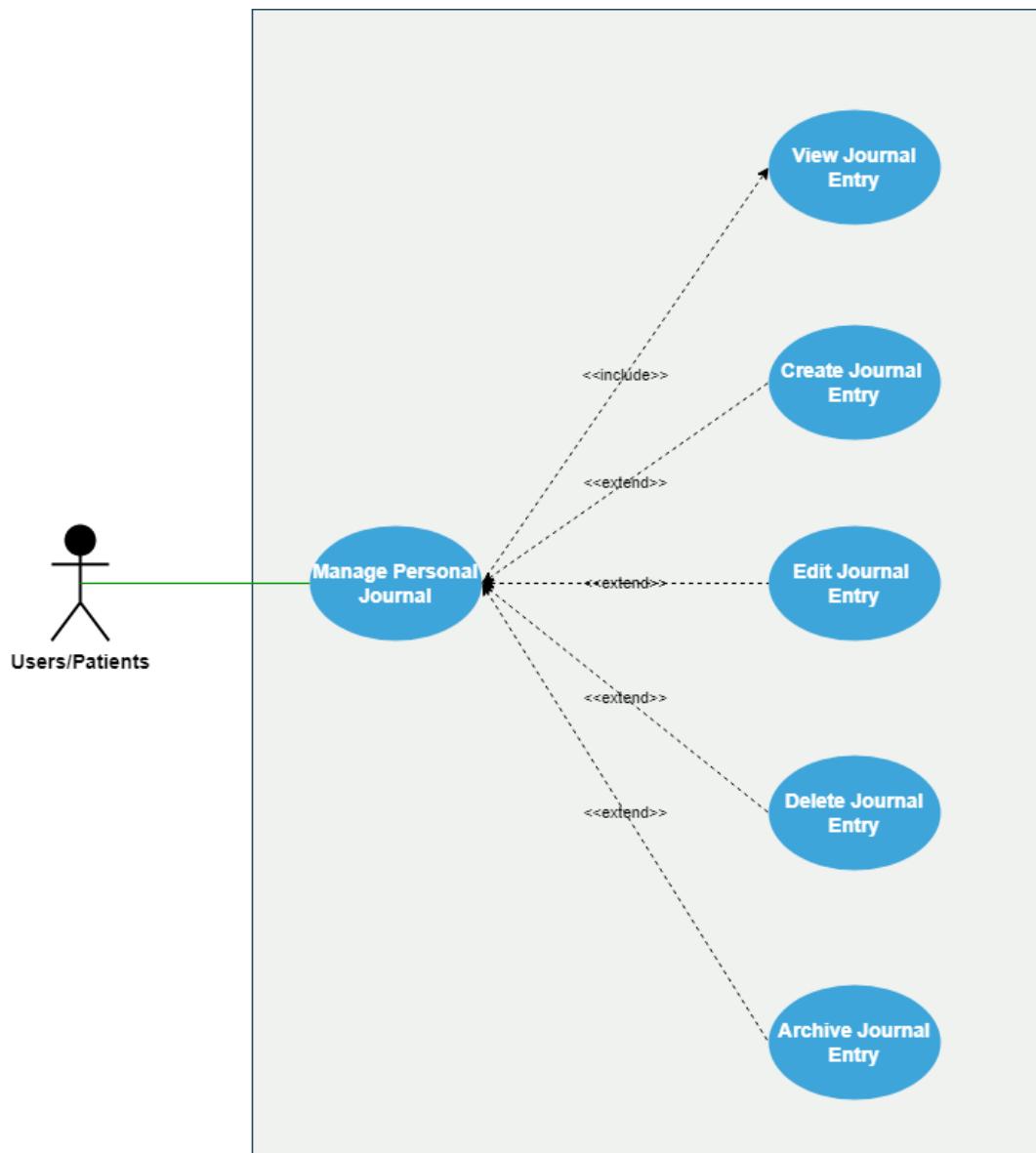
Use Case Diagrams for Users/Patients

Figure 4.11 Use Case Diagram for Users/Patients Profile



4.12 Use Case Diagram for Personal Journal Expanded

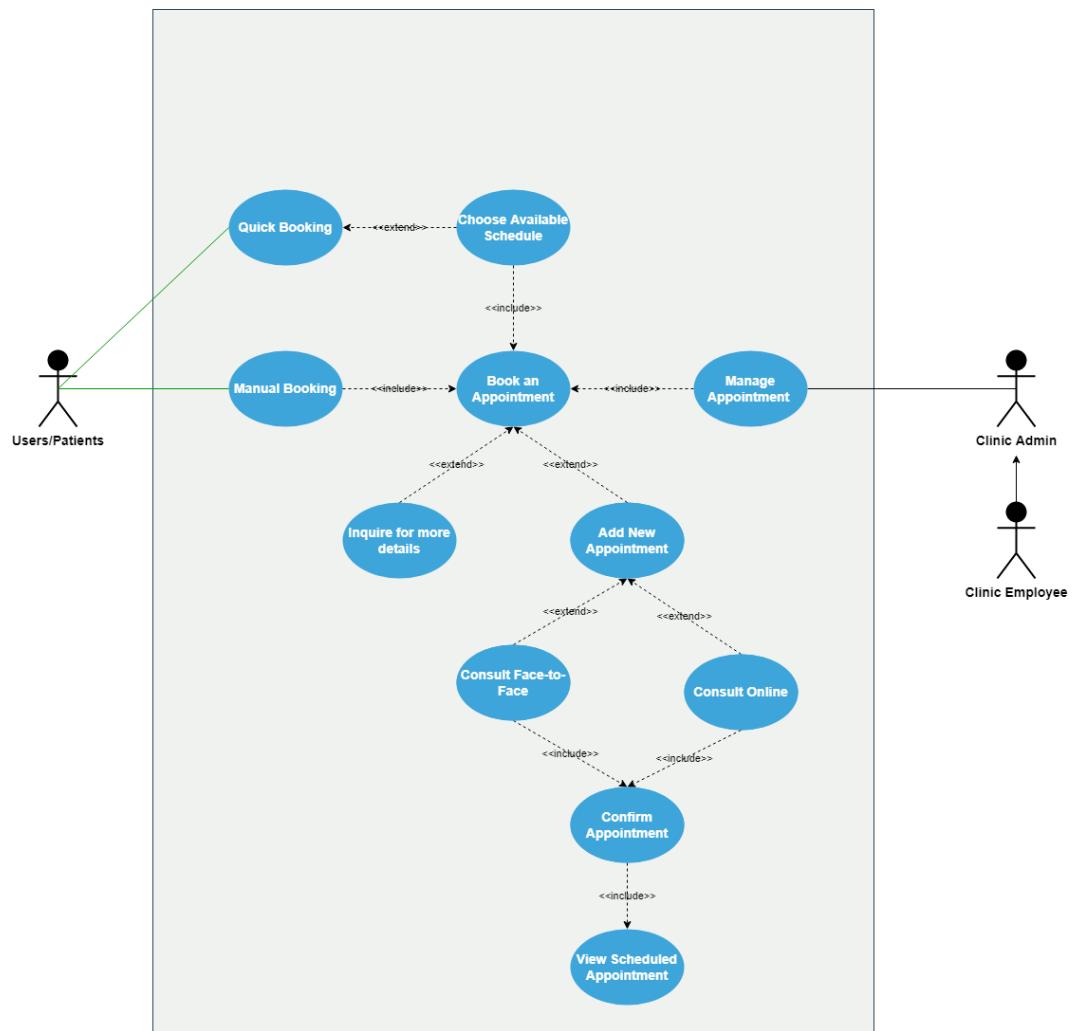


Figure 4.13 Use Case Diagram for Schedule Appointment

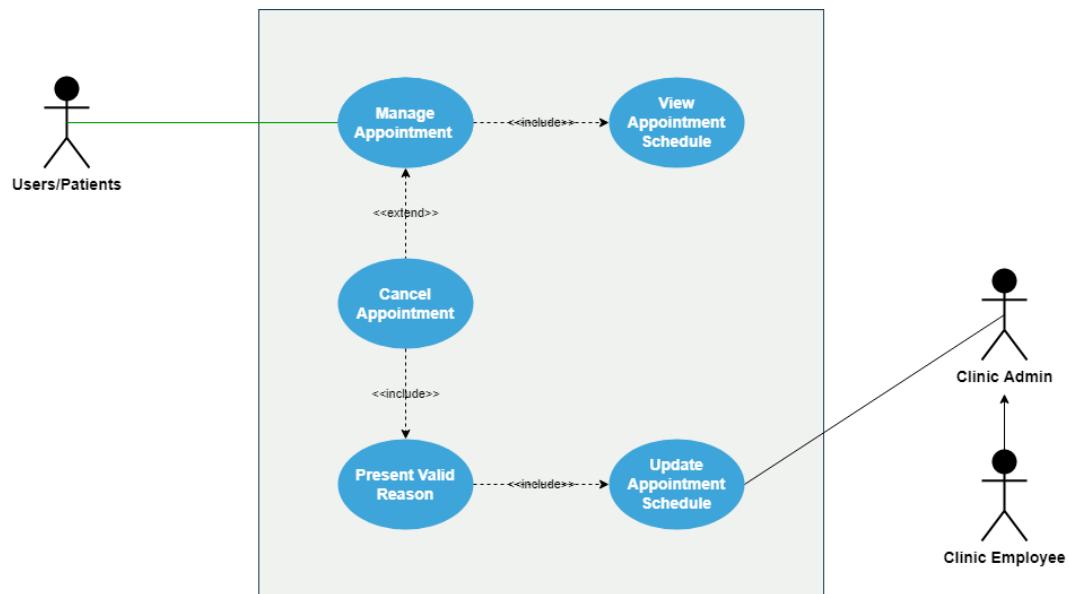


Figure 4.14 Use Case Diagram for Manage Appointment Expanded



Figure 4.15 Use Case Diagram for EMA

Functional Requirements

The system provides user access levels specifically for system administrators, clinic admin, clinic employee and users. All users are required to login to access the features.

Users (Patients)

- User Profile – enable users to view and edit user profile information
- Book Consultation – enable users to book consultation on their preferred clinic or quick booking
- Rate Clinic - enable users to rate clinic after a consultation
- View Medical Record - enable users to view all personal medical records
- Personal Journal - enable users to create, edit, delete, view journal entries.
- Tickets - enable users to file, view and track their own tickets
- Community Forum - enable users to create, view and reply in the community forum
- Email Notification – allow users to receive an email notification
- Notification – allow users to receive notifications in their personal accounts

- Awards (e-badges & certificates) - allows users to receive e-badges and certificates provided by the system
- Logout – enable users to log out their accounts

Clinic Employee

- User Profile – enable users to view and edit user profile information
- Accept Consultation – enable users to accept consultation assigned by clinic admin
- View Consultation - enable users to view all the consultation schedule of the clinic
- View Employees - enable users to view all the employees of the clinic
- View Medical Record - enable users to view the medical records of all the patients in the clinic
- Calendar - enable users to view the calendar to check their schedule
- Tickets - enable users to file, view and track their own tickets
- Community Forum - enable users to create, view and reply in the community forum
- Email Notification – allow users to receive an email notification
- Notification – allow users to receive notifications in their personal accounts

- Awards (e-badges & certificates) - allows users to receive e-badges and certificates provided by the system
- Logout – enable users to log out their accounts

Clinic Administrator

- User Profile – enable users to view and edit user profile information
- View Clinic Admin Dashboard – enables users to view personal dashboard and use its features.
- Assign Consultation – enable users to assign consultations to the clinic employees
- View Consultation - enable users to view all the consultation schedule of the clinic
- View Employees - enable users to view all the employees of the clinic
- View Medical Record - enable users to view the medical records of all the patients in the clinic
- Edit Clinic Settings - enable users to edit the clinic settings from general description to services and important details
- Award Badge - enable users to award badge to the employees
- Accept Employees - enable users to accept pending employees to gain access in the clinic

- Avail subscription - enable users to avail subscription
- Calendar - enable users to view the calendar to check their schedule
- Tickets - enable users to file, view and track their own tickets
- Community Forum - enable users to create, view and reply in the community forum
- Email Notification – allow users to receive an email notification
- Notification – allow users to receive notifications in their personal accounts
- Awards (e-badges & certificates) - allows users to receive e-badges and certificates provided by the system
- Logout – enable users to log out their accounts

System Administrator

- User Profile – enable users to view and edit user profile information
- Audit logs – enable users to view audit logs and export to pdf
- Manage users - enable users to manage all the users
- Tickets - enable users to file, view and track their own tickets
- Answer tickets - enable users to address the tickets filed
- Community Forum - enable users to create, view and reply in the community forum
- Email Notification – allow users to receive an email notification

- Notification – allow users to receive notifications in their personal accounts
- Logout – enable users to log out their accounts

Non-Functional Requirements

Security

The system should be able to address and prevent any threats that it may encounter:

- Sends a verification email to the user's email address when registered
- Password visibility during registration and login for the user must be confirmed and typed correctly

Usefulness

The system should be simple to learn, understand and use. Users should be able to make use of the features to achieve and complete the desired tasks.

Accessibility

The system enables users to easily access the available features allowed for them to use. Restrictions are enforced in order for users to have no access to other features.

Requirements Documentation

The Requirements Documentation contains the detailed Use Case Narrative of Mentalit-E and its respective Activity Diagram

Case Narratives

Listed below are the respective use case narratives for each case seen above. It describes the steps between the different types of users and the features of the system.

Title	Register
Summary	This narrative case describes the steps of registration of users in Mentalit-E
Actor/s	1. System Administrator 2. Users
Creation Date	11/13/2021
Date of Update	11/13/2021
Version	1.0

Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ul style="list-style-type: none"> 1. Users must have a stable internet connection 2. Users must have access to the website
Main Success Scenario	<ul style="list-style-type: none"> 1. Users navigate to the register 2. System will display the registration form 3. Users will input the required fields 4. User will click the Register Button 5. System will verify if the input is valid 6. User's account will be registered 7. System will redirect user to the homepage
Alternative Scenario	N/A
Error Sequence	<p>E5. If the required input is wrong or incomplete</p> <ul style="list-style-type: none"> 1. System will inform user by displaying an error message about the input being invalid or incomplete 2. Return to step 3
Post Condition	<ul style="list-style-type: none"> 1. Users have successfully registered an account and is redirected to the Mentalit-E homepage 2. Users can start using the features of Mentalit-E

Narrative for Register	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Register	

Title	Login
Summary	This narrative case describes the steps of logging in to Mentalit-E
Actor/s	<ol style="list-style-type: none"> 1. System Administrator 2. Users
Creation Date	10/22/2021
Date of Update	11/13/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.

Pre-Condition	<ol style="list-style-type: none">1. Users must have a stable internet connection2. Users must have access to the website3. Users must already have an existing account in the system
Main Success Scenario	<ol style="list-style-type: none">1. Users navigate the website and click login2. System will display the login form3. Users will input the required fields: email and password4. User will complete the CAPTCHA5. User will click the Login Button6. System will verify the CAPTCHA7. System will verify if the account is existing8. User will be logged in9. System will redirect user to the homepage
Alternative Scenario	N/A

Error Sequence	<p>E4.1. If the required input is wrong</p> <ol style="list-style-type: none"> 1. System will inform user by displaying an error message about the input being invalid or not matching 2. Return to step 2 <p>E4.2. If the CAPTCHA is incomplete</p> <ol style="list-style-type: none"> 1. System will inform user by displaying an error message about the CAPTCHA not being completed 2. Return to step 2 <p>E4.3. If the CAPTCHA input is wrong</p> <ol style="list-style-type: none"> 1. System will inform user by displaying an error message about the CAPTCHA not being completed 2. Return to step 2
Post Condition	<ol style="list-style-type: none"> 1. Users have successfully logged in and is redirected to the Mentalit-E homepage 2. Users can start using the features of Mentalit-E

Narrative for Login	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Login	

Title	Forgot Password
Summary	This narrative case describes the steps when a user forgot the password of their account in Mentalit-E
Actor/s	1. System Administrator 2. Users
Creation Date	10/22/2021
Date of Update	11/13/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	1. Users must have a stable internet connection 2. Users must have access to the website 3. Users must already have an existing account in the system 4. Users forgot their password

Main Success Scenario	<ol style="list-style-type: none">1. Users navigate the website and click login2. System will display the login form3. Users will click Forgot Password4. System will redirect user to forgot password page5. System will ask user to input their email address to which the verification code will be sent6. Users will input their registered email address and click the submit button7. System will verify if the email is existing and valid8. System will send a verification code on the email address of the user9. System will ask for the verification code10. Users will input the verification code11. Users will click the Verify button12. System will verify if the verification code is valid13. System will redirect the users to the change password page14. User will input the new password and confirm password15. User will click the Save button16. System will verify if the input is valid17. System will confirm the change in the password
Alternative Scenario	N/A

Error Sequence	<p>E7. If the email input is wrong</p> <ol style="list-style-type: none"> 1. System will inform user by displaying an error message about the input being invalid or non-existent 2. Return to step 5 <p>E12. If the verification code input is wrong</p> <ol style="list-style-type: none"> 1. System will inform the user by displaying an error message about the verification code input to be invalid or wrong 2. Return to step 9 <p>E14.1 If the new password and confirm password is incomplete or invalid</p> <ol style="list-style-type: none"> 1. System will inform the users by displaying an error message about the input to be incomplete or invalid 2. Return to 13 <p>E14.2 If the new password and confirm password does not match</p> <ol style="list-style-type: none"> 1. System will inform the users by displaying an error message about the input not matching 2. Return to 13
Post Condition	<ol style="list-style-type: none"> 1. Users have successfully changed their password 2. Users successfully recovered their Mentalit-E account 3. Users can log in their Mentalit-E account

Narrative for Forgot Password	Reference Number: 1
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System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Forgot Password	

Case Narratives for System Administrator

Title	Manage System Administrator Profile
Summary	This narrative case describes the steps of the System Admin in managing his/her profile in Mentalit-E
Actor/s	<ol style="list-style-type: none">1. System Administrator2. Clinic Admin3. Clinic Employee4. Users/Patients
Creation Date	10/22/2021
Date of Update	11/13/2021
Version	1.0

Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none"> 1. System Admin must have a stable internet connection 2. System Admin must have access to the website 3. System Admin must already have logged in his/her account in the system
Main Success Scenario	<ol style="list-style-type: none"> 1. System admin must navigate the website and click his/her profile <ol style="list-style-type: none"> 2. System will display system admin profile 3. System will display other features and functions 3.1. System admin can edit his/her profile details <ol style="list-style-type: none"> 3.1.1 System displays system admin profile details 3.1.2 System admin edit his/her profile details 3.1.3 System verify and confirm changes 3.2. System admin can manage audit logs: subscription, forum, booking and user <ol style="list-style-type: none"> 3.2.1. System admin can export logs to pdf/csv file 3.3. System admin can manage users <ol style="list-style-type: none"> 3.3.1. System admin can moderate users 3.3.2. System admin can archive users 3.3.3. System admin can delete users 3.4. System admin can manage tickets 4. System will process desired function
Alternative Scenario	N/A

Error Sequence	<p>E3.1.3 If the required input is wrong</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the input being invalid or not matching 2. Return to step 3.1.1 <p>E3.1.3 If the required input is incomplete</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the required input being incomplete 2. Return to step 3.1.1
Post Condition	<ol style="list-style-type: none"> 1. System admin has successfully navigated his/her profile and used the desired function 2. System admin can use other functions in the system administrator profile

Narrative for Manage System Administrator Profile	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage System Administrator Profile	

Title	Manage Tickets
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Summary	This narrative case describes the steps of the System Admin in managing tickets in Mentalit-E
Actor/s	<ol style="list-style-type: none">1. System Administrator2. Clinic Admin3. Clinic Employee4. Users/Patients
Creation Date	10/26/2021
Date of Update	10/26/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. System Admin must have a stable internet connection2. System Admin must have access to the website3. System Admin must already have logged in his/her account in the system4. System Admin must already have navigated through his/her profile and chose the function of managing tickets

Main Success Scenario	<ol style="list-style-type: none">1. All actors can file tickets by filling up the ticket form on the website2. Users must click the submit button3. System will verify the ticket4. System will receive filed tickets and send to System Admin profile5. System admin must navigate the website and click his/her profile6. System will display system admin profile7. System admin must choose manage ticket function8. System will display ticket lists along its functions<ol style="list-style-type: none">8.1. System admin can view tickets8.2. System admin can solve tickets8.3. System admin can track tickets8.4. System admin can archive tickets9. System will verify tickets10. System will update tickets status11. Users can track their respective tickets through their profile and email
Alternative Scenario	N/A

Error Sequence	<p>E3. If the required input is wrong</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid or not matching 2. Return to step 1 <p>E3. If the required input is incomplete</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the required input being incomplete 2. Return to step 1
Post Condition	<ol style="list-style-type: none"> 1. Users have successfully filed tickets in the system 2. System admin has successfully used the respective functions: view tickets, solve tickets and track tickets 3. System admin and users has successfully tracked their tickets status

Narrative for Manage Tickets	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Tickets	

Title	Manage Forum
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Summary	This narrative case describes the steps of the System Admin in managing tickets in Mentalit-E
Actor/s	<ol style="list-style-type: none">1. System Administrator – manages the forum2. Clinic Admin – interacts with the form3. Clinic Employee – interacts with the form4. Users/Patients – interacts with the form
Creation Date	10/26/2021
Date of Update	12/03/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. All actors must have a stable internet connection2. All actors must have access to the website3. All actors must already have logged in his/her account in the system4. All actors must already have navigated through the forum feature

Main Success Scenario	<ol style="list-style-type: none">1. System displays forum interface along with its functions<ol style="list-style-type: none">1.1. All actors can create discussion threads<ol style="list-style-type: none">1.1.1. System will verify if discussion thread is valid1.1.2. System will create the discussion thread1.2. All actors can remove their created discussion threads<ol style="list-style-type: none">1.2.1. System will ask confirmation from the user1.2.2. System will remove the discussion thread1.3. All actors can search for a particular and specific discussion threads1.4. All actors can reply to a discussion thread<ol style="list-style-type: none">1.4.1. System will verify if the reply is valid1.4.2. System will post the reply in the thread1.5. All actors can remove their own reply to a discussion thread<ol style="list-style-type: none">1.5.1. System will ask confirmation from the user1.5.2. System will remove the reply in the thread2. System will confirm and verify the function3. System will update the forum4. System admin manages the forum<ol style="list-style-type: none">4.1. System admin must moderate discussion threads<ol style="list-style-type: none">4.1.1. System will allow system admin to notify and warn users4.2. System admin can remove discussion threads
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	<p>4.2.1. System will allow system admin to remove discussion threads</p> <p>4.3. System admin must moderate forums replies</p> <p> 4.3.1. System will allow system admin to notify and warn users</p> <p>4.4. System admin can remove forums replies</p> <p> 4.4.1. System will allow system admin to remove forum replies</p> <p>4.5. System admin must moderate user profiles replies</p> <p> 4.5.1. System will allow system admin to notify and warn users</p> <p>5. System will confirm and verify the function</p> <p>6. System will update the forum</p>
Alternative Scenario	N/A

Error Sequence	<p>E1.1.1 If the required input is wrong/incomplete</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid or not matching 2. Return to step 1.1 <p>E1.4.1 If the required input is wrong/incomplete</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the required input being invalid or not matching 2. Return to step 1.4
Post Condition	<ol style="list-style-type: none"> 1. An actor has successfully interacted in the forum 2. An actor has successfully created a discussion thread 3. An actor has successfully removed a discussion thread 4. An actor has successfully search for a discussion thread 5. An actor has successfully created a reply in a discussion thread 6. An actor has successfully removed a reply in a discussion thread

Narrative for Manage Forum	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Forum	

Case Narratives for Clinic Admin/Employee

Title	Subscribe to Mentalit-E
Summary	This narrative case describes the subscription process to Mentalit-E
Actor/s	<ol style="list-style-type: none">1. System Administrator – view the subscription status2. Clinic Admin3. Clinic Employee
Creation Date	10/22/2021
Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. Users must have a stable internet connection2. Users must have access to the website3. Users must have a valid email4. Users must have not an existing subscription to Mentalit-E5. User must register as Clinic Admin

Main Success Scenario	<ol style="list-style-type: none">1. After registering as a Clinic Admin2. Users click the subscribe feature found on the website3. System will display different subscription promos and packages4. Users will choose their preferred subscription promos and packages5. System will display the subscription form6. Users will fill out the subscription form7. Users will then choose purchase8. System will verify the details input9. System will display the form in registering the user account10. System will process proof of payment and send to Users11. Users will need to send proof of payment12. Users will click the Submit button13. System will verify14. System will notify the System Administrator about the subscription15. System Administrator can view and update the subscription details16. System will send subscription status and details to the User's profile and email
Alternative Scenario	N/A

Error Sequence	<p>E8. If it is incomplete or there is an input error in the form</p> <ol style="list-style-type: none"> 1. System will inform user by displaying an error message: invalid input 2. Return to step 4 <p>E13. If it is incomplete or there is an input error in the form</p> <ol style="list-style-type: none"> 1. System will inform user by displaying an error message: invalid input 2. Return to step 9
Post Condition	<ol style="list-style-type: none"> 1. Users successfully subscribed to Mentalit-E and is redirected to the Mentalit-E 2. Users have successfully created a new account on Mentalit-E 3. Users can start using the features of Mentalit-E

Narrative for the subscription process to Mentalit-E	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Subscribe to Mentalit-E	
Title	Manage Clinic Admin/Employee Profile

Summary	This narrative case describes the steps of the users in managing his/her profile in Mentalit-E
Actor/s	1. Clinic Admin 2. Clinic Employee
Creation Date	10/27/2021
Date of Update	11/13/2021
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. Clinic admin/employee must have a stable internet connection2. Clinic admin/employee must have access to the website3. Clinic admin/employee must already have logged in his/her account in the system

Main Success Scenario	<ol style="list-style-type: none"> 1. Clinic admin/employee must navigate the website and click his/her profile 2. System will display user profile depending on his/her role 2.1. System will display clinic admin/employee profile along the following functions <ol style="list-style-type: none"> 2.1.1. Display user's details 2.1.2. Display badges and awards 2.1.3. Display ratings and comments 2.1.4. Manage consultation: view assigned appointment status and confirm appointment 2.1.7. View calendar 2.1.8. View notifications 3. System will display other features and functions <ol style="list-style-type: none"> 3.1 Clinic admin/employee can edit their own profile <ol style="list-style-type: none"> 3.1.1. System displays user profile details 3.1.2. User edit his/her profile details 3.1.3. System verify and confirm changes 3.2. All actors can view their ticket status 3.3. All actors receive and can view notifications 4. All actors must choose a desired function 5. System will process the desired function
Alternative Scenario	N/A

Error Sequence	<p>E3.1.3. If the required input is wrong</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid or not matching 2. Return to step 3.1.1 <p>E3.1.3. If the required input is incomplete</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the required input being incomplete 2. Return to step 3.1.1
Post Condition	<ol style="list-style-type: none"> 1. All actors have successfully navigated his/her profile and used the desired function 2. All actors have successfully edited his/her profile 3. All actors can use other functions in the user's profile

Narrative for Manage Clinic Admin/Employee Profile	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Clinic Admin/Employee Profile	

Title	Manage Clinic Profile
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Summary	This narrative case describes the steps of the clinic admin/employee in managing the clinic profile in Mentalit-E
Actor/s	1. Clinic Admin 2. Clinic Employee
Creation Date	11/13/2021
Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. Clinic admin/employee must have a stable internet connection2. Clinic admin/employee must have access to the website3. Clinic admin/employee must already have logged in his/her account in the system

Main Success Scenario	<ol style="list-style-type: none"> 1. Clinic admin/employee must navigate the website and click his/her profile 2. System will display user profile depending on his/her role 2.1. System will display clinic admin dashboard along the following functions <ol style="list-style-type: none"> 2.1.1. Display clinic details 2.1.2. Display badges and awards 2.1.3. Display ratings and comments 2.1.4. View data logistics and analytics 2.1.5. Manage consultation menu: view appointment status, assign clinic employee to appointment 2.1.6. Manage user/patient records 2.1.7. Manage employees 2.1.8. View employees 2.1.9. View calendar System will display other features and functions <ol style="list-style-type: none"> 3.1. Clinic admin can edit clinic their own profile <ol style="list-style-type: none"> 3.1.1. System displays clinic profile details 3.1.2. User edit clinic profile details 3.1.3. System verify and confirm changes 3. All actors must choose a desired function System will process the desired function
Alternative Scenario	N/A

Error Sequence	<p>E3.1.3. If the required input is wrong</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid or not matching 2. Return to step 3.1.1 <p>E3.1.3. If the required input is incomplete</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the required input being incomplete 2. Return to step 3.1.1
Post Condition	<ol style="list-style-type: none"> 1. All actors have successfully navigated his/her profile and used the desired function 2. All actors have successfully edited his/her clinic profile 3. All actors can use other functions in the user's profile

Narrative for Manage Clinic Profile	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Clinic Profile	

Title	Manage User/Patient Records
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Summary	This narrative case describes the steps of the clinic admin and clinic employee in managing users/patients records in Mentalit-E
Actor/s	<ol style="list-style-type: none">1. Clinic Admin – will manage user/patient records2. Clinic Employee – will manage user/patient records3. Users
Creation Date	10/27/2021
Date of Update	11/13/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. All actors must have a stable internet connection2. All actors must have access to the website3. All actors must already have logged in his/her account in the system4. Mental health clinic admin/employee must already have navigated through the clinic admin profile and chose the function of medical records

Main Success Scenario	<ol style="list-style-type: none"> 1. Users must have finished an appointment with a clinic employee 2. Clinic employee must fill-up a form in regards of the user/patient information including notes, remarks and prescriptions 3. System will verify the form 4. System will record users/patients' data from the appointment 5. System will privately display the users/patients records to the appointed clinic admin/employee profile 6. Only the appointed clinic admin/employee is allowed to view the users/patient's medical records 7. System will privately send and display the users/patient's personal records 8. Only the user is allowed to view his/her records including the clinic employee notes, remarks and prescriptions
Alternative Scenario	N/A
Error Sequence	<p>E3. If the required input is invalid</p> <ol style="list-style-type: none"> 1. System will inform the clinic admin/employee by displaying an error message about the input being invalid 2. Return to step 2 <p>E3. If the required input is invalid</p> <ol style="list-style-type: none"> 1. System will inform the clinic admin/employee by displaying an error message about the input being invalid 2. Return to step 2

Post Condition	<ol style="list-style-type: none"> 1. Clinic admin/employee have successfully managed user/patient records 2. Users have successfully been prescribed and marked by a clinic employee
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Narrative for Manage User/Patient Records	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage User/Patient Records	

Title	Manage Employees
Summary	This narrative case describes the steps of how the clinic admin manage his/her employees in Mentalit-E
Actor/s	<ol style="list-style-type: none"> 1. Clinic Admin – will manage employees 2. Clinic Employee – will register as an employee of the clinic
Creation Date	10/27/2021

Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. All actors must have a stable internet connection2. All actors must have access to the website3. All actors must already have logged in his/her account in the system4. Clinic admin must already have navigated through the clinic profile and chose the function of manage employees

Main Success Scenario	<ol style="list-style-type: none"> 1. Clinic employee must register or update his/her profile as an employee of a clinic 2. System will send a notification to the clinic admin 3. Clinic admin will confirm if the clinic employee is an employee of the clinic 4. System will update the status of the clinic employee and will be registered in the clinic 5. System will confirm the changes 6. Clinic admin must choose the manage employees function 7. System will display the lists of employees along the functions 8. Clinic admin can archive an employee 9. System will verify and confirm the changes 10. Clinic admin can message his/her employees 11. System will send a message to the employees
Alternative Scenario	N/A
Error Sequence	N/A
Post Condition	<ol style="list-style-type: none"> 1. Users have successfully viewed the list of employees of the clinic in the system 2. Users have successfully archived an employee 3. Users have successfully messaged an employee

Narrative for Manage Employees	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Employees	

Title	Manage Booking
Summary	This narrative case describes the steps of how the clinic admin/employee manage his/her consultations in Mentalit-E
Actor/s	<ol style="list-style-type: none"> 1. Clinic Admin – will manage consultations 2. Clinic Employee – will manage consultations
Creation Date	10/27/2021
Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.

Pre-Condition	<ol style="list-style-type: none"> 1. Clinic admin/employee must have a stable internet connection 2. Clinic admin/health professional must have access to the website 3. Clinic admin/employee must already have logged in his/her account in the system 4. Clinic admin/employee must already have navigated through the clinic dashboard and chose the function of manage consultation
Main Success Scenario	<ol style="list-style-type: none"> 1. System will display the appointments and their statuses along the other functions 2. Clinic admin can assign an employee for the appointment 3. System will verify 4. System will update the appointment details 5. Clinic admins/employee can confirm the appointment status within their profiles 6. System will ask for confirmation 7. System will update the changes of the appointment status 8. System will then send notifications to Clinic admin/employee and users/patients of the appointment status and schedule
Alternative Scenario	N/A
Error Sequence	N/A

Post Condition	<ol style="list-style-type: none"> 1. Clinic admin/employee have successfully managed consultations and appointments in the system 2. Clinic admin have successfully assigned a clinic employee to an appointment 3. Clinic admin/employee have successfully confirmed an appointment
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Narrative for Manage Booking	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Booking	

Title	View Calendar
Summary	This narrative case describes the steps of how the clinic admin/employee can view the calendar of bookings in Mentalit-E
Actor/s	<ol style="list-style-type: none"> 1. Clinic Admin 2. Clinic Employee
Creation Date	10/27/2021

Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none"> 1. Clinic admin/employee must have a stable internet connection 2. Clinic admin/employee must have access to the website 3. Clinic admin/employee must already have logged in his/her account in the system 4. Clinic admin/employee must already have navigated through his/her profile and chose the function of view calendar
Main Success Scenario	<ol style="list-style-type: none"> 1. System will update the appointments and their statuses in the calendar 2. System will verify if there are scheduled appointments 3. System will display the calendar with the scheduled appointment and details including google meet link 4. System will verify 5. System will update the appointment details 6. System will send notifications to clinic admin/employee and users/patients of the details 7. Clinic admin/employee can view the appointments and consultations scheduled in the manage calendar function in their profile

Alternative Scenario	N/A
Error Sequence	N/A
Post Condition	<ol style="list-style-type: none"> Clinic admin/employee have successfully viewed their consultations and appointments in the system

Narrative for View Calendar	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: View Calendar	

Case Narratives for Users/Patients

Title	Manage Users/Patients Profile
Summary	This narrative case describes the steps of the users/patients in managing his/her profile in Mentalit-E

Actor/s	1. Users/Patients
Creation Date	10/27/2021
Date of Update	03/12/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. Users must have a stable internet connection2. Users must have access to the website3. Users must already have logged in his/her account in the system

Main Success Scenario	<ol style="list-style-type: none"> 1. All actors must navigate the website and click his/her profile 2. System will display users/patients' profile along the following functions <ol style="list-style-type: none"> 2.1. Display account details 2.2. Display badges and awards 3. Users can manage personal journal 4. Users can view booking menu <ol style="list-style-type: none"> 4.1. Users can cancel an appointment 4.1.2. Users can run view appointment status 4.1.3. Users can rate an appointment 5. Users can view their personal medical record <ol style="list-style-type: none"> 5.1. System will display records 5.2. View clinic employee remarks, notes and prescriptions 6. System will display other features and functions <ol style="list-style-type: none"> 6.1. Users can edit their own profile <ol style="list-style-type: none"> 6.1.1 System displays user profile details 6.1.2 Users can edit his/her profile details 6.1.3 System verify and confirm changes 6.2. Users can view their ticket status 7. Users must choose a desired function 8. System will process the desired function
Alternative Scenario	N/A

Error Sequence	<p>E6.1.2. If the required input is wrong</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid or not matching 2. Return to step 6.1.1 <p>E6.1.2. If the required input is incomplete</p> <ol style="list-style-type: none"> 1. System will inform system admin by displaying an error message about the required input being incomplete 2. Return to step 6.1.1
Post Condition	<ol style="list-style-type: none"> 1. Users have successfully navigated his/her profile and used the desired function 2. Users can use and navigate through other functions in his/her profile

Narrative for Manage Users Profile	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Users Profile	

Title	Manage Personal Journal
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Summary	This narrative case describes the steps of how the users manage his/her personal journal in Mentalit-E
Actor/s	<ol style="list-style-type: none">1. Users/Patients2. Clinic Admin3. Clinic Employee
Creation Date	10/27/2021
Date of Update	11/13/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. Users/Patients must have a stable internet connection2. Users/Patients must have access to the website3. Users/Patients must already have logged in his/her account in the system4. Users/Patients must already have navigated through his/her profile and chose the journal function

Main Success Scenario	<ol style="list-style-type: none"> 1. User must navigate the website and click his/her profile 2. System will display user profile 3. User must choose the manage personal journal function 4. System will display the personal journal 4.1. User can view his/her journal entry 4.2. User can create a journal entry 4.3. User can edit journal entry 4.4. User can archive journal entry 5. System will verify journal entry 6. System will update journal entry 7. System will redirect user to personal journal interface
Alternative Scenario	N/A
Error Sequence	<p>E4.2 If the required input is invalid</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid 2. Return to step 4 <p>E4.4 If the required input is invalid</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid 2. Return to step 4

Post Condition	<ol style="list-style-type: none"> 1. Users have successfully created a journal entry in the system 2. Users have successfully edited a journal entry in the system
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Narrative for Manage Personal Journal	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Personal Journal	

Title	Schedule Appointment
Summary	This narrative case describes the steps of the user in scheduling an appointment with a clinic employee in Mentalit-E
Actor/s	<ol style="list-style-type: none"> 1. Users/Patients – will book and schedule for appointments 2. Clinic Admin – will manage and confirm the schedule for appointments 3. Clinic Employee – will manage and confirm the schedule for appointments

Creation Date	10/27/2021
Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. All actors must have a stable internet connection2. All actors must have access to the website3. All actors must already have logged in his/her account in the system4. Users must already have navigated through quick booking or schedule an appointment through manual booking

Main Success Scenario	<p>1. User must navigate the booking function through quick booking or manual booking</p> <p>1.1 Users navigate to quick booking</p> <ul style="list-style-type: none"> 1.1.1. System displays quick booking interface 1.1.2. User must choose an available schedule along with its details 1.1.3. System will display mode of payment transaction 1.1.4. User must send proof of payment to clinic 1.1.5. Clinic admin must confirm proof of payment 1.1.6. System will verify and confirm proof of payment 1.1.7. System will send receipt and appointment details through notification and email <p>1.2 Users navigate to manual booking</p> <ul style="list-style-type: none"> 1.2.1. System displays manual booking interface 1.2.2. User must choose a specific clinic employee 1.2.3. User can inquire and message the clinic employee for more details 1.2.4. User must choose an available schedule along with its details 1.2.5. System will display proof of payment 1.2.6. User must send proof of payment to clinic 1.2.7. Clinic admin must confirm proof of payment 1.2.8. System will verify and confirm proof of payment 1.2.9. System will send receipt and appointment details through user profile notification and email
Alternative Scenario	N/A
Error Sequence	N/A

Post Condition	<ol style="list-style-type: none"> 1. Users have successfully booked an appointment with a clinic employee 2. Users have successfully received an appointment schedule
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Narrative for Schedule Appointment	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Schedule Appointment	

Title	Manage Appointment
Summary	This narrative case describes the steps of the clinic admin/employee in managing an appointment in Mentalit-E
Actor/s	<ol style="list-style-type: none"> 1. Users/Patients – will book and schedule for appointments 2. Clinic Admin – will manage and confirm the schedule for appointments 3. Clinic Employee – will manage and confirm the schedule for appointments

Creation Date	10/27/2021
Date of Update	03/12/2022
Version	1.1
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ul style="list-style-type: none"> 1. All actors must have a stable internet connection 2. All actors must have access to the website 3. All actors must already have logged in his/her account in the system 4. Users/patients must already have navigated through their profile and select consultation function 5. Clinic admin/employee must already have navigated through their profile and select consultation function
Main Success Scenario	<ul style="list-style-type: none"> 1. System will display appointments statuses in the consultation within the actor's profiles 2. Clinic admin/employee can update the appointment details and schedule 3. Clinic admin/employee will confirm and finalize the appointment schedule <ul style="list-style-type: none"> 3.1. System will ask for confirmation 3.2. System will update the appointment 4. Only users can cancel the scheduled appointment

Alternative Scenario	N/A
Error Sequence	E3.1 If the required input is invalid <ul style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being invalid 2. Return to step 2
Post Condition	<ul style="list-style-type: none"> 1. Clinic admin/employee have successfully managed an appointment status 2. Clinic admin/employee and users have successfully cancelled an appointment 3. Clinic admin/employee have successfully confirmed an appointment

Narrative for Manage Appointment	Reference Number: 1
System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Manage Appointment	

Title	Ecological Momentary Assessment
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Summary	This narrative case describes the steps of the user interacting with the EMA in Mentalit-E
Actor/s	1. Users – can interact with the EMA
Creation Date	10/27/2021
Date of Update	10/27/2021
Version	1.0
Person-in-Charge	Dahilig, Ralph Lance M.
Pre-Condition	<ol style="list-style-type: none">1. Users must have a stable internet connection2. Users must have access to the website3. Users must already have logged in his/her account in the system4. Users must already have navigated through quick booking or schedule an appointment

Main Success Scenario	<ol style="list-style-type: none"> 1. Users must click on and navigate through the Mentalit-E website 2. System will display the features and functions of the home page including the EMA 3. Users must answer the EMA 4. System will verify the form 5. System will display the results 6. Users can view their results
Alternative Scenario	N/A
Error Sequence	<p>E4. If the required input is incomplete</p> <ol style="list-style-type: none"> 1. System will inform users by displaying an error message about the input being incomplete 2. Return to step 3
Post Condition	<ol style="list-style-type: none"> 1. Users have successfully finished the EMA and received the results

Narrative for Ecological Momentary Assessment	Reference Number: 1
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System Name: Mentalit-E: Online Mental Health Services Platform	Version Number: 1.1
Subject: Ecological Momentary Assessment	

Activity Diagram

The section shows the respective activity diagram for each use case narrative created in the previous section.

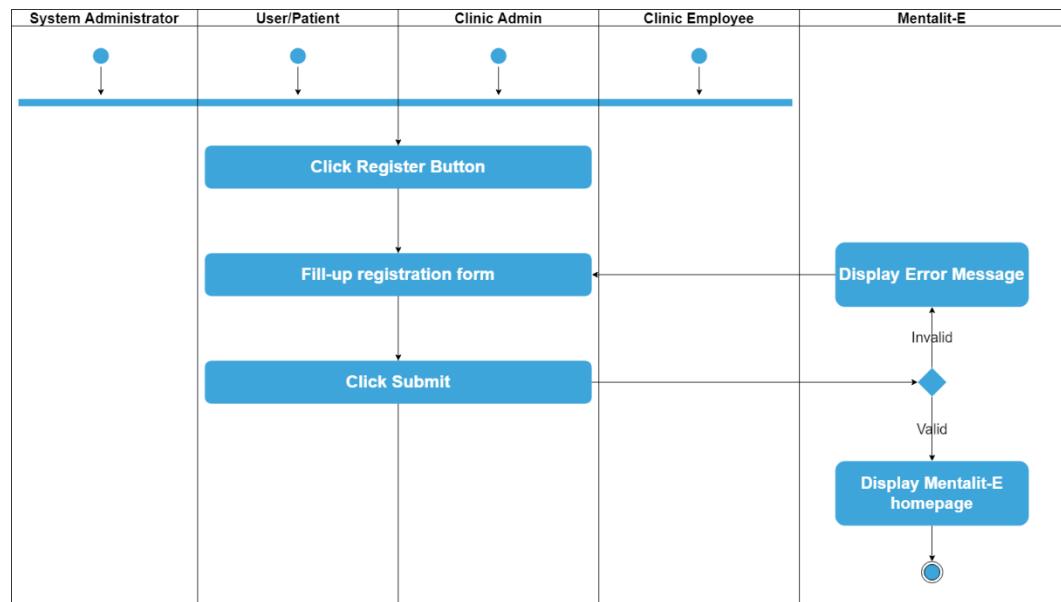


Figure 4.16 Activity Diagram for Register

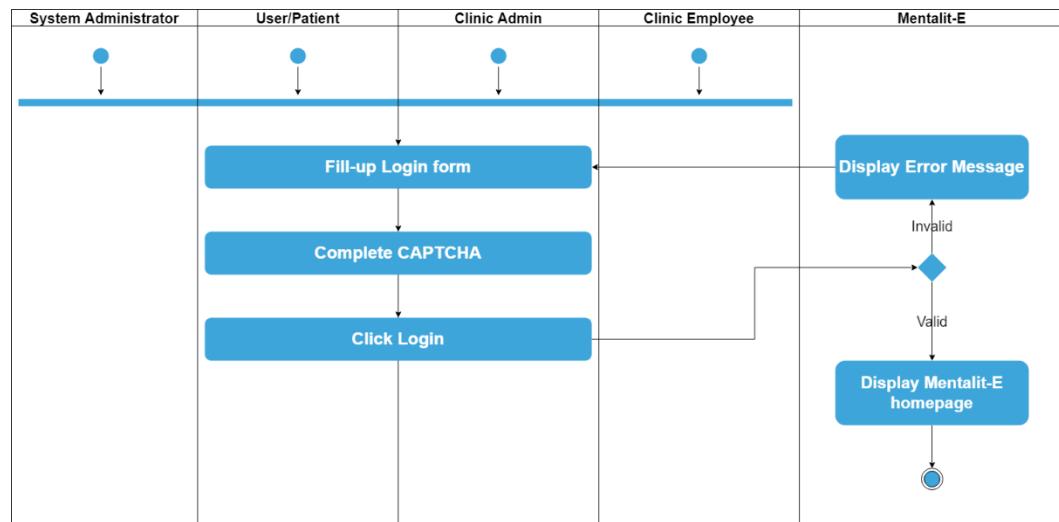


Figure 4.17 Activity Diagram for Login

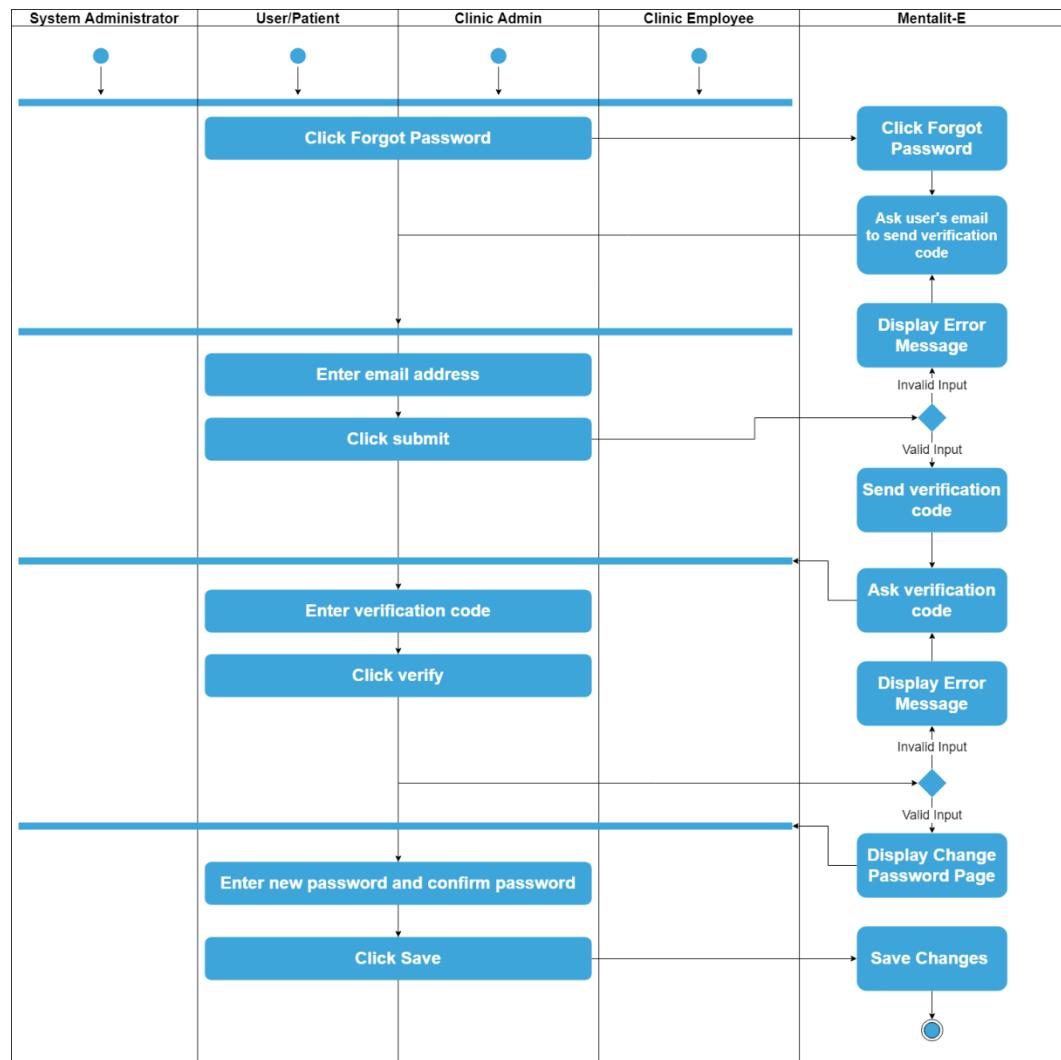


Figure 4.18 Activity Diagram for Forgot Password

Activity Diagram for System Administrator

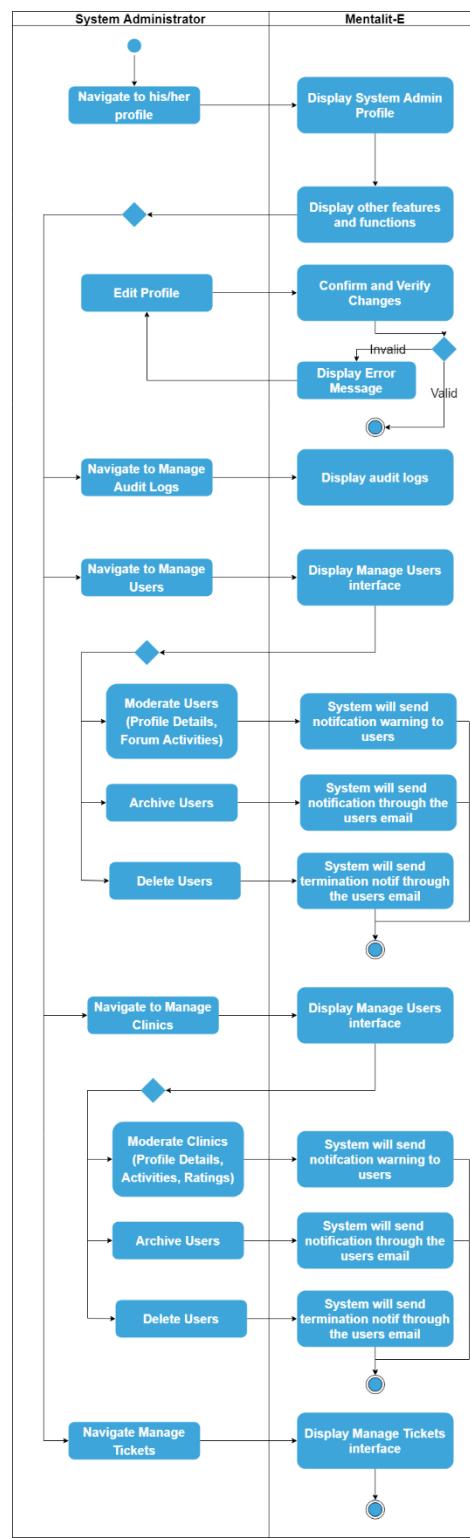


Figure 4.19 Activity Diagram for Manage System Administrator Profile

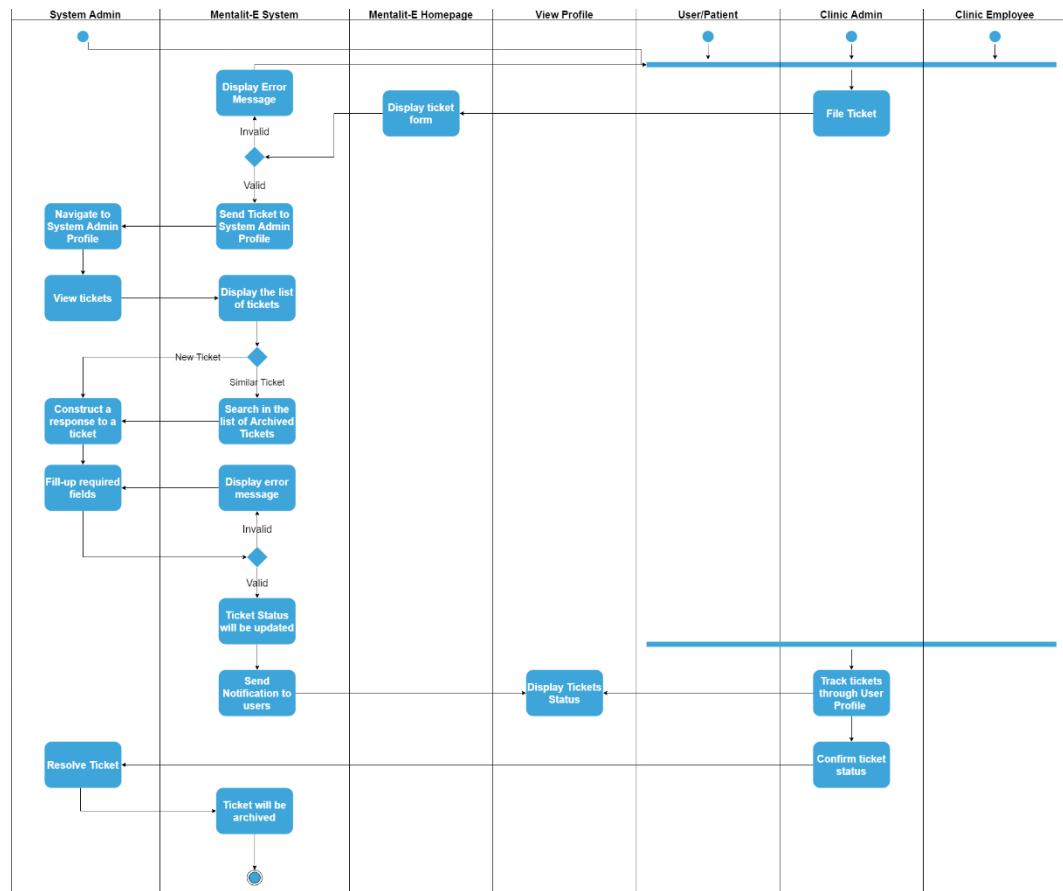


Figure 4.20 Activity Diagram for Manage Tickets

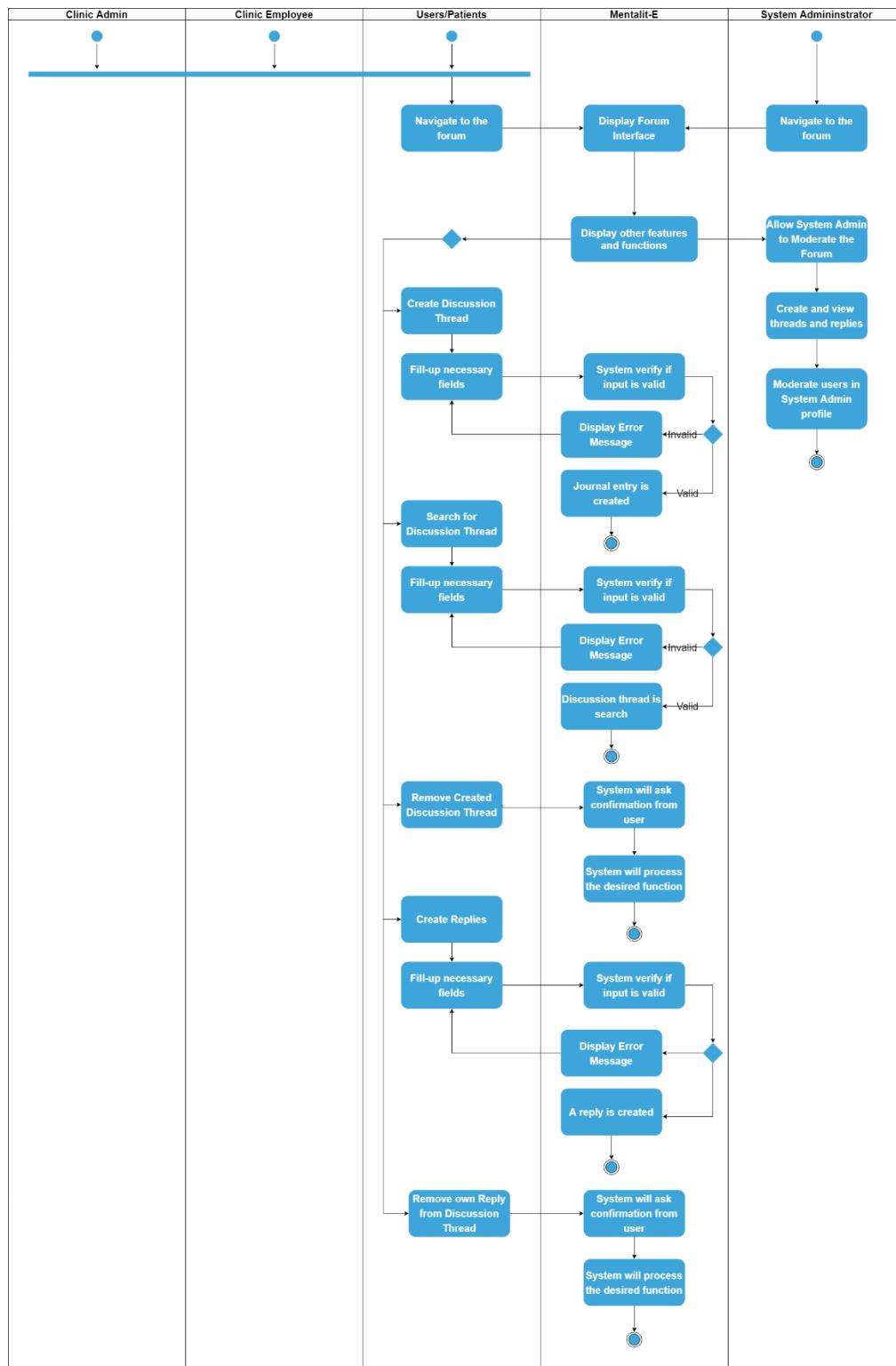


Figure 4.21 Activity Diagram for Manage Forum

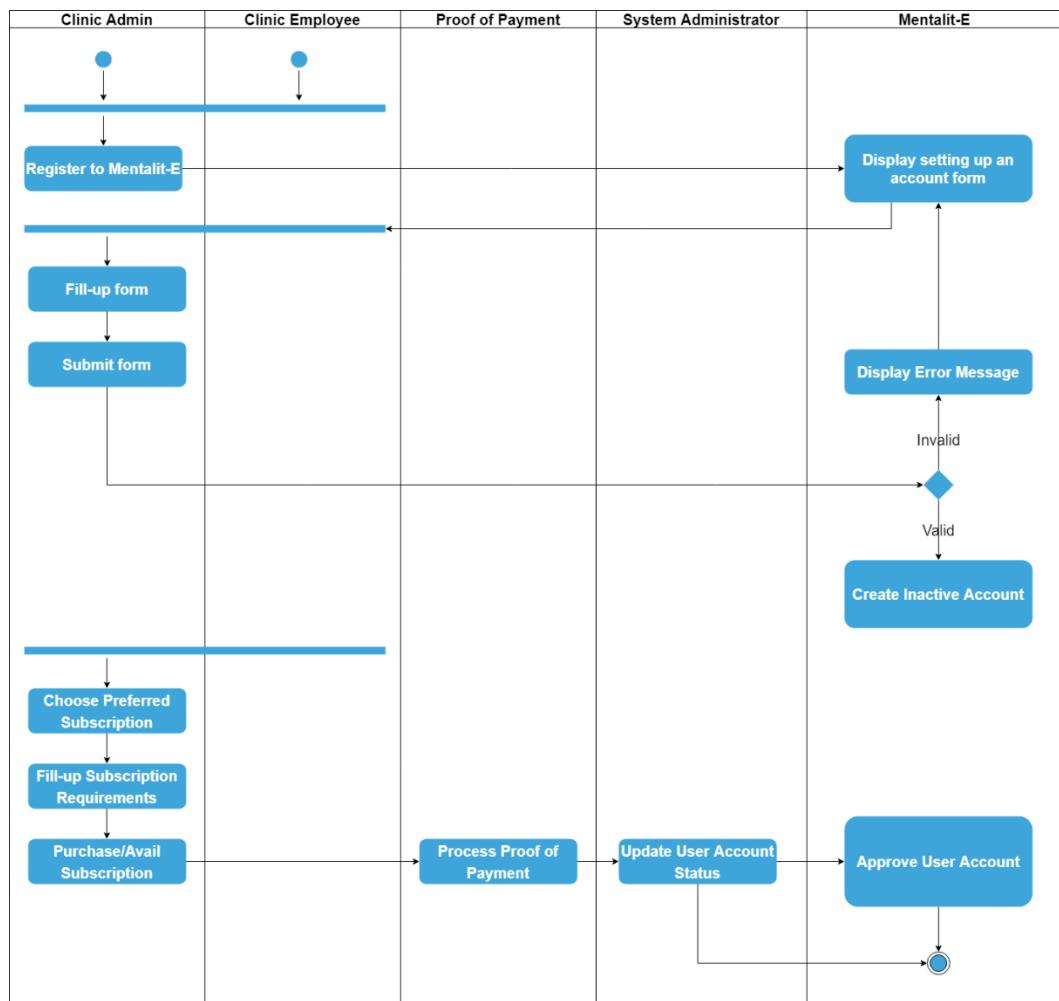
Activity Diagram for Clinic Admin/Employee

Figure 4.22 Activity Diagram for Subscription to Mentalit-E

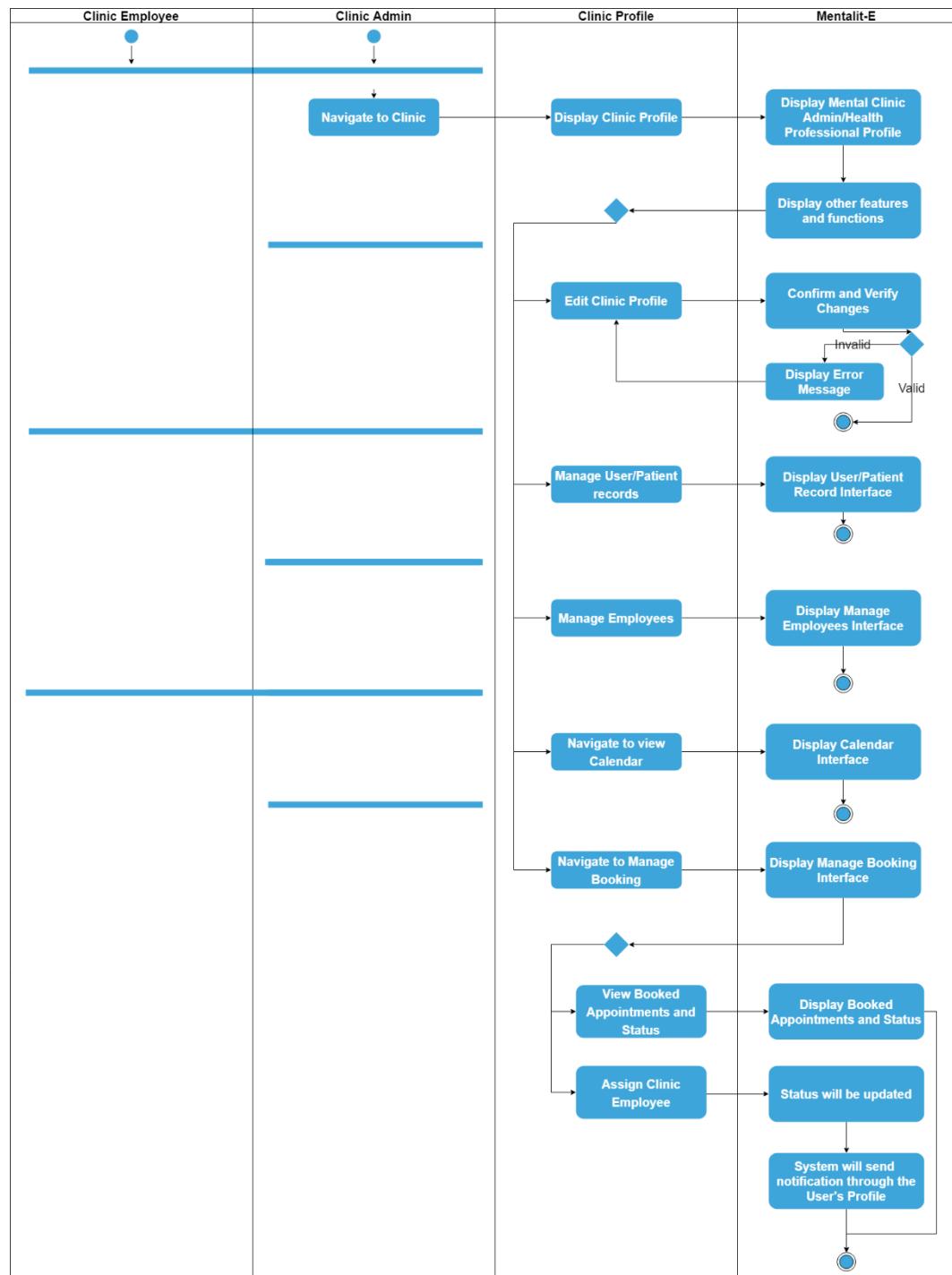


Figure 4.23 Activity Diagram for Clinic Admin/Employee Profile

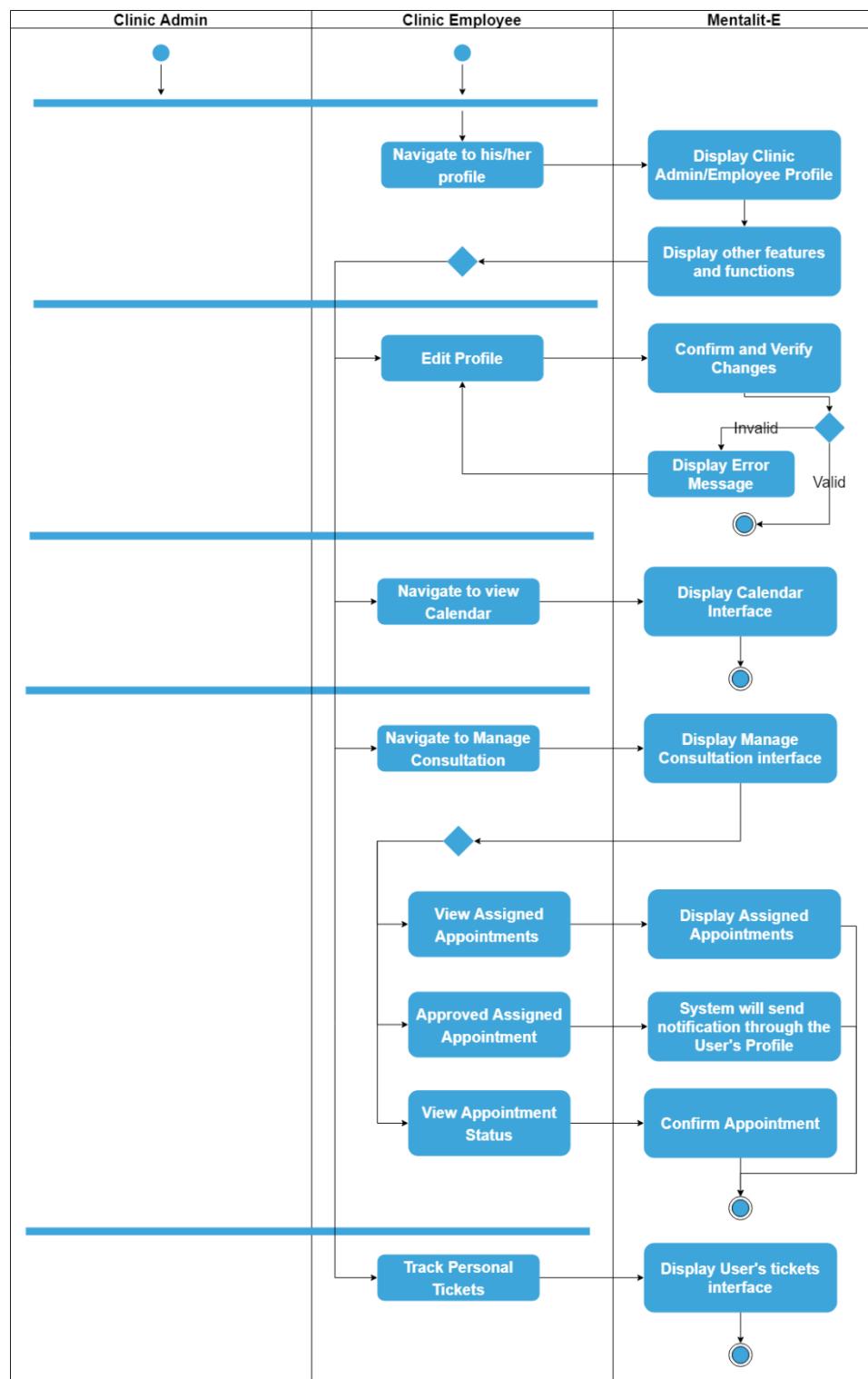


Figure 4.24 Activity Diagram for Manage Clinic Profile

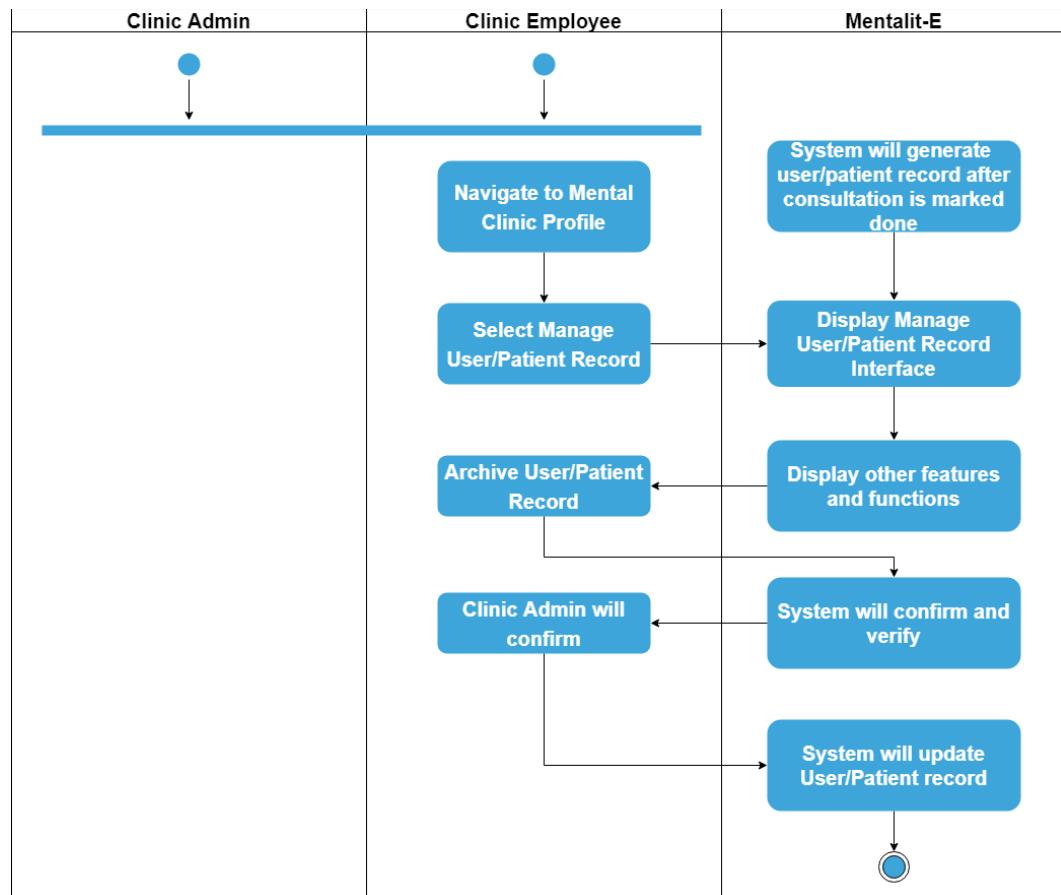


Figure 4.25 Activity Diagram for Manage Users/Patients Record

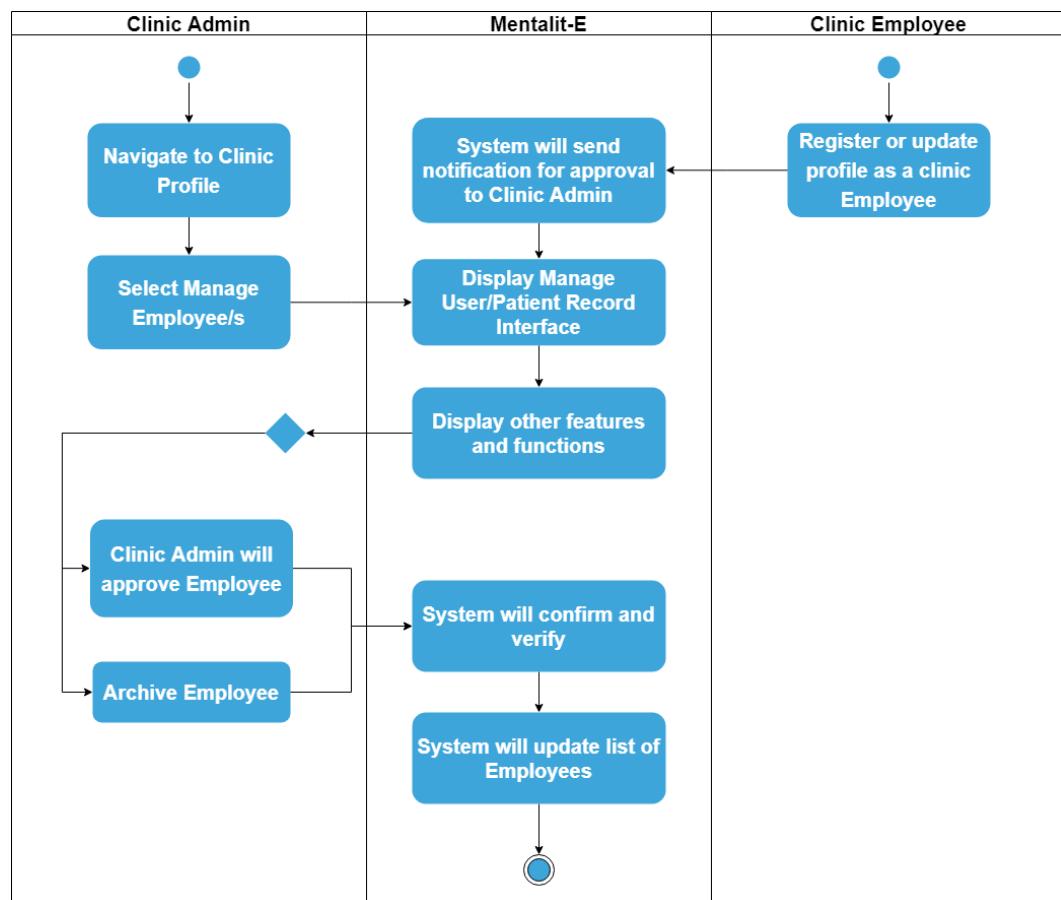


Figure 4.26 Activity Diagram for Manage Employees

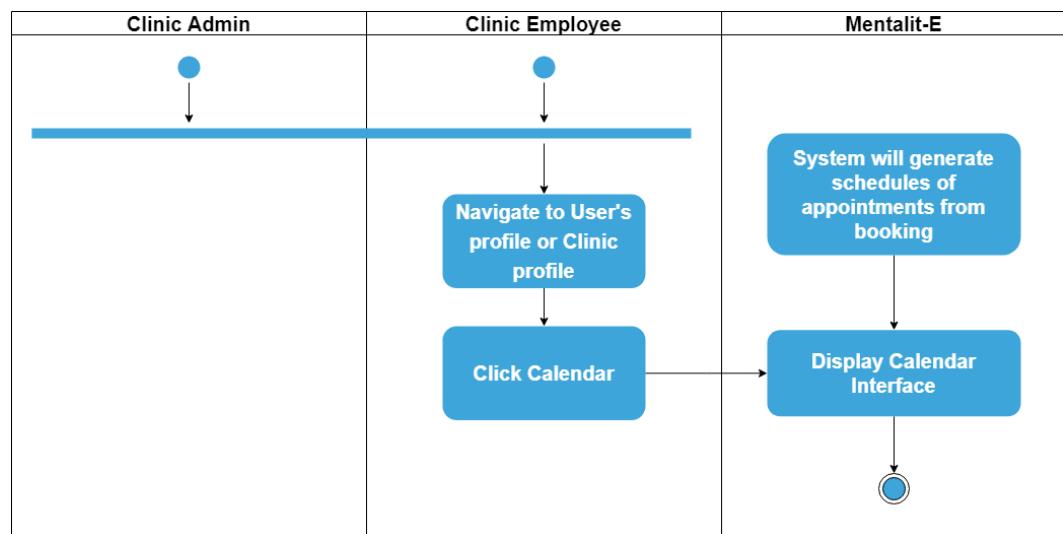


Figure 4.27 Activity Diagram for View Calendar

Activity Diagram for Users/Patients

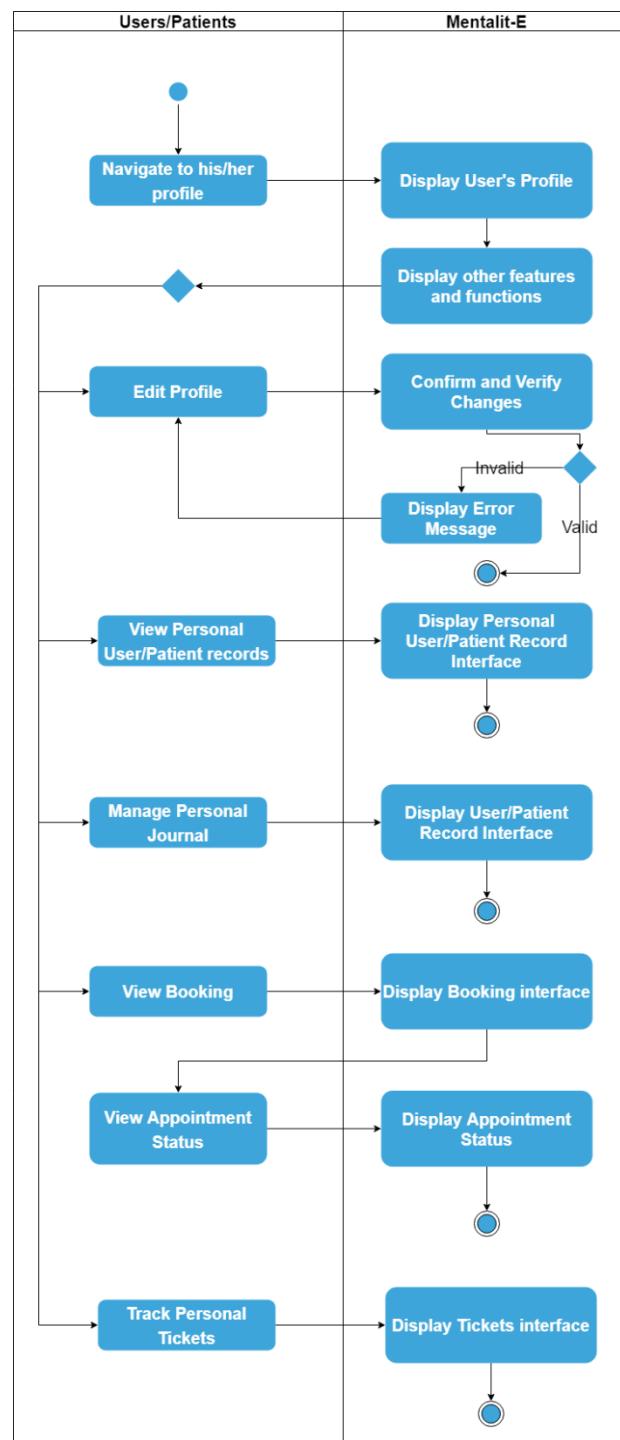


Figure 4.28 Activity Diagram for Users/Patients Profile

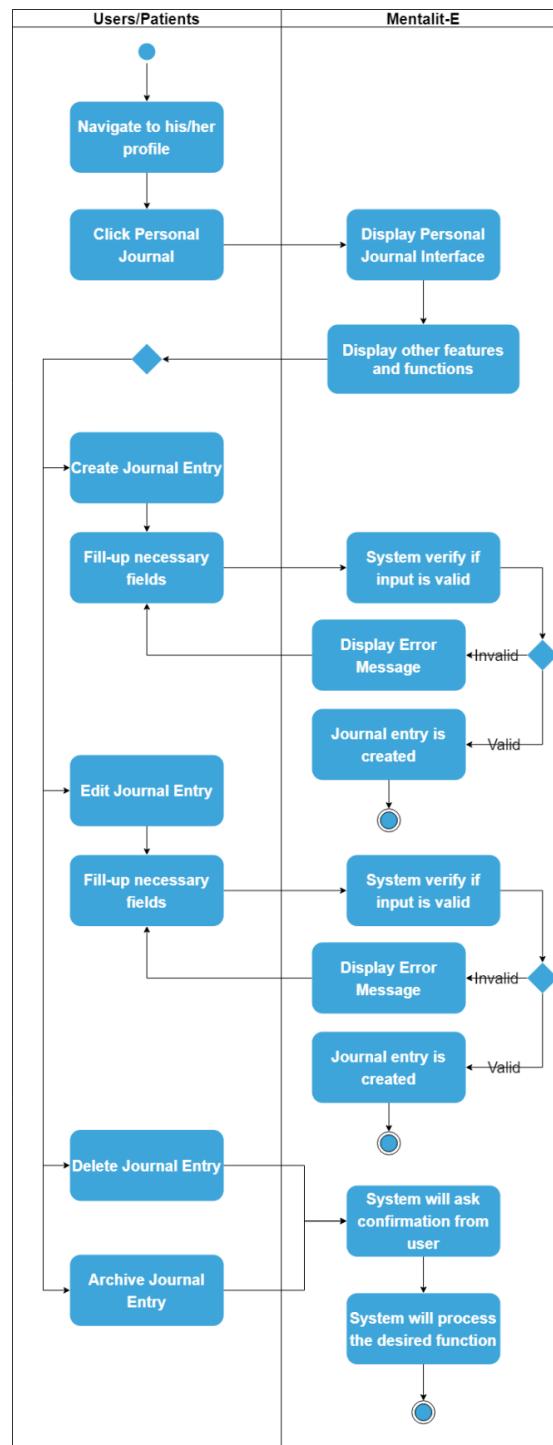


Figure 4.29 Activity Diagram for Manage Personal Journal

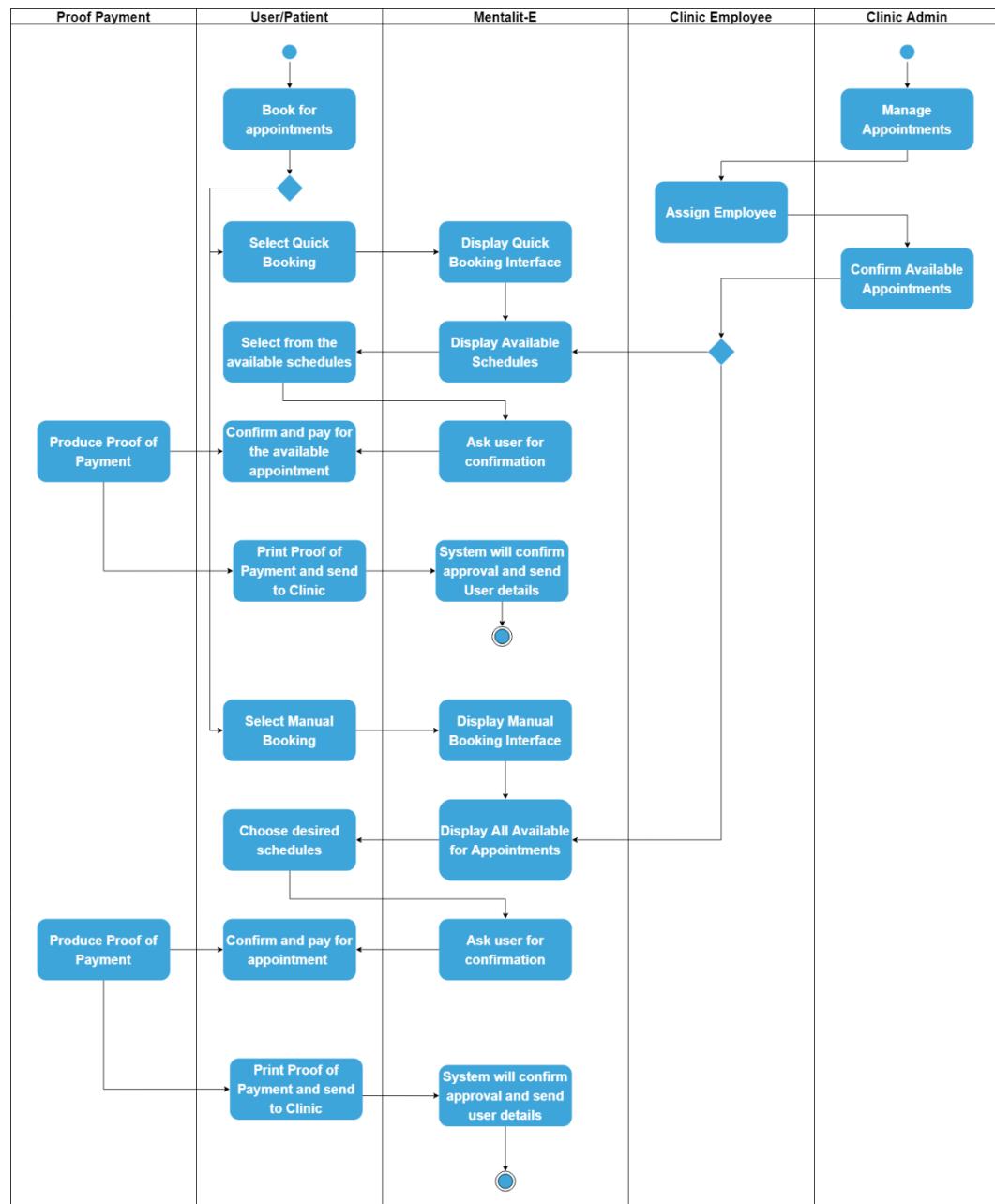


Figure 4.30 Activity Diagram for Schedule Appointment

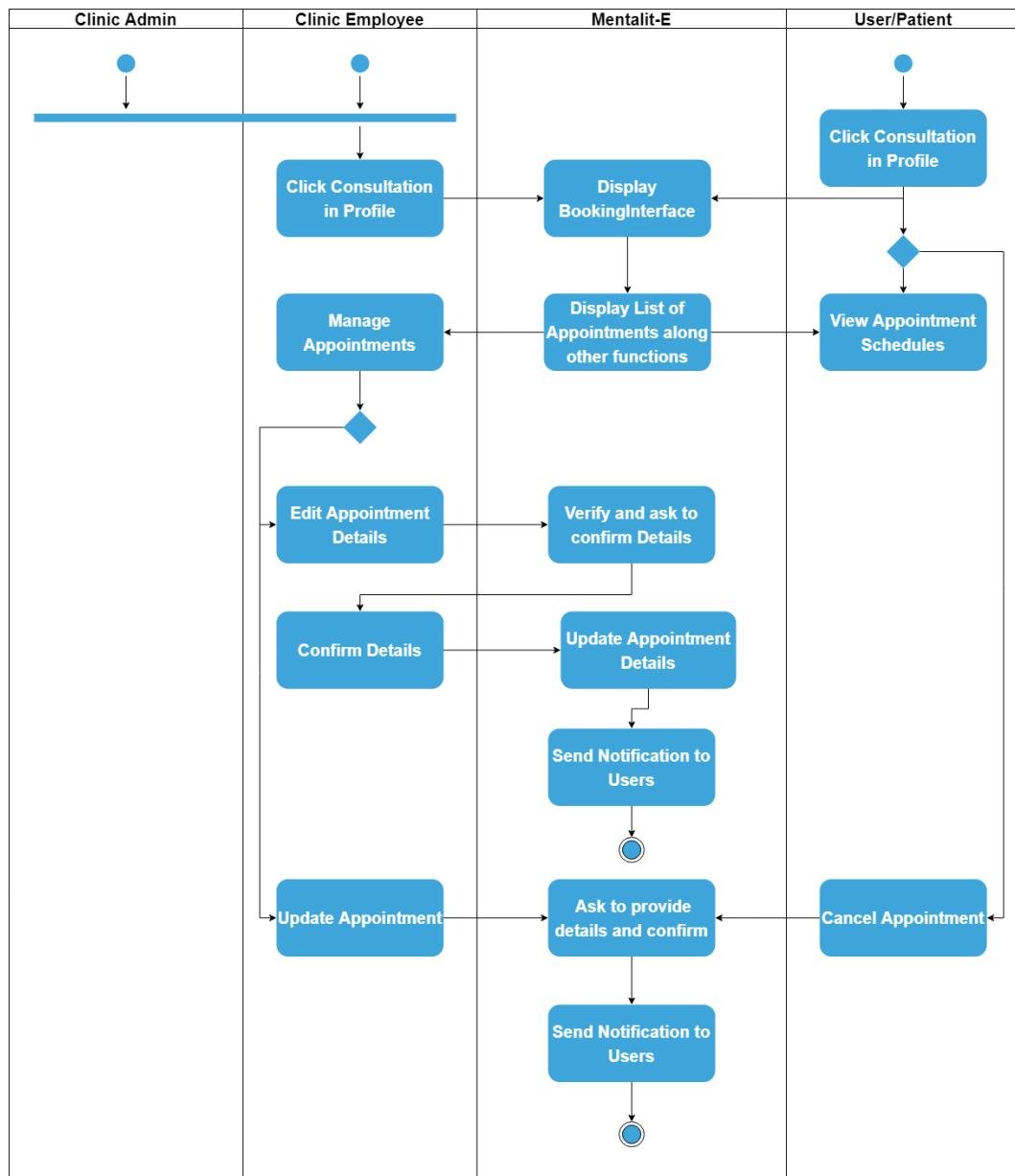


Figure 4.31 Activity Diagram for Manage Appointment

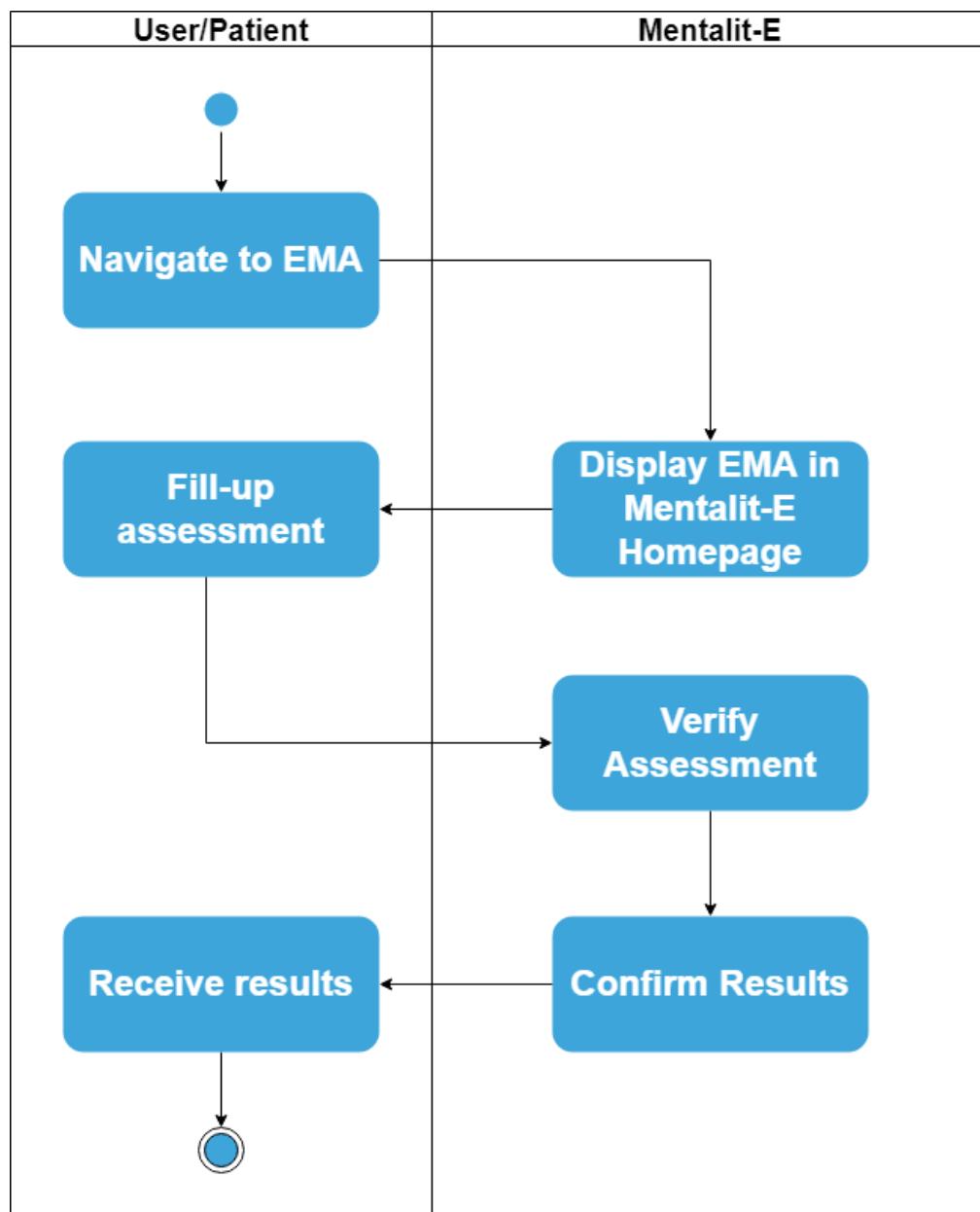


Figure 4.32 Activity Diagram for EMA

System Sequence Diagrams

The illustrations below show the different sequence diagrams for each function of the system. It discusses the order and how the objects interact with one another to complete a task.

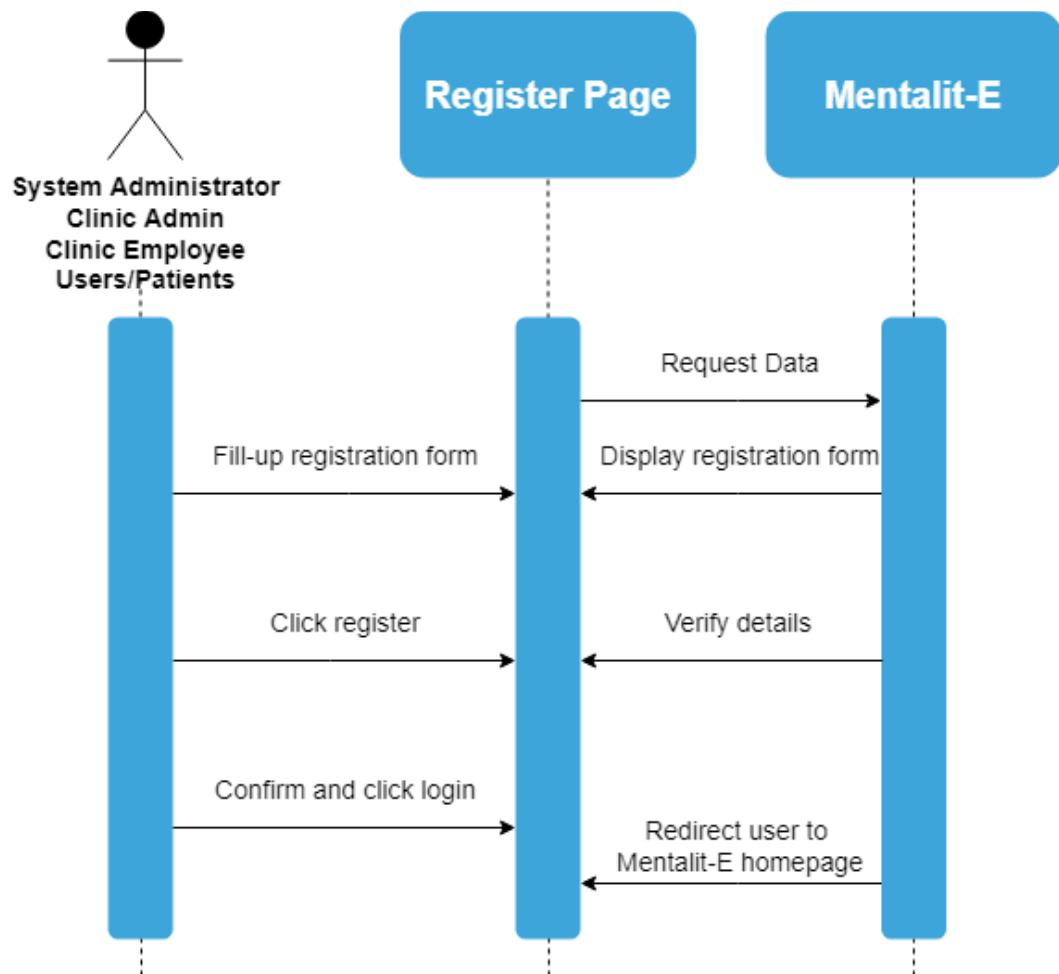


Figure 4.33 Sequence Diagram for Register to Mentalit-E

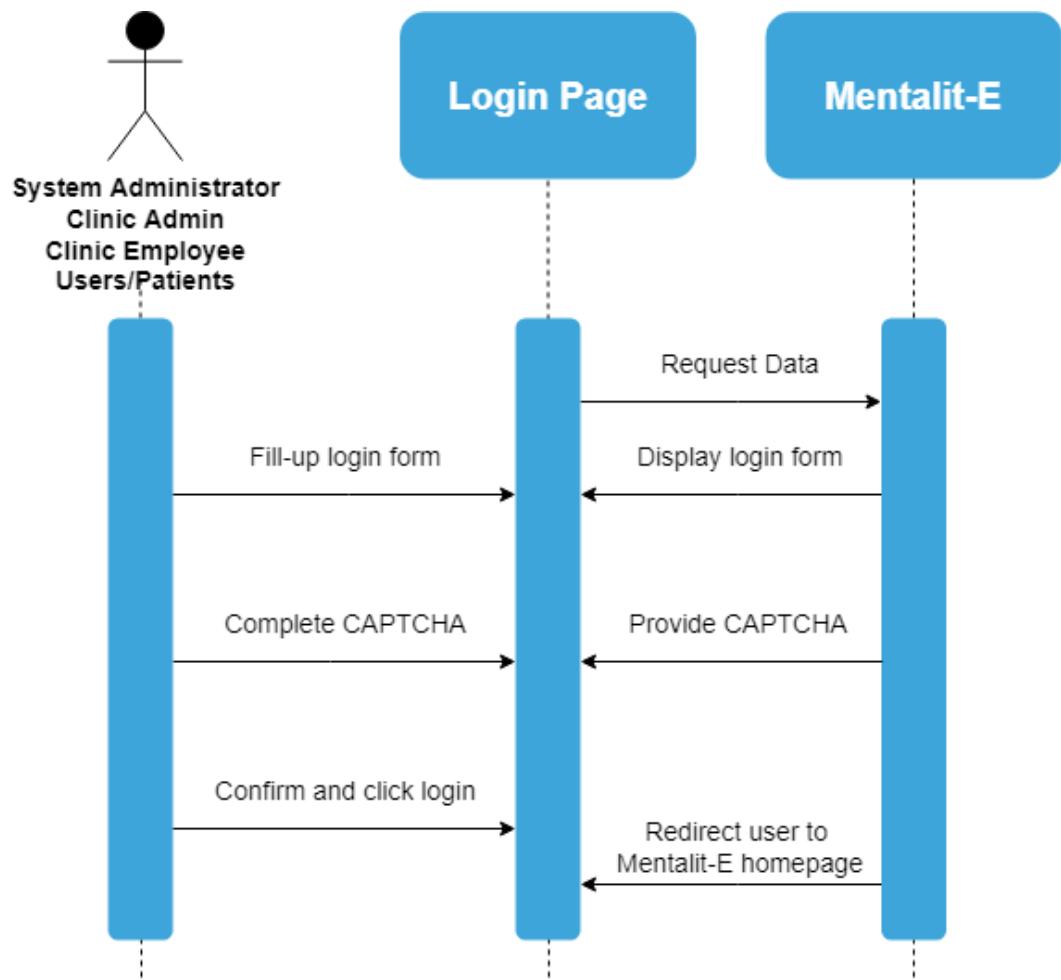


Figure 4.34 Sequence Diagram for Login

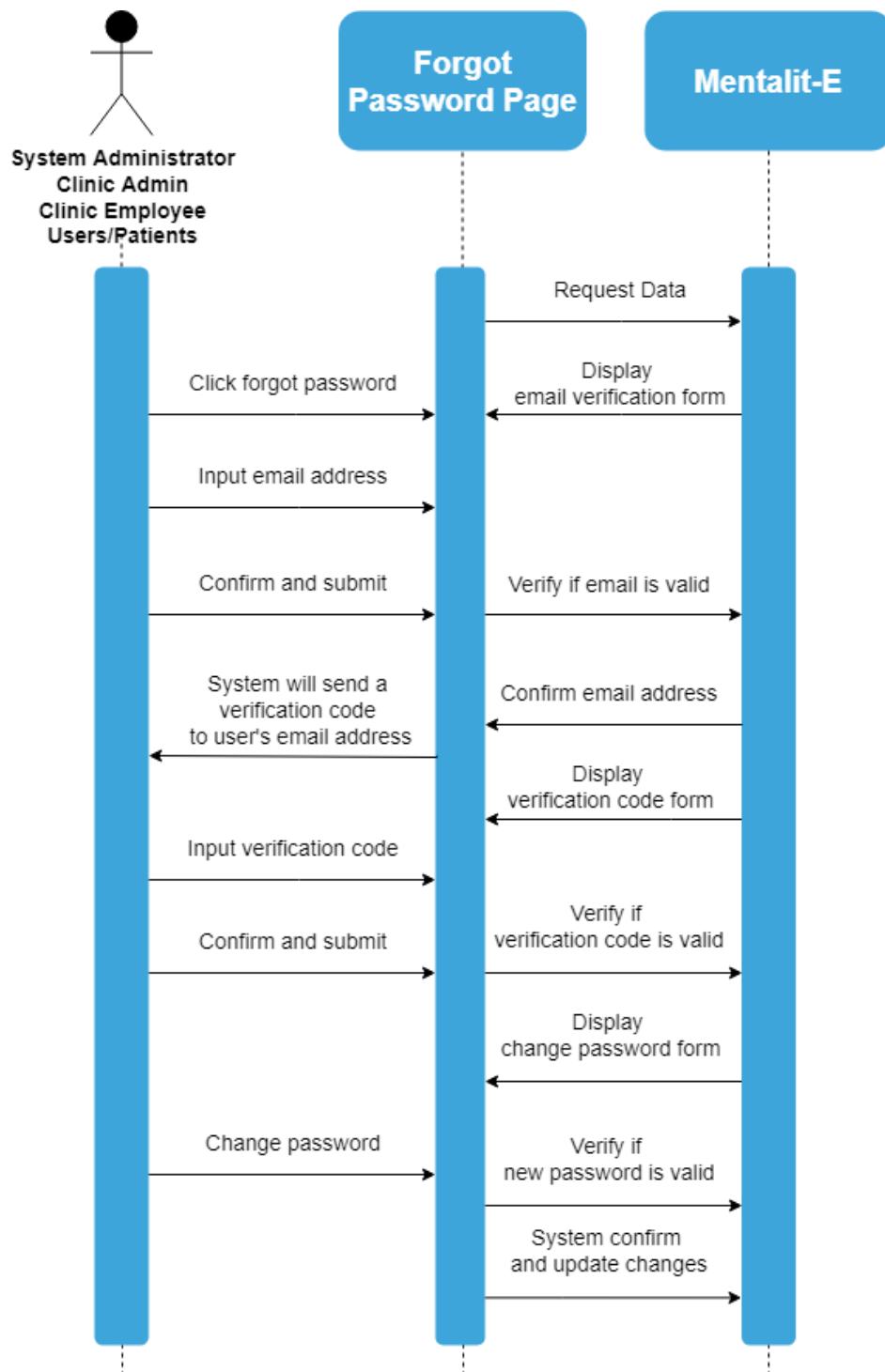


Figure 4.35 Sequence Diagram for Forgot Password

Sequence Diagram for System Administrator

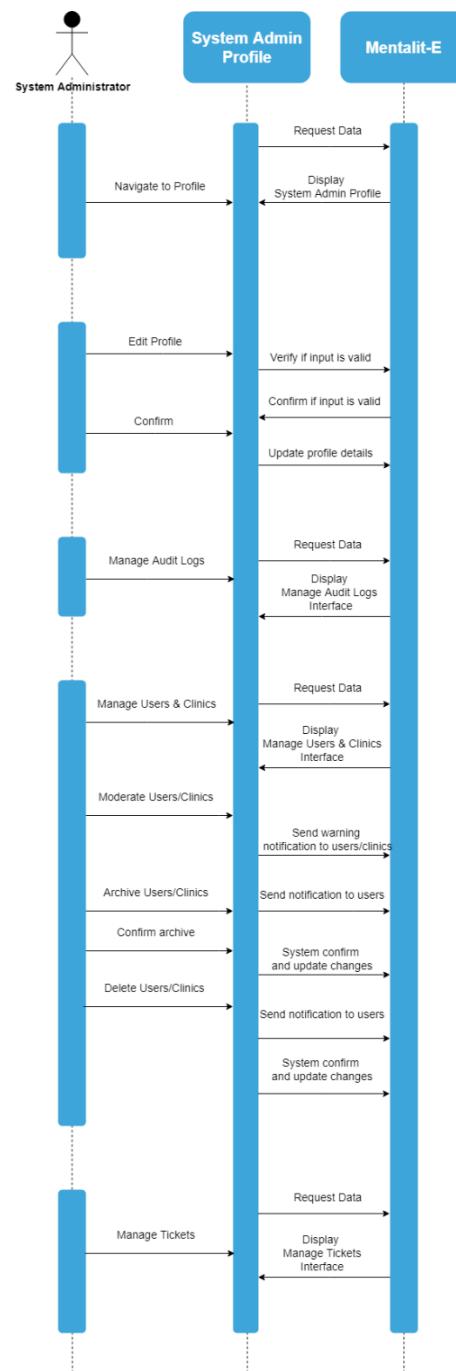


Figure 4.36 Sequence Diagram for Manage System Administrator Profile

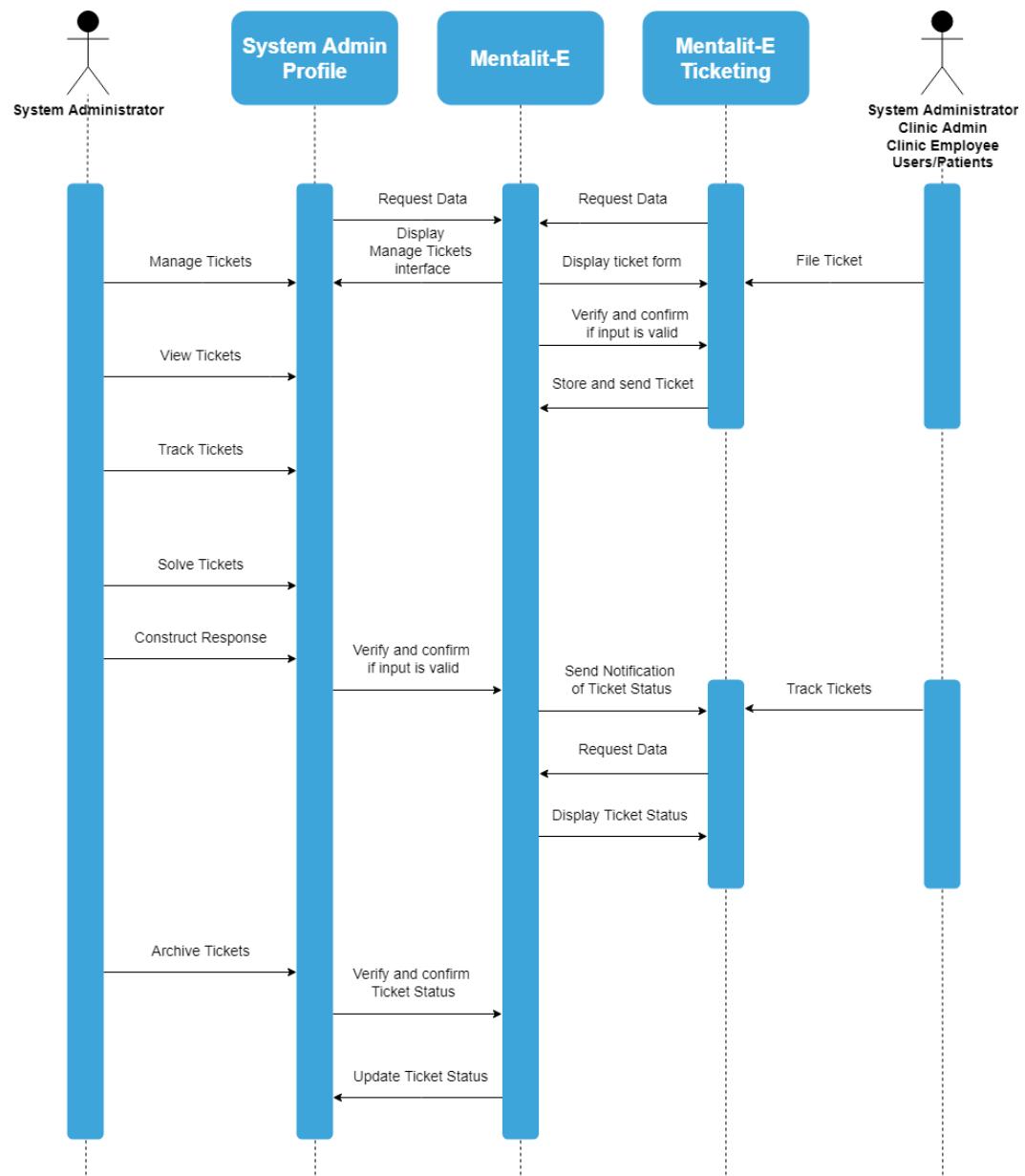


Figure 4.37 Sequence Diagram for Manage Tickets

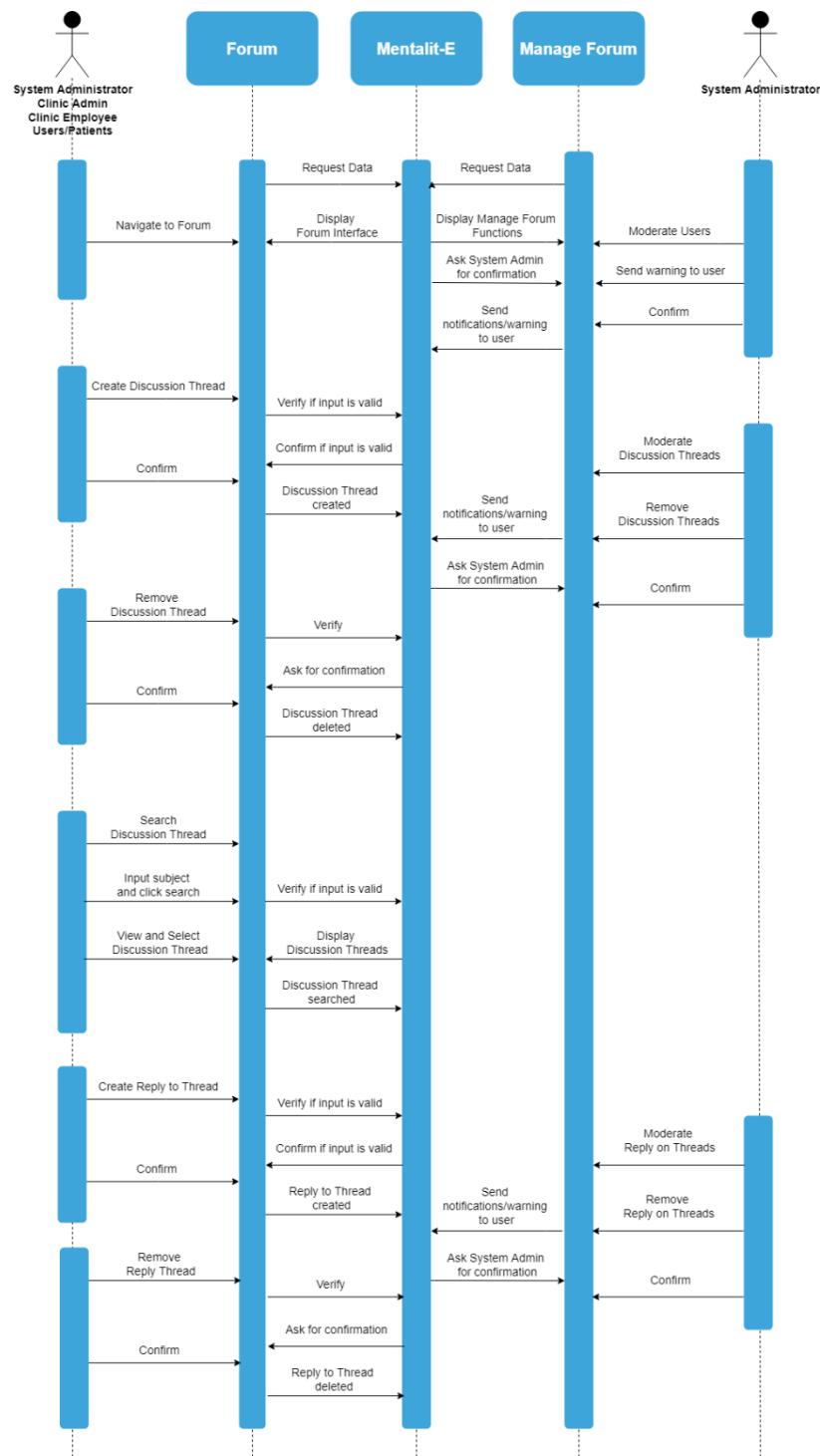


Figure 4.38 Sequence Diagram for Manage Forum

Sequence Diagram for Clinic Admin/Employee

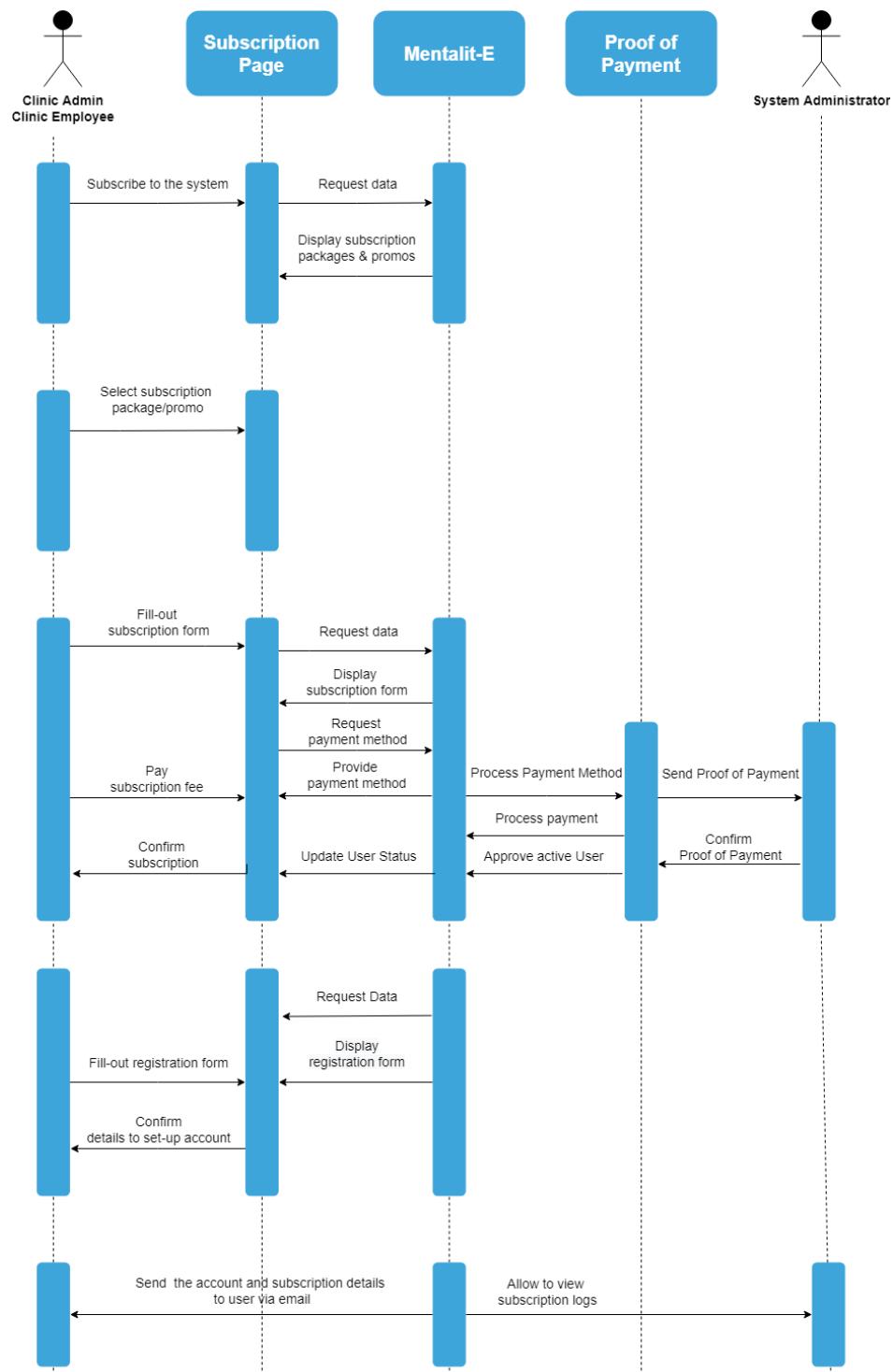


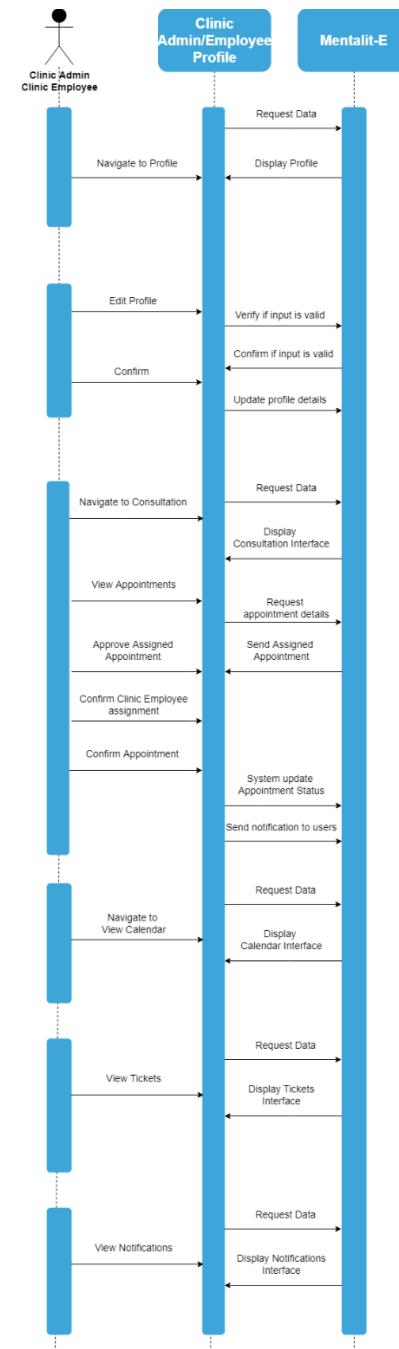
Figure 4.39 Sequence Diagram for Subscription to Mentalit-E

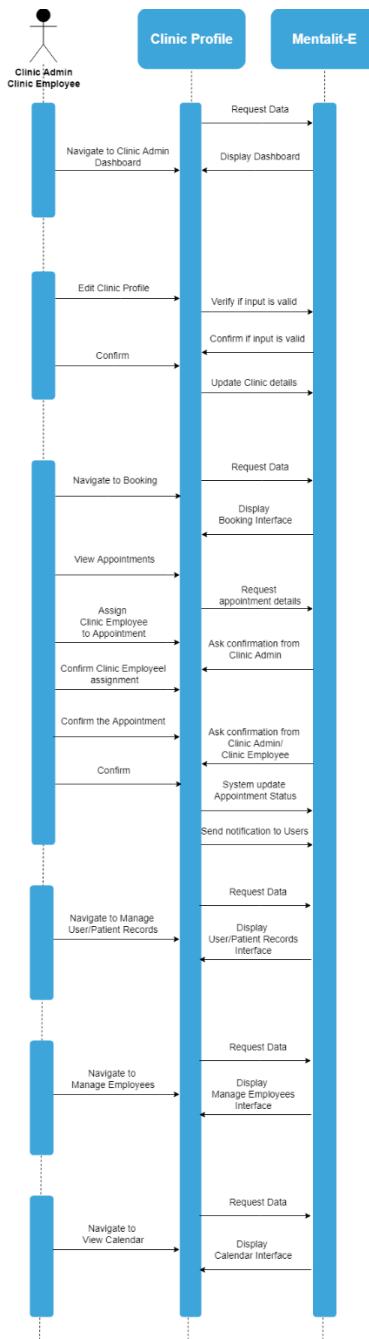
Figure 4.40 Sequence Diagram for Clinic Admin/Employee Profile

Figure 4.41 Sequence Diagram for Clinic Profile

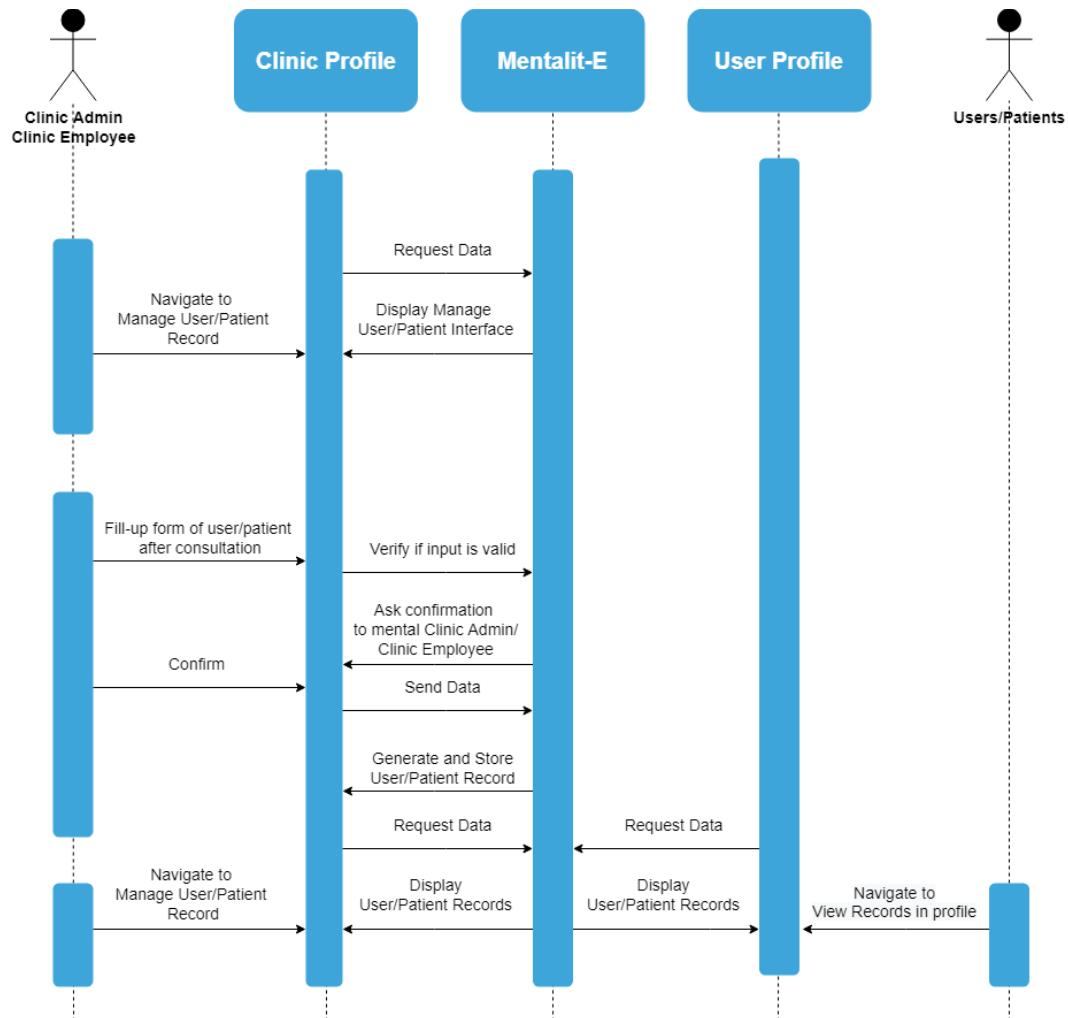


Figure 4.42 Sequence Diagram for Users/Patients Record

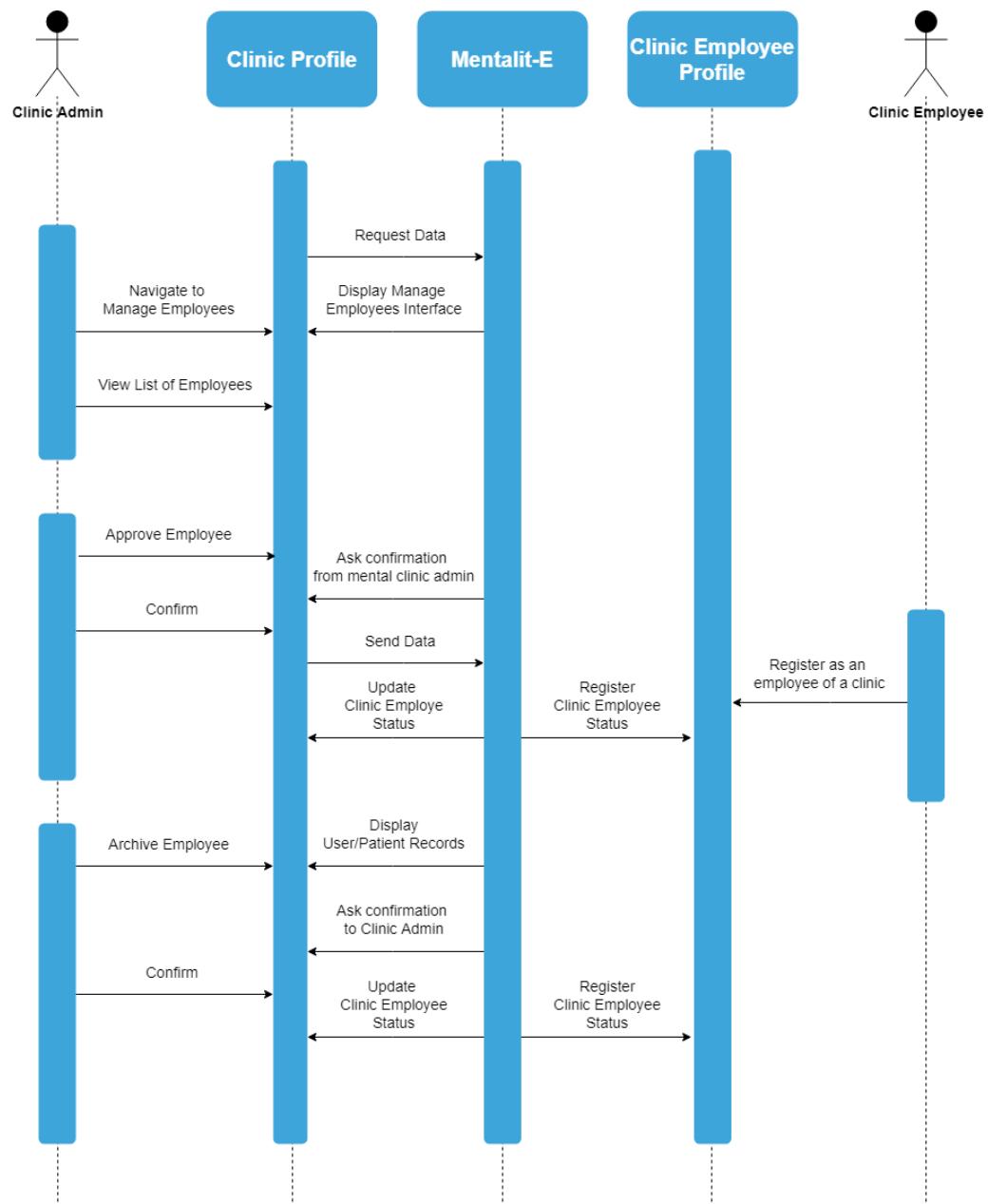


Figure 4.43 Sequence Diagram for Manage Employees

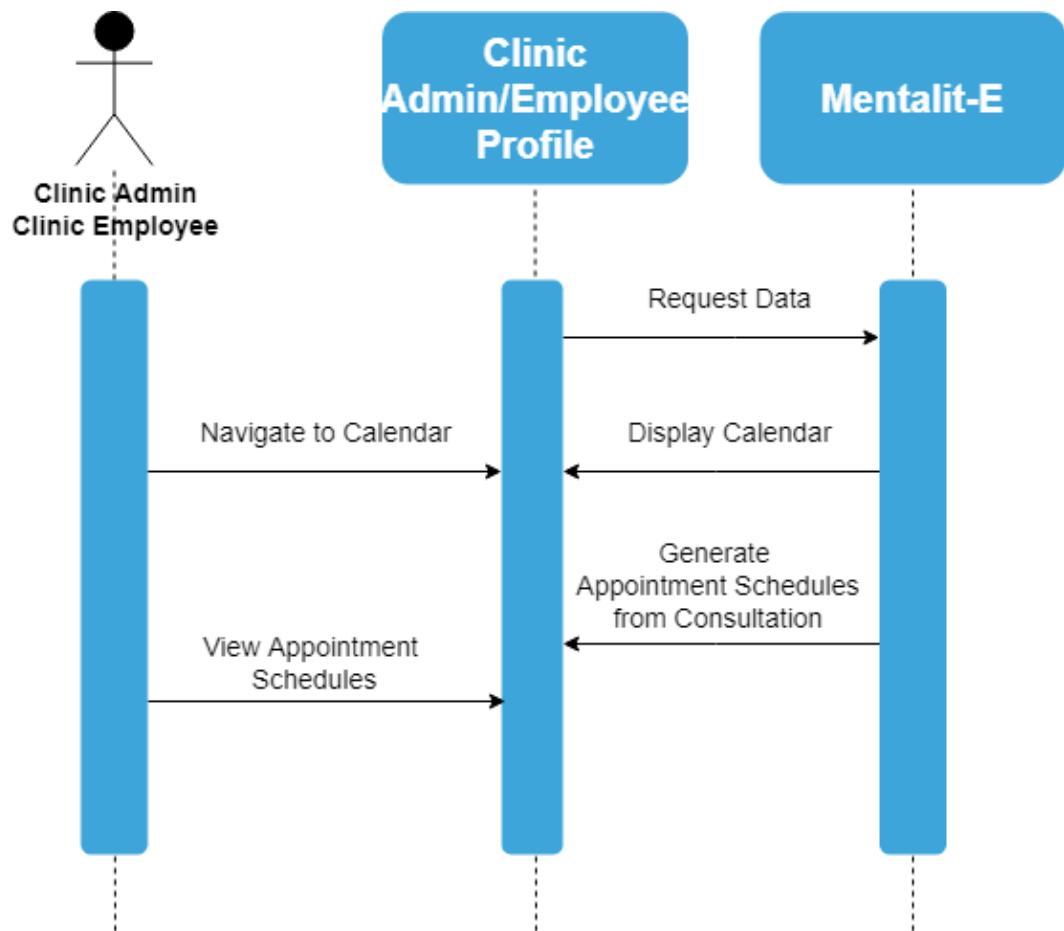


Figure 4.44 Sequence Diagram for View Calendar

Sequence Diagram for Users/Patients

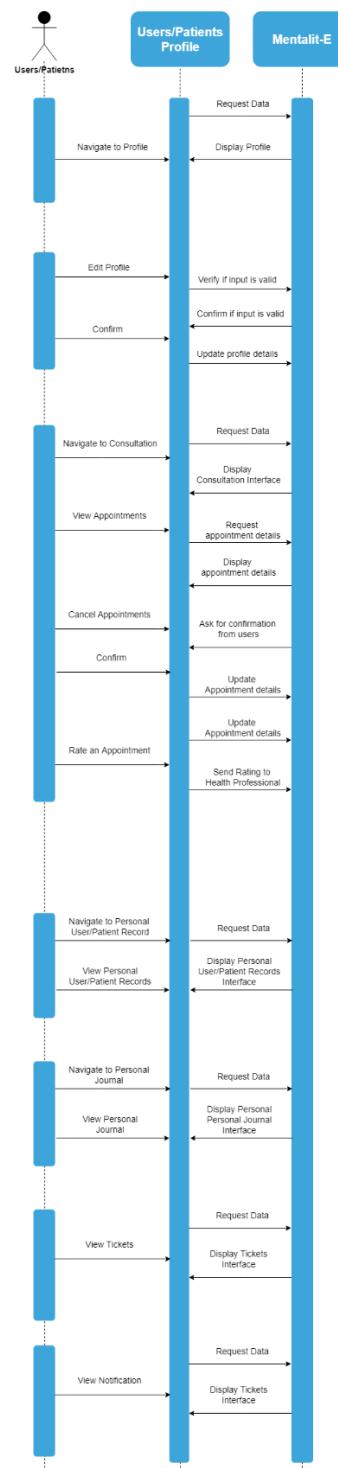


Figure 4.45 Sequence Diagram for Users/Patients Profile

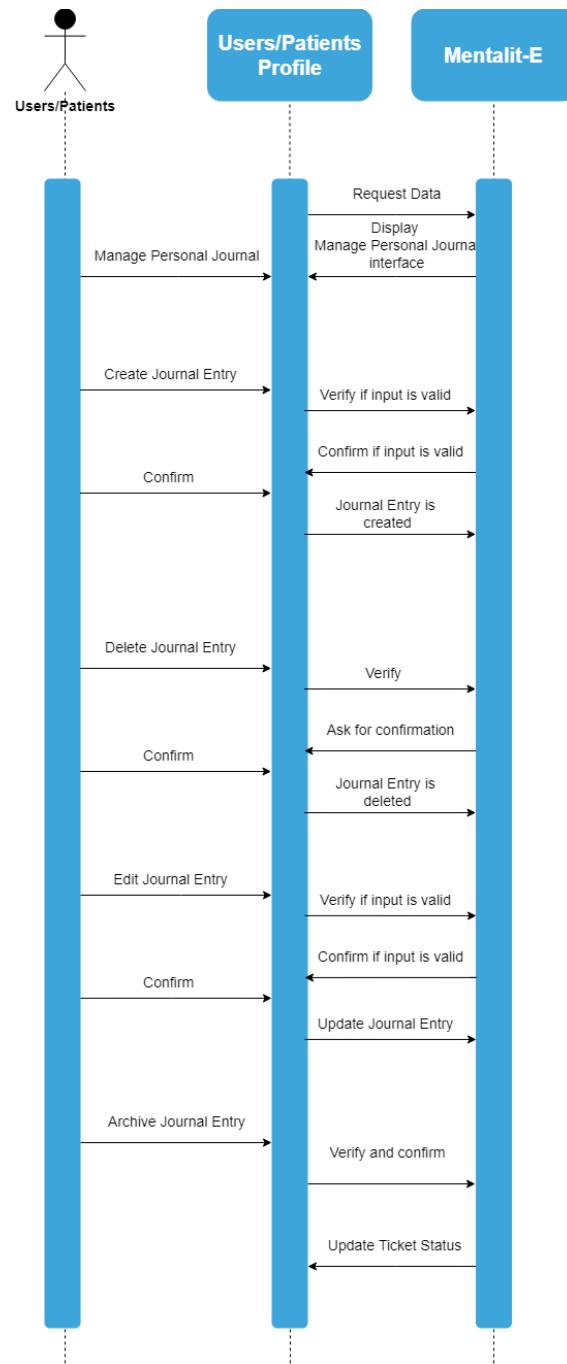


Figure 4.46 Sequence Diagram for Manage Personal Journal

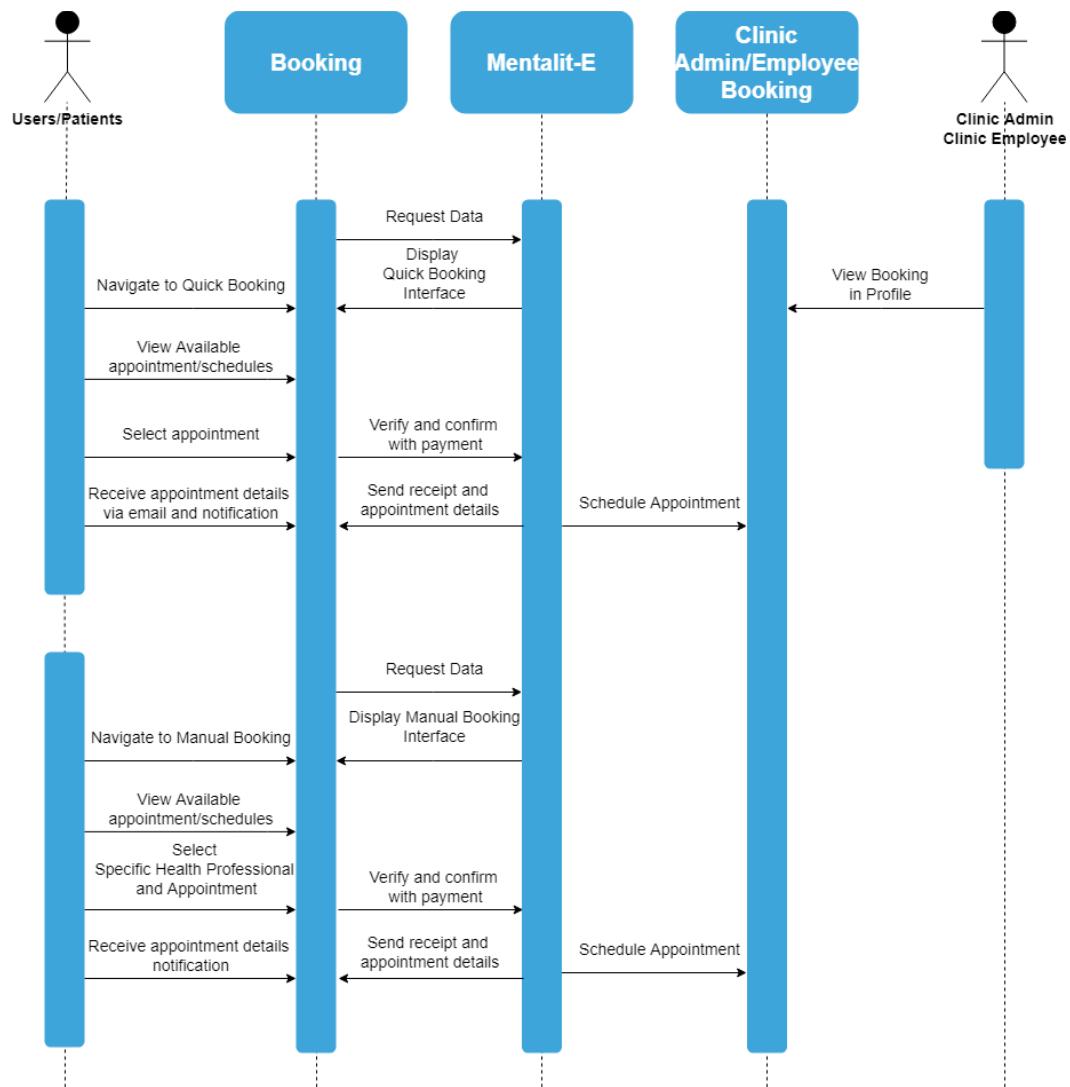


Figure 4.47 Sequence Diagram for Schedule Appointment

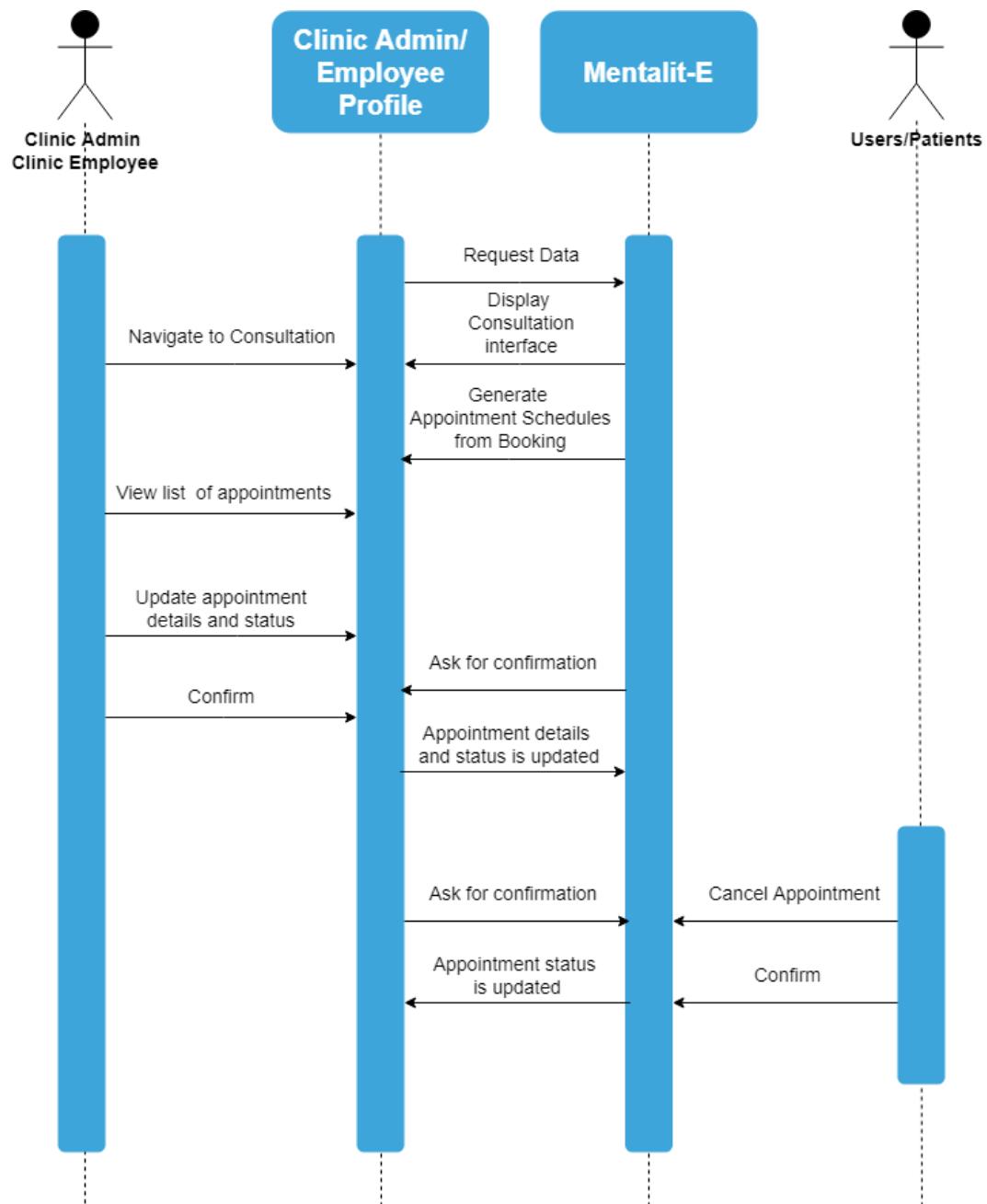


Figure 4.48 Sequence Diagram for Manage Appointment

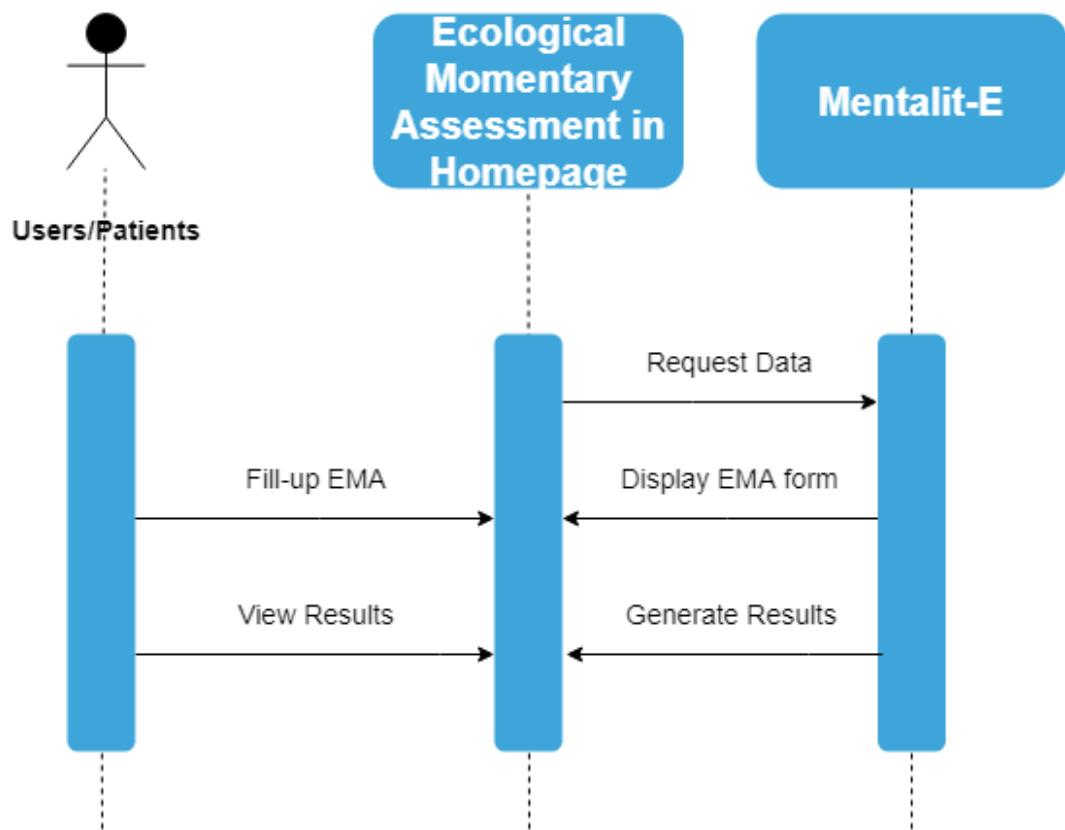


Figure 4.49 Sequence Diagram for EMA

Description of the Prototype (screenshots of the UI)

Landing Page

Mentalit-E

Login / Register

Mentalit-E

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

[Be a User](#)[Be a Medical Professional](#)**SAMPLE IMAGE**

The picture above is the landing page of the web-based prototype with a name of “Mentalit-E” which was developed by the researchers under the research title of “The Need for an Online Mental Health Services Platform in the Philippines”.



One of the goals of the research is to spread awareness about the importance of Mental health among the Filipinos, especially from adolescents to young adults (ages 12-30) which were considered as the demographics of the study.

What does Mentalit-E do?



Lorep Ipsum

Lorep Ipsum

Lorep Ipsum

?

Features and Services



?

The homepage also showcases the primary goals and the objectives of the objectives of the study. Not only that, but it also includes the features and services that the online mental health services platform is capable of.

Answer our assessment on your mood

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

	1	2	3	4	5
1. Lorem Ipsum	<input type="radio"/>				
2. Lorem Ipsum	<input type="radio"/>				
3. Lorem Ipsum	<input type="radio"/>				
4. Lorem Ipsum	<input type="radio"/>				

	1	2	3	4	5
4. Lorem Ipsum	<input type="radio"/>				
5. Lorem Ipsum	<input type="radio"/>				
6. Lorem Ipsum	<input type="radio"/>				
7. Lorem Ipsum	<input type="radio"/>				
8. Lorem Ipsum	<input type="radio"/>				
9. Lorem Ipsum	<input type="radio"/>				

Generate results

Mentalit-E

Quick Booking Health Professional Profile Clinic System Admin

5. Lorem Ipsum

6. Lorem Ipsum

7. Lorem Ipsum

8. Lorem Ipsum

9. Lorem Ipsum

Result

58

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

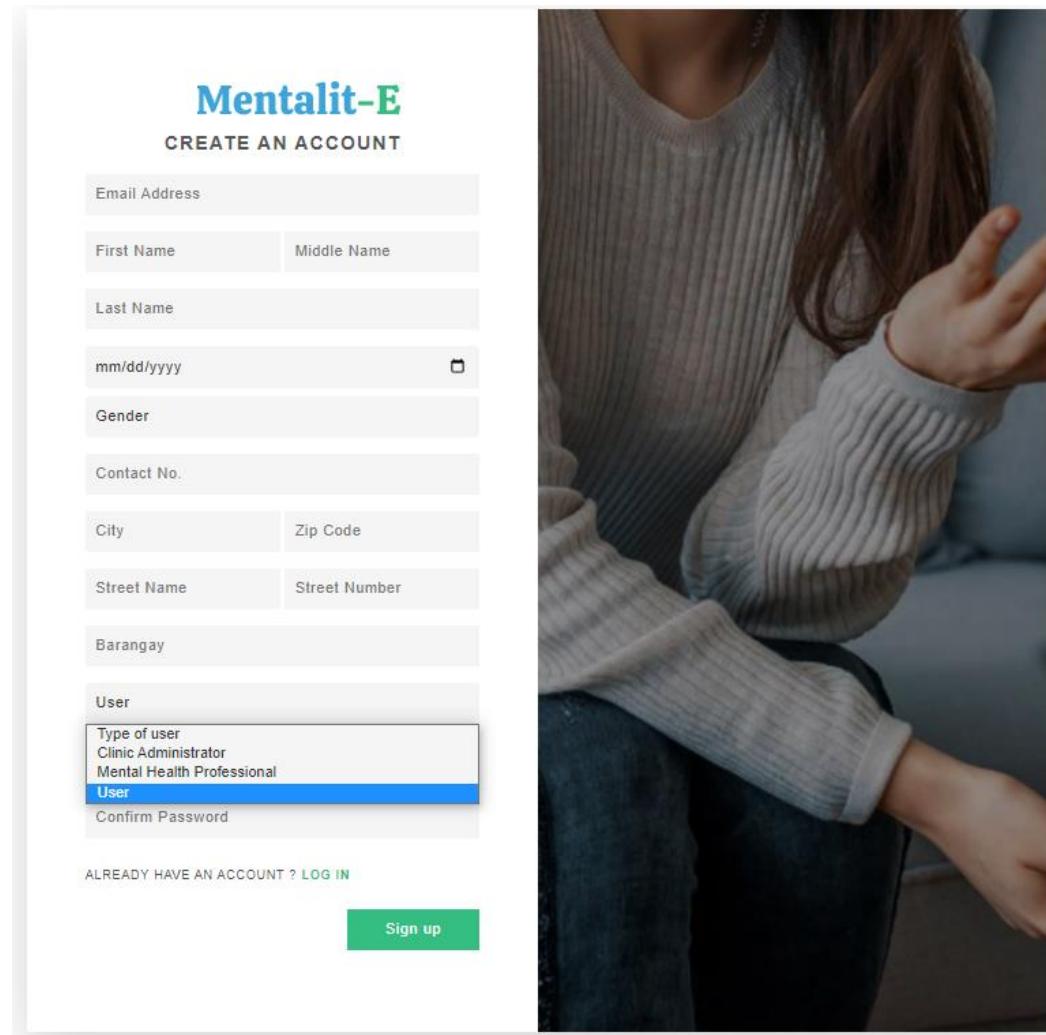
Contact us

One of the features of the system is based on the Ecological Momentary Assessment (EMA). EMA (Ecological momentary assessment) is the evaluation of behavior or mood of individuals that depends on daily questions, providing a better knowledge of temporal connections among factors included (Vlaescu et al., 2016). By clicking the Generate Results button, it will evaluate the answers and provide the score and the assessment of the behavior of an individual. Any users even with or without an account can access and use the Ecological momentary assessment which can serve as their guide regarding their mental health state.



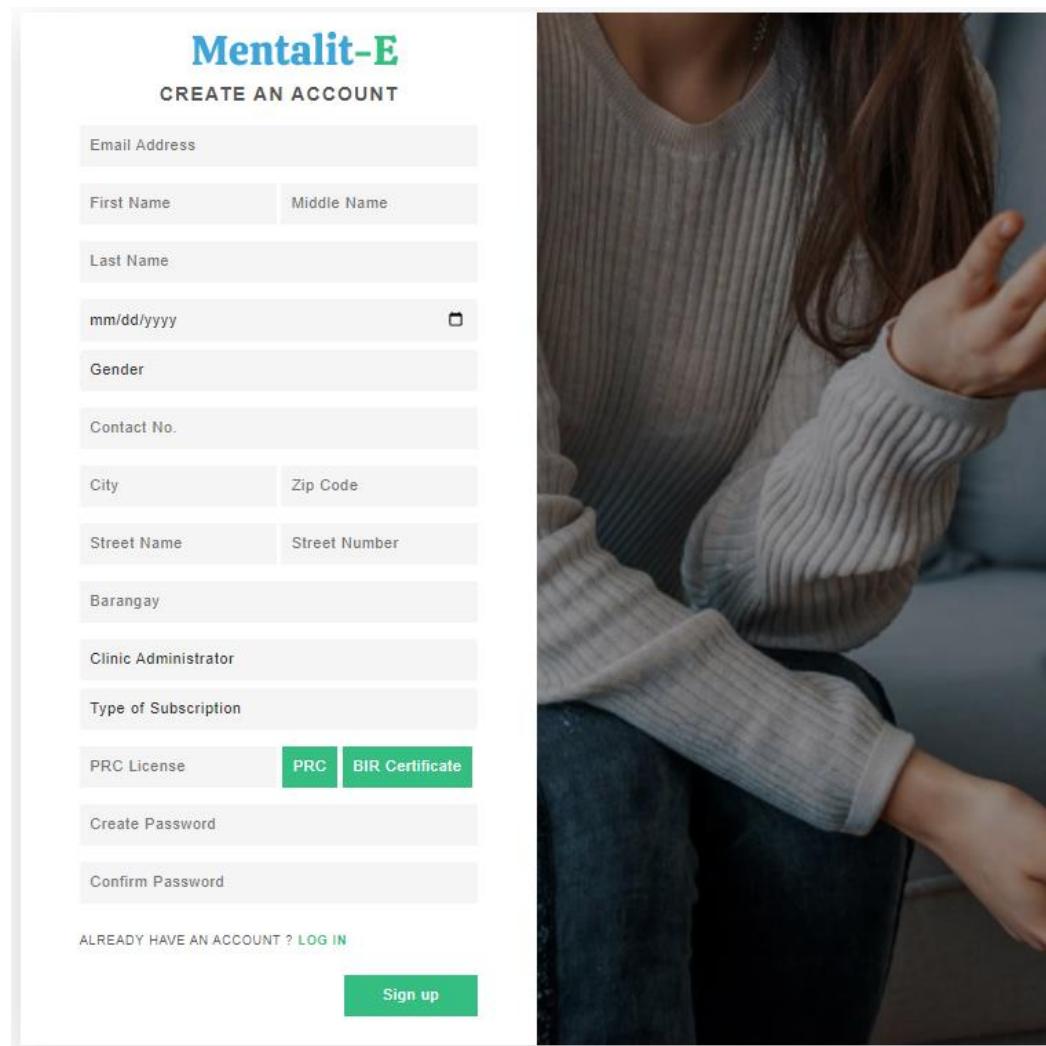
Lastly in the index of the system, it includes the information on how the users can contact the system administrators. From Frequently Asked Questions (FAQs), chat with chatbots and instructional information to filing of complaints and tickets through the button that appears on the lower right corner of each web page in the system.

Registration



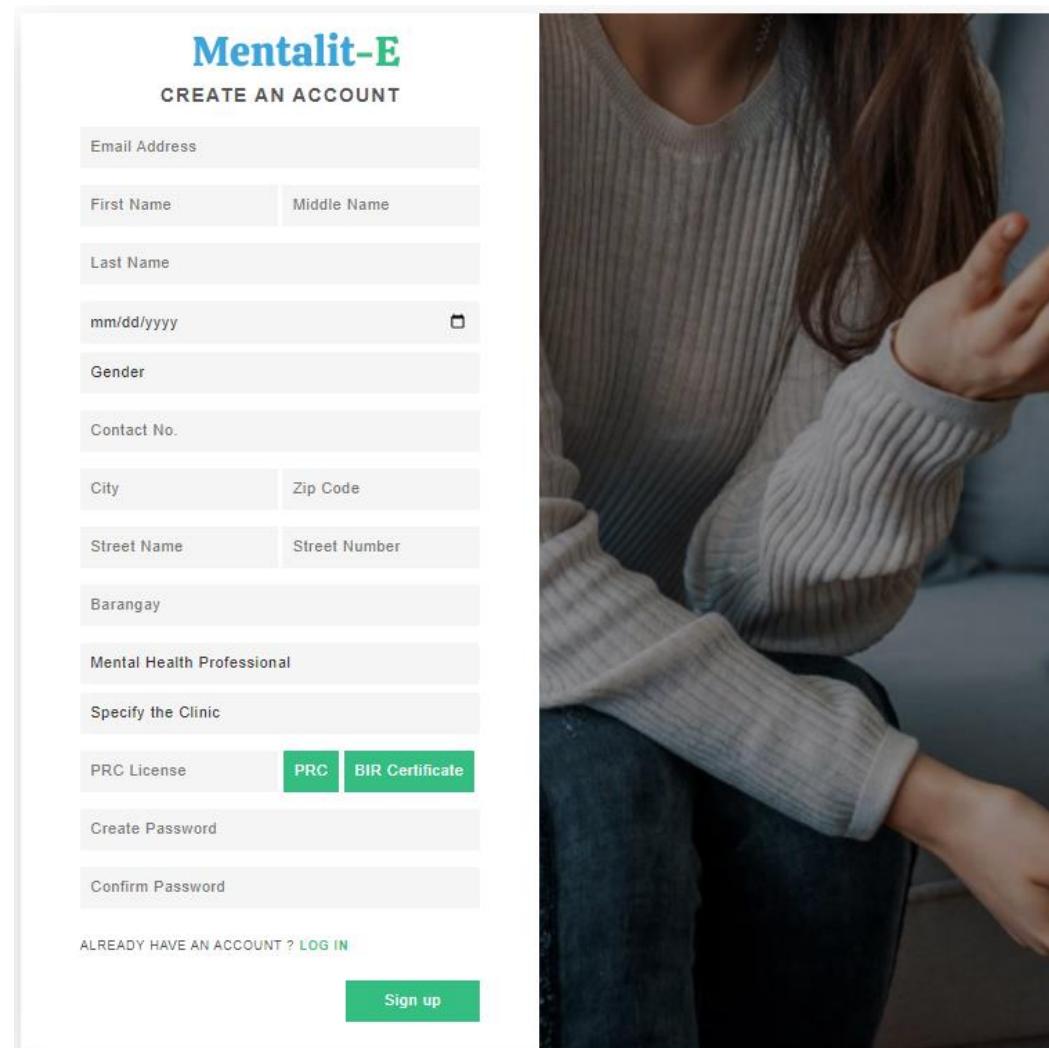
The image displays a composite of two visual elements. On the left, there is a screenshot of a web-based application titled "Mentalit-E". The title is in blue at the top, followed by a "CREATE AN ACCOUNT" button. Below this are several input fields: "Email Address", "First Name" and "Middle Name" (in separate boxes), "Last Name", "mm/dd/yyyy" (date of birth), "Gender", "Contact No.", "City" and "Zip Code" (in separate boxes), "Street Name" and "Street Number" (in separate boxes), "Barangay", and "User". Under "User", there is a dropdown menu with three options: "Type of user", "Clinic Administrator", "Mental Health Professional", and "User", where "User" is highlighted with a blue selection bar. Below the dropdown is a field for "Confirm Password". At the bottom of the form, there is a link "ALREADY HAVE AN ACCOUNT ? LOG IN" and a green "Sign up" button. On the right side of the image is a photograph of a person from behind, wearing a light-colored ribbed sweater and dark jeans, sitting on a couch.

Before a user can fully access and use the system, it requires the creation of an account. The system has three (3) users namely: Clinic Administrator, Clinic Employee, and General Users.



The image is a composite of two photographs. On the left, there is a screenshot of a web page titled "Mentalit-E" with a "CREATE AN ACCOUNT" button. The form contains fields for Email Address, First Name, Middle Name, Last Name, Date of Birth (mm/dd/yyyy), Gender, Contact No., City, Zip Code, Street Name, Street Number, Barangay, Clinic Administrator, Type of Subscription, PRC License (which is selected), and BIR Certificate. Below these fields are "Create Password" and "Confirm Password" fields. At the bottom, there is a link "ALREADY HAVE AN ACCOUNT ? LOG IN" and a green "Sign up" button. On the right, there is a photograph of a person from the waist up, wearing a light-colored, ribbed, long-sleeved sweater over a dark top. The person has long brown hair and is gesturing with their hands.

First, Clinic Administrators are required to avail subscriptions before they can use the system. The system implements 3 types of subscription from 3 months, 6 months, and 12 months with corresponding price value and proceeds to payment. After that, the Clinic Administrators are also required to upload their PRC License with proof and the BIR Certificate before conducting their business.



The image consists of two parts. On the left, there is a screenshot of a web-based registration form titled "Mentalit-E". The form is titled "CREATE AN ACCOUNT" and contains the following fields: Email Address, First Name, Middle Name, Last Name, Date of Birth (mm/dd/yyyy), Gender, Contact No., City, Zip Code, Street Name, Street Number, Barangay, Mental Health Professional, Specify the Clinic, PRC License (button), BIR Certificate (button, highlighted in green), Create Password, and Confirm Password. Below the form, it says "ALREADY HAVE AN ACCOUNT ? [LOG IN](#)". At the bottom is a green "Sign up" button. On the right side of the image, there is a photograph of a person with long brown hair, wearing a light-colored ribbed sweater, sitting at a desk and looking down at their hands.

On the other hand, Clinic employees are asked to specify which clinic they are working on. In order for a clinic to appear in the system, their clinic must avail the subscription first in order to be listed on the following clinics. Clinic employees are also required to upload their PRC License together with the proof. After successful registration, the Clinic Administrator will receive the request from the employee to access the records of the clinic.



Mentalit-E

CREATE AN ACCOUNT

Email Address

First Name Middle Name

Last Name

mm/dd/yyyy

Gender

Contact No.

City Zip Code

Street Name Street Number

Barangay

User

Create Password

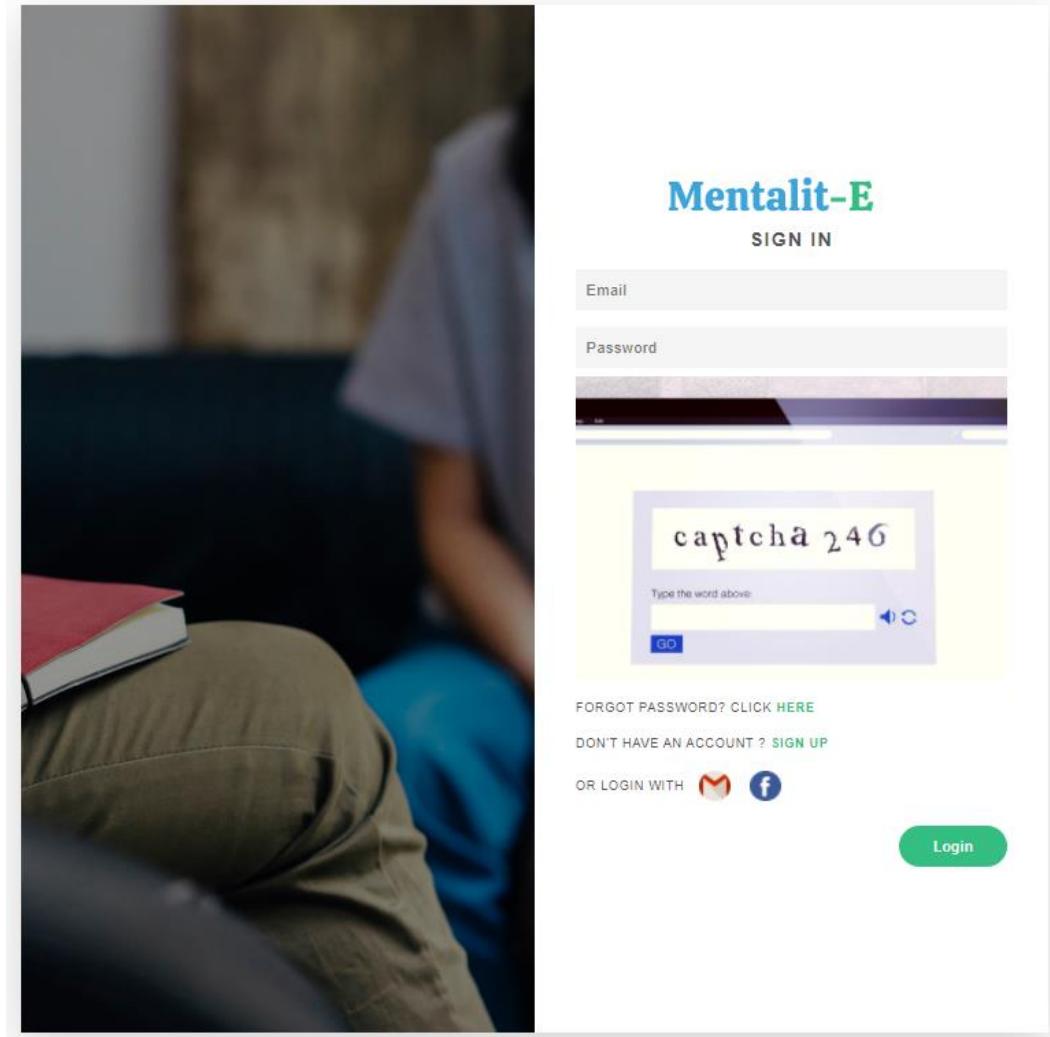
Confirm Password

ALREADY HAVE AN ACCOUNT ? [LOG IN](#)

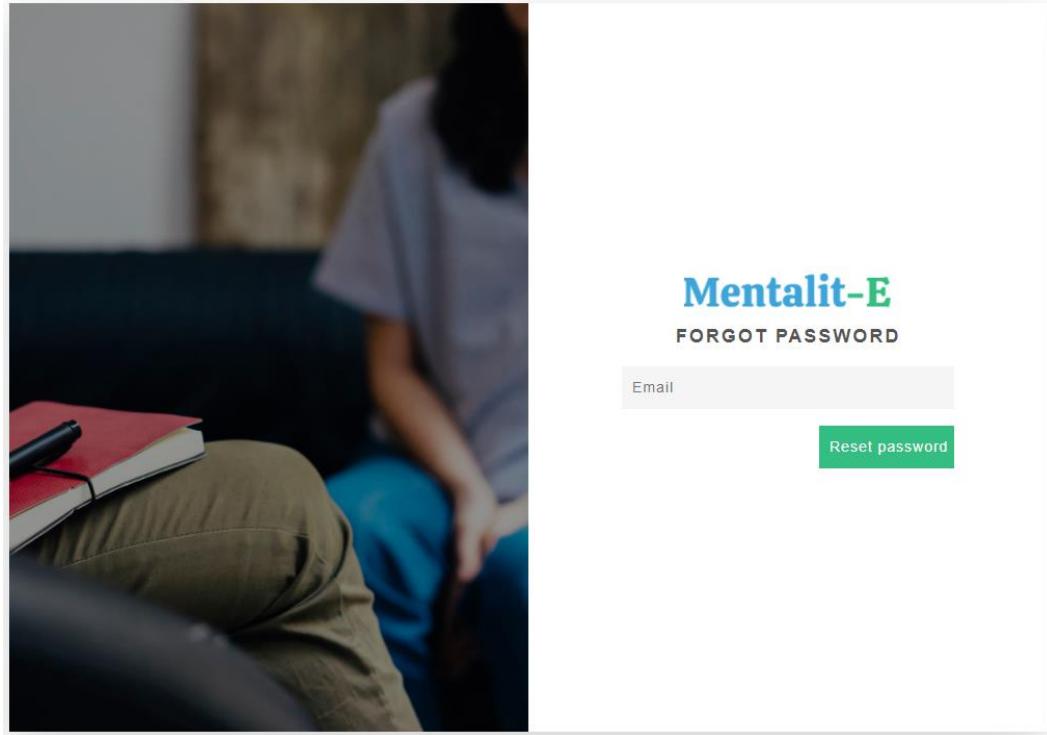
[Sign up](#)

Last is the General User. It can be a patient that wants to use the system or a general user who only wants to participate in the forum and seek mental health awareness through the system. They are only required to supply personal information.

[Login](#)



Once the user has successfully created an account, the user can now login. The system also accepts login through their chosen Social Media Platform such as Gmail and Facebook. For security purposes, the system implements captcha verification in order to differentiate between users and computer bots.



In case users forget their passwords, they can easily reset their password through their corresponding Email Address. A link will be sent to the email address and they can provide a new password.

Homepage

[Mentalit-E](#)

Quick Booking Manual Booking Community Forum Patient Profile

[Mentalit-E](#)

Community Forum Health Professional Profile Clinic

[Mentalit-E](#)

Community Forum System Admin

The landing page for general users consists of four (4) navigational links. Namely: Quick Booking, Manual Booking, Community Forum and their Profile.

While the landing page for both Clinic Administrator and Clinic Employee consists only of two (2) navigational links. Namely: Community Forum, and Profile. Lastly, the System Administrator page will only display the System Admin profile and Community Forum.

Booking

The screenshot displays a mobile application interface for booking services. At the top, the title "Quick Booking" is centered above a horizontal green line. Below the line, a message reads "Have you done any consultations? Click here to rebook again". A green "Schedule" button is positioned below this message. The main content area contains two separate booking cards, each consisting of a header and a body. The first card's header includes "ClinicName", "ServiceName", "Service Description", and "Php ServicePrice". The second card's header includes "ClinicName", "ServiceName", "Service Description", and "Php ServicePrice". Each card concludes with a green "Schedule" button on the right side.

Quick Booking

Have you done any consultations? Click here to rebook again

Schedule

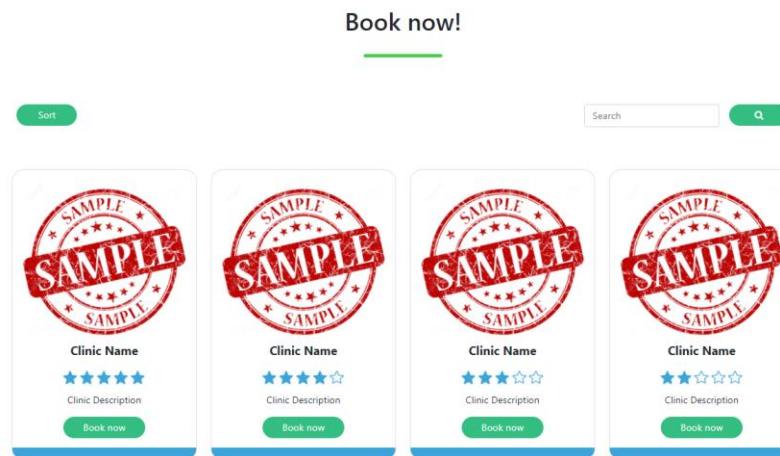
ClinicName
ServiceName
Service Description
Php ServicePrice

Schedule

ClinicName
ServiceName
Service Description
Php ServicePrice

Schedule

There are three types of booking, namely: Quick booking, Manual Booking, and Rebooking. The first type of booking is Quick Booking. Quick Booking is specially designed for users who require immediate assistance and quick service booking. The users can specify if they want to avail their past consultation and choose their own schedule. The system displays the Clinic Name, Clinic Service Name, Clinic Service Description, and its corresponding price.



The next type of booking is Manual booking. The users can freely choose their own clinic wherein the system will display the Clinic Name, Clinic Ratings, and the Clinic Description.



Clinic Name

 | 5.0 ratings (xx) Inquire Book now






Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Services Offer	Location	Price Range
<ul style="list-style-type: none"> • Clinic Service Name • Clinic Service Name • Clinic Service Name 	Clinic Address	Php Clinic service price - Php Clinic service price

Ratings


Name


Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

2020-05-19 (rating date) 10:20 (rating time)

The user can view the profile of the clinic wherein it will display all the necessary information such as Clinic Name, Clinic Description, Clinic Service Offerings, Clinic Address and the corresponding price range of the services provided by the clinic. To add, user ratings are also displayed which are filled by the users after each consultation.

Clinic Name	To Approve
<i>by Mental Health Professional Name</i>	<i>Date of Consultation</i>
Type of service	
Service brief description	
<i>Total amount in Php</i>	
Re-schedule	View

In an instance of emergency, the user can reschedule the consultation in their own profile where the sub-menu consultation can be found. However, it requires an additional fee payment which will enable the user to select another schedule.

Scheduling

Available services

Clinic Service Name
Clinic Service Description
Clinic Service Price

Schedule

Clinic Service Name
Clinic Service Description
Clinic Service Price

Schedule

Available dates and time

01-01-21 (Clinic Service Date)
10:30 (Clinic Service Time)

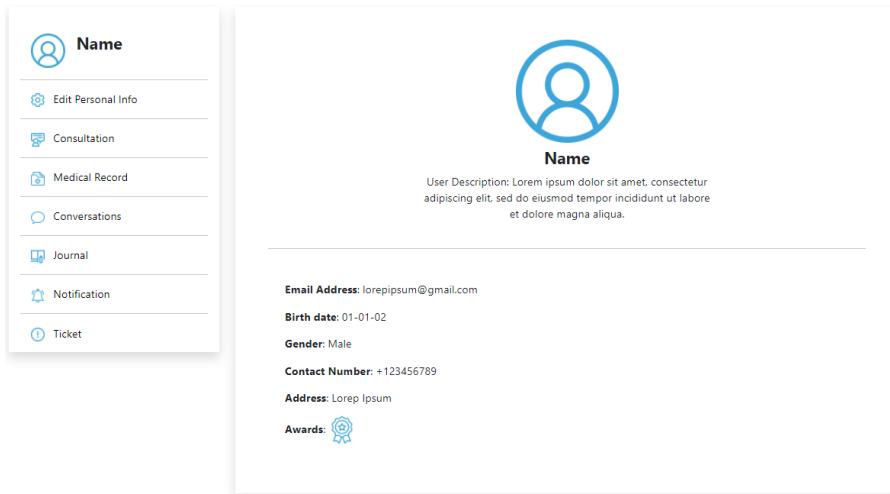
Book

01-01-21 (Clinic Service Date)
10:30 (Clinic Service Time)

Book

After clicking the desired type of service, the system will display the available time and date for the particular service. Then the user can now select the desired schedule.

User Profile (for General Users/Patients)



The general user profile consists of 7 sub-menus. From Edit Personal Info, Consultation, Medical Record, Conversations, Journal, Notification, and Ticket. It also displays the basic information such as name, user description, email address, birth date, gender, contact number, and the address. On the other hand, the system implements badges and e-certificates as rewards for users who have outstanding performance which is also displayed in the profile of the users. These are the following criteria:

1. Numbers of therapies attended
2. Helpful in community forums

Edit Profile (for General Users/Patients)

The screenshot shows a user profile editing interface. On the left, a sidebar menu lists: Name, Edit Personal Info, Consultation, Medical Record, Conversations, Journal, Notification, and Ticket. The main area features a large blue circular profile placeholder with the word "Upload" and a "Name" field below it. A checkbox labeled "Hide my name in public" is present. Below this are sections for User Description (with placeholder "Lorem ipsum"), Contact Number (placeholder "Lorem ipsum"), Address (placeholder "Lorem ipsum"), and Password (with fields for Old Password, New Password, and Confirm New Password). At the bottom, there are social media connection icons for Facebook and Gmail.

The general users can edit their personal information from User description, Contact Number, Address, Change their password and their emails. They can also connect their social media accounts such as Facebook and Gmail. To add, they can also hide their profile for privacy and confidentiality reasons.

Consultation (for General Users/Patients)

The image displays five screens of a mobile application interface:

- Left Column Top:** A sidebar titled "Name" with icons and links for "Edit Personal Info", "Consultation", "Medical Record", "Conversations", "Journal", "Notification", and "Ticket".
- Top Center:** A main screen titled "Consultations" with buttons for "Consult now", "Sort", a search bar, and a "Done" button. Below are tabs for "All", "To Approve", "In progress", and "Done".
- Middle Left:** A screen titled "Available dates and time" showing two service slots: "01-01-21 (Clinic Service Date) 10:30 (Clinic Service Time)" and another identical slot below it. Each slot has a "Book" button.
- Middle Right:** A screen titled "Rate" showing a 5-star rating. It includes a text input field for "Enter comment" and a "Submit" button.
- Bottom Left:** A screen titled "Confirmation" asking "Are you sure that the consultation is done?" with "Yes" and "Cancel" buttons.
- Bottom Right:** A screen titled "Cancel your booking?" stating "Cancelling your booking will not give you refund" with a "Confirm" button.

The consultation page is where the booking of the patient appears. The users can either file a new consultation which will redirect them to manual booking, which allows them to sort the data by status, alphabetically, and price. Lastly, is the search button to lessen the time in searching consultation records. The consultation for patients has 4 status, namely: To approve, In Progress, To rate, and Done. “To approve” status appears when the patient files a booking and the clinic administrator does not assign the task yet to mental health professionals and vice versa, the mental health professionals does not accept the designation of the task. Only the Reschedule and Cancel button are visible when the status is “To Approve”. After the designation has been successfully performed, the consultation status will now change to “In Progress” wherein the consultation is now ongoing. The Reschedule and Cancel button will be removed and only the Mark As Done button will be visible when the status is “In Progress”. Once the patient clicks the Mark As Done Button, the status of the consultation will now change to “To Rate” and the patient will be tasked to fill a rating form wherein the patient can rate the service of the clinic from 1-5 with comments. After doing so, the status of the consultation will be “Done” and the patient can view the history of consultation on date type.

Medical Record (for General Users/Patients)

The user can retrieve their medical records from different clinics which will be displayed in the sub menu of their profile at medical record. After each consultation, the system will automatically add the patient records to the clinic, and if in an instance that a patient has an old record, it will only add to the existing ones.

Journal (for General Users/Patients)

The system also implements a personal journal feature wherein the general users or patients can express their thoughts using the system. It consists of Journal Subject, Journal Description, Journal Date and the Status of the journal which gives the user an option to archive some journal entries. The user can also share the

journal entry with a unique URL which can be shared during consultation at patient's discretion.

User Profile (for Health Professionals)

The left screenshot shows a sidebar with the following menu items:

- Mental Health Professional Name
- Edit Personal Info
- Consultation
- Conversation
- Calendar
- Notification
- Ticket

The right screenshot shows a main profile view with the following details:

Health Professional Name
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Email Address: lorep ipsum@gmail.com
Birth date: 01-01-02
Gender: Male
Contact Number: +123456789
Address: Lorep Ipsum
Awards:

The Health Professionals profile consists of 7 sub-menus. From Edit Personal Info, Consultation, Clinic, Conversations, Calendar, Notification, and Ticket. It also displays the basic information such as name, user description, email address, birth date, gender, contact number, and the address. On the other hand, the system implements badges and e-certificates as rewards for users who have outstanding performance which is also displayed in the profile of the users. These are the following criteria:

1. Most Outstanding employee (given by Clinic Admin)
2. Helpful in Community Forums

The screenshot shows a user interface for editing a mental health professional's profile. On the left, there is a sidebar with a blue circular icon containing a person silhouette and the text "Mental Health Professional Name". Below this are several menu items with icons: "Edit Personal Info" (person), "Consultation" (chat), "Conversation" (speech bubble), "Calendar" (calendar), "Notification" (bell), and "Ticket" (ticket). The main content area has a large blue circular "Upload" button with a person silhouette above the text "Psychiatrist Name". Below this are two columns of input fields. The left column contains "User Description" (Lorem Ipsum), "Phone Number" (Lorem Ipsum), and "Address" (Lorem Ipsum). The right column contains "Password" fields for "Old Password", "New Password", "Confirm New Password", and "Email" fields for "Email", "Old Email", and "New Email". There is also a "PRC License expiration" section with "Date expiry" and a green "Upload new PRC License" button. At the bottom, there are social media connection icons for Facebook and Gmail, and a green "Save changes" button.

The mental health professionals can edit their personal information from User description, Contact Number, Address, Change their password and their emails. They can also connect their social media accounts such as Facebook and Gmail. To add, they can also view the expiry of their PRC License and renew it once it expired.

Consultation (for Health Professionals/Clinic Admin)

The screenshot displays a web-based application for managing patient consultations. On the left, a sidebar titled "Mental Health Professional Name" lists navigation options: Edit Personal Info, Consultation, Conversation, Calendar, Notification, and Ticket. The main area is titled "Consultations" and shows a list of entries. At the top of this list are buttons for "Sort" and a search bar with a magnifying glass icon. Below the search are four status filters: All, To Approve, In progress, and Done. Each list item contains fields for "Patient Name (Patient Email Address)", "Date of Consultation", "Type of service" (with a brief description), and "Total amount in Php". At the bottom of each list item are buttons for "Accept", "Mark as done", and "View". A confirmation dialog box is overlaid on the page, asking "Are you sure that you want to accept the task?" with "Yes" and "Cancel" buttons. To the right, a "Notes" section is open, showing a "Psychiatrist Notes" field and a "Remarks" field, both with "Submit" and "Cancel" buttons.

The consultation page is where the booking of the patient appears. The users can either sort the data by status, alphabetically, and price or search for consultation records. The consultation for patients has 4 status, namely: To approve, In Progress,

To rate, and Done. “To approve” status appears when the patient files a booking and the clinic administrator does not assign the task yet to mental health professionals and vice versa, the mental health professionals does not accept the designation of the task. Only the Accept button is visible when the status is “To Approve”. After confirmation of task, the consultation status will now change to “In Progress” wherein the consultation is now ongoing. The Accept button will be removed and only the Mark As Done button will be visible when the status is “In Progress”. Once the health professional clicks the Mark As Done Button, the health professional will be asked to fill a form regarding the consultation and the remarks. After that, the status of the consultation will now change to “To Rate” and wait for the rating of the patient and eventually will be changed to “Done” and the mental health professional can view the history of consultation on date type.

Calendar (for Mental Health Professionals and Clinic Admin)

The image shows two side-by-side screenshots. On the left is a user interface for a mental health professional, featuring a sidebar with icons for Edit Personal Info, Consultation, Conversation, Calendar, Notification, and Ticket, and a main area for 'Mental Health Professional Name'. On the right is a Google Calendar for February 2021, displaying various events like 'Video conference 9:30 - 11:30am', 'Take day off the 8 - 9am', 'Virtual yoga class 9 - 10am', 'Order lunch for 12 - 1pm', 'Deliver Groceries 2 - 3pm', 'Virtual team meeting 3 - 4pm', and 'Doctor's appointment 8:15 - 9:15pm'.

The system will utilize the use of (FullCalendar) calendar. Once the acceptance of consultation has been successfully performed, it will automatically be added to the calendar of the assigned employee.

Conversation (For all users)

The screenshot shows a mobile application interface for managing conversations. On the left, there's a sidebar with a user icon and the text "Mental Health Professional Name". Below this are several menu items: "Edit Personal Info", "Consultation", "Conversation" (which is highlighted in blue), "Calendar", "Notification", and "Ticket". The main area is titled "Conversation". It features a "Sort" button, a search bar with a magnifying glass icon, and three tabs at the top: "All", "Active" (which is selected and highlighted in blue), and "Archive". Below these tabs, there's a message card for a user named "Name". The card displays a short preview of the message content and two buttons: "Archive" and "View".

The messages of a user will appear to their conversation list, they can either sort or search the records. Also, an archive message will be implemented whenever the user wants to remove the message in the active side.

The screenshot shows a messaging interface. At the top, it says "Clinic Name (user)". Below that, there's a message from "Name" sent on "2020-05-19 (date sent) 10:20 (time sent)". The message content is "Message". To the right of the message, there's another message from "Name" sent on the same date and time, also with the content "Message". At the bottom, there's a text input field with the placeholder "Send a message" and a green "Send" button.

By clicking the view button, it will display the conversation between the users. The users can send not only words but also attachments.

Notification (For all users)

The screenshot shows a user interface for managing notifications. On the left, a sidebar titled 'Mental Health Professional Name' lists several options: Edit Personal Info, Consultation, Conversation, Calendar, Notification, and Ticket. The 'Notification' option is selected. The main area is titled 'Notification' and contains a table with one row. The row shows a notification entry with the date '01-01-21'. Below the table is a green 'View' button.

Notification	01-01-21
Notification description	

The notification page will display all the notifications regarding the activities of the user.

Tickets (For all users)

The screenshot shows a user interface for managing tickets. On the left, a sidebar titled 'Mental Health Professional Name' lists several options: Edit Personal Info, Consultation, Conversation, Calendar, Notification, and Ticket. The 'Ticket' option is selected. The main area is titled 'Tickets' and contains a table with one row. The row shows a ticket entry with the number 'Ticket # 12345' and the date '01-01-21'. Below the table is a green 'View' button.

Ticket # 12345	01-01-21
Ticket description	

The users can track their ticket in the ticket menu. It has three status. Namely: Open, Pending, and Closed. When the status is open, it is not yet opened by the system administrator. While Pending refers to the event that the system administrator is trying to resolve the issue. Lastly, Closed is when the issue is finally resolved.

Clinic Profile

Clinic Name

- [Clinic Dashboard \(Admin\)](#)
- [Edit Clinic Info \(Admin\)](#)
- [View Clinic Consultation \(Both\)](#)
- [Assign Consultation \(Admin\)](#)
- [Patient Records \(Both\)](#)
- [Manage Employees \(Admin\)](#)
- [View Employees \(Both\)](#)
- [Conversations \(Admin\)](#)
- [Calendar \(Both\)](#)
- [Notification \(Admin\)](#)
- [Ticket \(Admin\)](#)

Clinic Name

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Clinic Address: loremipsum@gmail.com

Contact Number: +123456789

Address: Lorep Ipsum

Awards:

Rating:

The clinic profile will display all necessary information regarding the clinic, only the clinic administrator can view the dashboard, edit clinic info, assign consultation to the mental health professional, manage employees, view the conversation, notification and the ticket of the clinic. While it allows the employees to view all the consultation schedules conducted by the clinic, view patient records, view all the employees and calendar of their clinic.

Community Forum

Mentalit-E Community Forum

Add new thread Sort

Search



Forum title

by Name

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

01-01-20

Heart icon xx Comment icon xx Share icon



Forum title

by Name

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

01-01-20

Heart icon xx Comment icon xx Share icon

Add a new thread

Subject

Description

By clicking post, you adhere to the [Terms and Conditions](#)

Post

What are the reasons to report the user?

Lorem Ipsum
 Lorem Ipsum
 Others

Report **Cancel**

Share with your friends

 **Forum title**
by Name

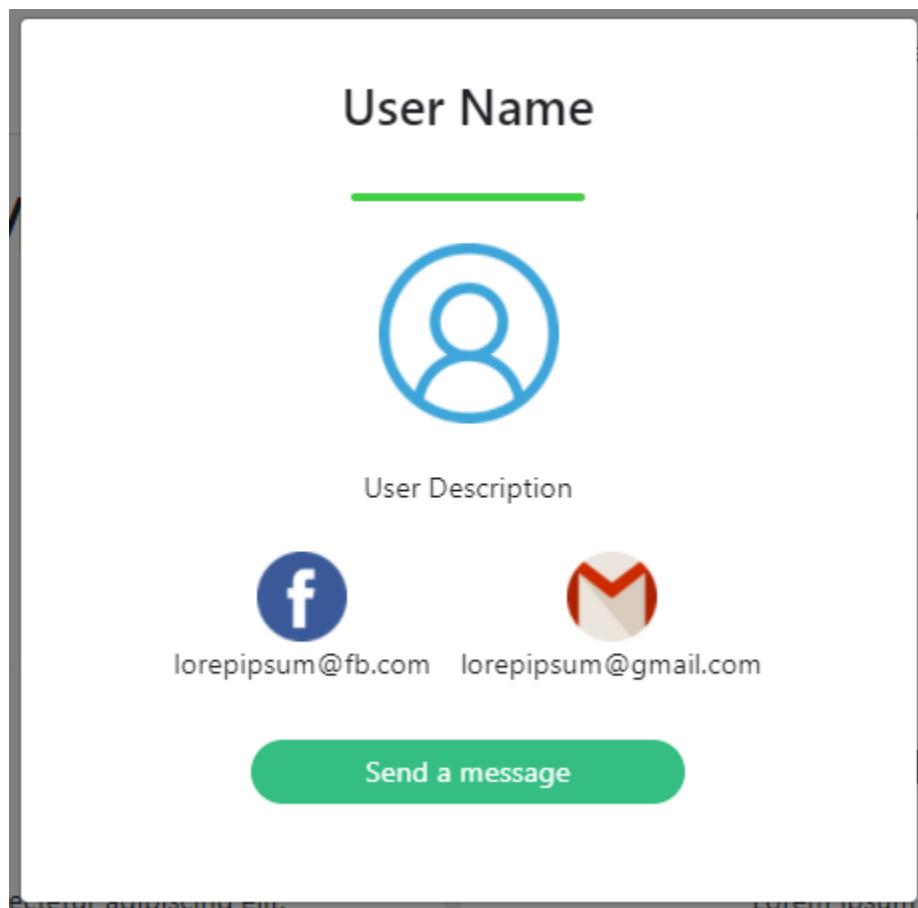
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

01-01-20  xx  xx  



 **Name**
Lorem ipsum dolor

Comment section



The community forum is open for every type of user with an account. The users can either create, like, comment, report, and share a thread at their own will. They can also view the profile of a specific user. However, the forum is supervised by the system administrator.



The community forum will utilize the use of support groups for specific cases such as Depression, OCD, etc for similar people who experience the following.

System Administrator Profile

System Admin

- Edit Personal Info
- Audit Logs
- Manage Users
- Manage Clinics
- Ticket

Welcome System Admin!

Number of consultations conducted today Number of clinics subscribed today Number of new registered users

System Admin

- Edit Personal Info
- Audit Logs
- Manage Users
- Manage Clinics
- Ticket

Audit Logs

Date & Time	User	Action
2021-05-30 05:25:30	lorep ipsum@gmail.com	Login
2021-05-30 05:25:30	lorep ipsum@gmail.com	Login
2021-05-30 05:25:30	lorep ipsum@gmail.com	Login

The image displays two side-by-side screenshots of a web-based administrative interface, likely for a school's management system.

Screenshot 1: Manage Users

This screenshot shows a list of users. At the top right, there are buttons for 'Sort' and 'Search'. Below is a table with columns: Email, Role, Status, and Action. The data is as follows:

	Email	Role	Status	Action
1.	lorep ipsum@gmail.com	Clinic Administrator	Active	
2.	lorep ipsum@gmail.com	Clinic Employee	Active	
3.	lorep ipsum@gmail.com	Users	Active	

Screenshot 2: Tickets

This screenshot shows a ticket detail page. At the top right, there are buttons for 'Sort' and 'Search'. The ticket information is as follows:

- Ticket #** 12345
- Date** 01-01-21
- Description** Ticket description
- Status** Open
- Action** View

Left Sidebar (Common to both screenshots):

The sidebar is titled 'System Admin' and contains the following menu items:

- Edit Personal Info
- Audit Logs
- Manage Users
- Manage Clinics
- Ticket

The system administrator can also edit profile, view and convert to pdf the audit logs, manage users and clinics whenever someone goes against the community rules or low in rating. Also, address the tickets of the community.

Entity Relationship Diagram and Data Dictionary

Full Database Schema

Database Schema	Reference Number: 1
	Version Number: 3.0
System Name: Mentalit-E : The Need for an Online Mental Health Services Platform in the Philippines	

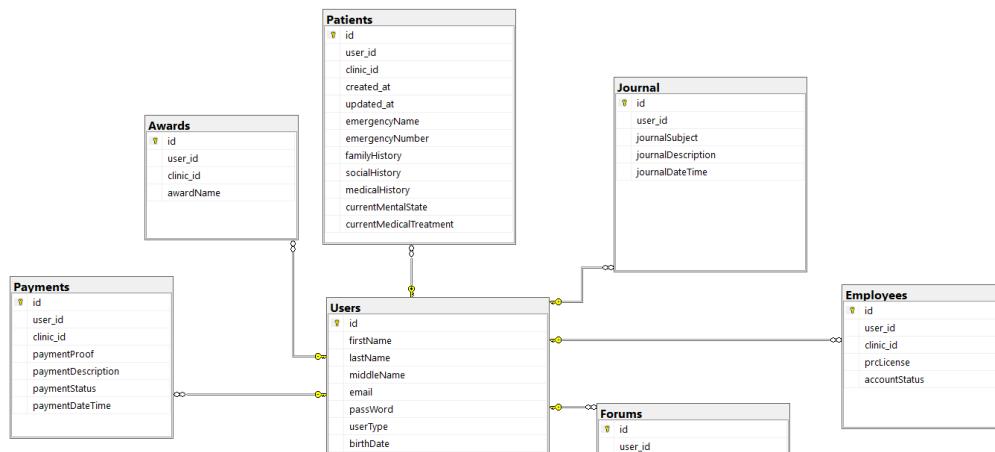


Figure - Database Schema

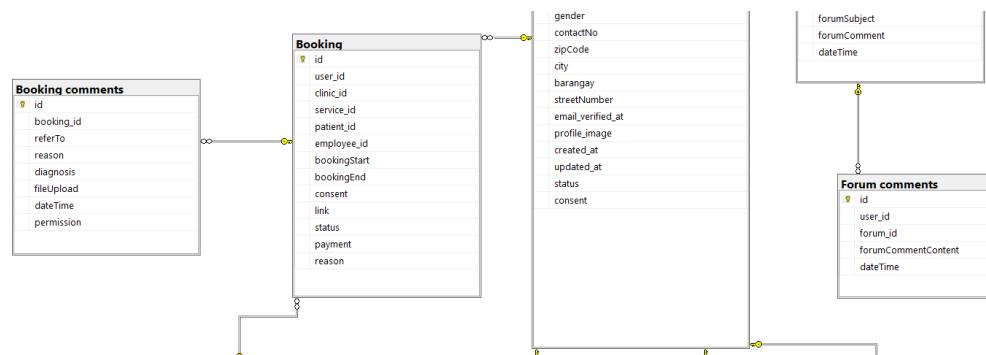
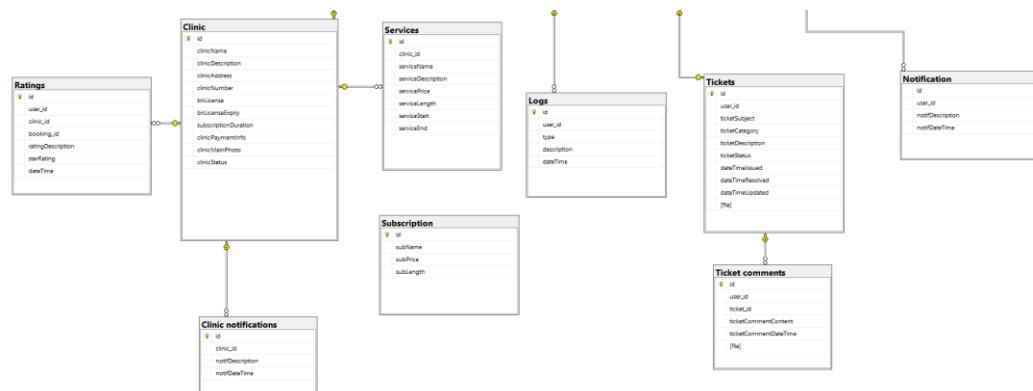


Figure - Database Schema*Figure - Database Schema*

Users - Data dictionary

Data Dictionary	Reference Number: 2
	Version Number: 3.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Users	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary

	firstName	string		No		
	lastName	string	350	No		
	middleName	string	350	Yes		
	email	string	350	No		Unique
	passWord	string	350	No		
	userType	string	350	No		
	birthDate	date	350	No		
	gender	string	350	No		
	contactNo	string	350	No		
	zipCode	string	350	No		
	city	string	350	No		
	barangay	string	350	No		
	streetNumber	string	350	No		
	email_verified_at	timestamp		No		
	profile_image	string		Yes		
	created_at	dateTime		No		
	updated_at	dateTime		Yes		
	status	boolean		No	1	

	consent	boolean		No		
--	---------	---------	--	----	--	--

Subscriptions - Data Dictionary

Data Dictionary	Reference Number: 3
	Version Number: 3.0
System Name: Mentalit-E : The Need For an Online Mental Health Services	
Platform in the Philippines	
Subject: Subscriptions	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	subName	string		No		
	subPrice	int		No		
	subLength	int		No		

Clinics - Data dictionary

Data Dictionary	Reference Number: 4
	Version Number: 3.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Clinics	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	clinicName	string		No		
	clinicDescription	string		No		
	clinicAddress	string		No		
	clinicNumber	string		No		
	birLicense	string		No		
	birLicenseExpiry	date				
	subscriptionDuration	int		No	0	
	clinicPaymentInfo	string		Yes		

	clinicMainPhoto	string		Yes		
	clinicStatus	string		No	0	

Employees - Data dictionary

Data Dictionary	Reference Number: 5
	Version Number: 1.0
System Name: Mentalit-E: The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Employees	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	clinic_id	bigInt		No		Foreign
	prcLicense	string		No		
	accountStatus	boolean		No	0	

Services - Data dictionary

Data Dictionary	Reference Number: 6
	Version Number: 1.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Services	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	clinic_id	bigInt		No		Foreign
	serviceName	string		No		
	serviceDescription	string		No		
	servicePrice	float		No		
	serviceLength	string		No		
	serviceStart	dateTime		No		
	serviceEnd	dateTime		No		

Bookings - Data dictionary

Data Dictionary	Reference Number: 7
	Version Number: 2.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Bookings	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	clinic_id	bigInt		No		Foreign
	service_id	bigInt		No		Foreign
	patient_id	bigInt		No		Foreign
	employee_id	bigInt		Yes		Foreign
	bookingStart	dateTime		No		
	bookingEnd	dateTime		No		
	consent	boolean		No		
	link	string		Yes		

	status	string		No	To pay	
	payment	string		No		
	reason	string		Yes		

Patients - Data dictionary

Data Dictionary	Reference Number: 8
	Version Number: 3.0
System Name: Mentalit-E : The Need For an Online Mental Health Services	
Platform in the Philippines	
Subject: Patients	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	clinic_id	bigInt		No		Foreign

	created_at	dateTim e		No		
	updated_at	dateTim e		Yes		
	emergencyName	string		Yes		
	emergencyNumber	string		Yes		
	familyHistory	string		Yes		
	socialHistory	string		Yes		
	medicalHistory	string		Yes		
	currentMentalState	string		Yes		
	currentMedicalTreatme nt	string		Yes		

Journals - Data dictionary

Data Dictionary	Reference Number: 9
	Version Number: 3.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Journals	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	journalSubject	string		No		
	journalDescription	string		No		
	journalDateTime	dateTime		No		

Forums - Data dictionary

Data Dictionary	Reference Number: 10
	Version Number: 3.0

System Name: Mentalit-E : The Need For an Online Mental Health Services

Platform in the Philippines

Subject: Forums

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	forumSubject	string		No		
	forumComment	string		No		
	dateTime	dateTime		No		

Forum comments - Data dictionary

Data Dictionary

Reference Number: 11

Version Number: 1.0

System Name: Mentalit-E : The Need For an Online Mental Health Services

Platform in the Philippines

Subject: Forum comments

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	forum_id	bigInt		No		Foreign
	forumCommentContent	string		No		
	dateTime	dateTime		No		

Tickets - Data dictionary

Data Dictionary	Reference Number: 12
	Version Number: 3.0
System Name: Mentalit-E : The Need For an Online Mental Health Services	
Platform in the Philippines	
Subject: Tickets	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	ticketSubject	string		No		
	ticketCategory	string		No		
	ticketDescription	string		No		
	ticketStatus	string		No	Open	
	dateTimeIssued	dateTime		No		
	dateTimeResolved	dateTime		Yes		
	dateTimeUpdated	dateTime		Yes		
	file	string		Yes		

Ticket comments - Data dictionary

Data Dictionary	Reference Number: 13
	Version Number: 1.0

System Name: Mentalit-E : The Need For an Online Mental Health Services

Platform in the Philippines

Subject: Ticket comments

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	ticket_id	bigInt		No		Foreign
	ticketCommentContent	string		No		
	ticketCommentDateTime	dateTim		No		
	file	string		Yes		

Ratings - Data dictionary

Data Dictionary

Reference Number: 14

	Version Number: 3.0
System Name: Mentalit-E: The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Ratings	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	clinic_id	bigInt		No		Foreign
	booking_id	bigInt		No		Foreign
	ratingDescription	string		No		
	starRating	int		No		
	dateTime	dateTime		No		

Logs - Data dictionary

Data Dictionary	Reference Number: 15
	Version Number: 2.0

System Name: Mentalit-E : The Need For an Online Mental Health Services

Platform in the Philippines

Subject: Logs

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	type	string		No		
	description	string		No		
	dateTime	dateTime		No		

Notifications - Data dictionary

Data Dictionary

Reference Number: 16

Version Number: 2.0

System Name: Mentalit-E : The Need For an Online Mental Health Services

Platform in the Philippines

Subject: Notifications

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	notifDescription	string		No		
	notifDateTime	dateTime		No		

Clinic notifications - Data dictionary

Data Dictionary	Reference Number: 17
	Version Number: 1.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Clinic notifications	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary

	clinic_id	bigInt		No		Foreign
	notifDescription	string		No		
	notifDateTime	dateTime		No		

Awards - Data dictionary

Data Dictionary	Reference Number: 18
	Version Number: 2.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Awards	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		Yes		Foreign
	clinic_id	bigInt		Yes		Foreign
	awardName	string		No		

Booking comments - Data dictionary

Data Dictionary	Reference Number: 19
	Version Number: 1.0
System Name: Mentalit-E: The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Booking comments	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	booking_id	bigInt		No		Foreign
	referTo	string		No		
	reason	string		No		
	diagnosis	string		No		
	fileUpload	string		No		
	dateTime	dateTime		No		
	permission	boolean		No		

Payments - Data dictionary

Data Dictionary	Reference Number: 20
	Version Number: 2.0
System Name: Mentalit-E : The Need For an Online Mental Health Services Platform in the Philippines	
Subject: Payments	

PK	Field name	Data Type	Length	Nullable	Default Value	Description
✓	id	id		No		Primary
	user_id	bigInt		No		Foreign
	clinic_id	bigInt		No		Foreign
	paymentProof	string		No		
	paymentDescription	string		No		
	paymentStatus	string		No	0	
	paymentDateTime	dateTime		No		

Development and Testing

The development was done using Visual Studio Code as the IDE, and XAMPP as its local server to host the proposed program. The testing is done through Google Chrome, which is a web browser that serves as a testing environment to check the proposed program's user interface as well as its modules. The system's capacity, capability, and performance are all put to the test through XAMPP, which will be used by developers as a test server and deployment platform. XAMPP serves as an acronym for Cross-Platform, Apache, MySQL, PHP, and Perl. Its goal is to ensure full cloud deployment by inspecting if the application is working properly. Also, it is designed to catch any issues or problems within the application (XAMPP, n.d.). The programming language used is PHP using the framework of Laravel, which follows an MVC design pattern. The MVC pattern is used in Laravel, which is a progressive framework. It was previously referenced in the PHP language. It has a number of useful features, including unit and integrated testing, authentication, and database abstraction layer. It has authorization as well, and avoids injection dependencies (Laravel, n.d.). Specifically, the method of testing used is unit testing. Aebersold (n.d.) stated that the initial level of testing is known as unit testing. It is the level where it is implemented by developers themselves and serves as the way of checking that a set

of application's specific parts are operational and working as intended in a compiled code.

Description of Prototype

The researchers created different modules for the proposed system which mainly include Login with Authentication, Registration, Forgot Password, Change Password, System Admin Dashboard, User Management Module (Manage Users/Patients/Health Professionals/Clinics), Ticket Management Module, Forum Management Module, Clinic Admin/Health Professional Profile Module, Clinic Profile Module, Manage Users/Patients Module, Manage Employees Module, Users/Patients Profile Module, Personal Journal Module, Schedule Appointment Module, Cancel Appointment Module, and EMA Module.

Implementation Plan (Infrastructure/Deployment)

It is noted that the researchers had utilized the Agile Kanban method for DevOps software development and management. This method enabled the researchers to communicate in real-time while developing the project, this is to achieve transparency and reach certain deliverables within a week for two months. Kanban also gave the researchers more flexibility in terms of changes to the

research, project flow, roles and responsibilities. Due to the nature of the project's development certain changes are bound to happen at any time, this gives the researchers to finish or revise specific tasks without delay because of approval from the team leader or member.

Using a Kanban workflow, the researchers are able to prioritize which work needs to be finished with urgency from the top of the backlogs. For the deployment of the system, the assigned capstone deployment server to be provided by the college will be used as the hosting site to deploy the web application.

Implementation Results

As stated, the kanban agile kanban was used in order to keep track of the overall progress of the project. A kanban board indicates the deliverables for the entire week or certain period of time while showing which backlogs are still in progress and finally backlogs that are finished by the researcher.

TO DO	IN PROGRESS	DONE
EMA	Subscription	Registration (General User)
Conversation (General User)	Chat Bot	Login (General User)
Notification (General User)	Manage Calendar	Email Verification (General User)
Ticketing System (General User)		CAPTCHA
FAQs (General User)		Reset Password

Audit Logs (General User)		
---------------------------	--	--

Figure. Sample Kanban Board

The Following is the timeline of backlogs that had been achieved through the course of the project's development:

- The first week of the research project had a series of backlogs which mainly consisted of constructing frameworks for both theories and concepts. Finding the concise problem for the need of an online mental health services platform, from then on the researchers provided objectives on how to address the current issues of the study. Finally the researchers had set the scope and limitations of the study which also discussed the assumptions that the users may face upon interacting with Mentalit-E.
- Second week of the project involved researching the crucial theoretical frameworks such as the Communication Theory, Social Exchange Theory, Hierarchy of Needs, and the Technology Acceptance model.. Which served as the basis for the proof of concept of the entire online mental health services platform. The theories are then expounded into conceptual frameworks, in order tailor the needs and experience of the users when interacting with the platform.

- For the third and fourth week, the researchers focused on finding local and foreign literature to support the theoretical and conceptual frameworks. The review of related literature also assisted the researchers with what features or modules are currently feasible or studies that haven't been fully understood. There are four parts of literature that were covered based on current and pre-existing issues surrounding mental health before the pandemic. These included the factors that contributed to mental health, impact of global pandemic towards mental health, challenges in addressing mental health issues, technology as a means of medical intervention. Each factor has proven studies that can support claims and theories with the exception of some areas such as rewards and benefits and mostly privacy.
- The fourth week, the researchers formulated questions for the survey which was to be distributed to the following respondents such as teens to young adults and mental health professionals associated with mental health institutions. The survey aimed to answer some factors or areas from the review or related which were not further explored or completely lacking in research.
- The fifth week, survey results were gathered from the respondents, the data collected is used to implement the features for the platform. Use case narratives and diagrams were developed along with the functional requirements and wireframe of the web application.

- The sixth week marked the start of development of the entire application; modules such as the Login, Registration, and Email verification were finished within the week.
- For the seventh week, development of other features of the platform had begun such as the profiles for each user of the platform. Each profile will have limited access to functions of the platform based on their user roles.
- The eighth week, the researchers checked for any errors on the system login and if correct functions correspond to the specific user role of the system. The use of the calendar API and the payment system API were still in debate whether which API or method should be implemented to project.
- The ninth and tenth week, forums, journal, and patient records for the platform had begun development. Revisions of any errors from previous functions are still ongoing.
- The eleventh and twelfth week, changes requests must be implemented on some tables, as many IDs from the data table conflict with other functions and roles. It had been decided that FullCalendar would be used rather than the google API calendar, the payment system only needed proof of payment for subscription.
- The thirteenth and fourteenth week, integration of all modules to the platform begins and testing for all users will begin shortly after deployment.
- The fifteenth and sixteenth week, beta testing and deployment has begun.

CHAPTER V

The study aims to determine the need of a mental health platform in which it utilizes its features and functions between the users, clinic employees, and clinic admins. Its processes include appointment scheduling, booking, forums, and messaging. This chapter presents the conclusion and recommendations made by the researchers with regards to the need of a mental health services platform towards its users. The researchers used the qualitative method as the data has been obtained via Google Forms. Moreover, the sampling method used is purposive sampling by which the population frame is composed of 5 mental health doctors from various hospitals and 40 respondents ranging from teenagers to young adults aged 13-30.

RECOMMENDATIONS

The research problems in this study include the effectiveness of an online mental health services platform to promote the factors of interpersonal relationships and also the effectiveness of an online mental health service platform as a bridge between the mental health professionals and people with mental health problems. For the hypothesis, it states that there is either a need for a mental health services

platform and not. Moreover, the research method used is qualitative method as the researchers gathered data from survey questionnaires. On the other hand, the research designs applied in this study are descriptive, relational, and causal. These are focused on manifestations surrounding the individuals' interpersonal relationships, causes and effects towards their mental health as well.

Statistical Treatment of Data

The results of the survey will be computed and tallied to determine the right system requirements for development. A weighted mean will be used to gather the overall response from the respondents to measure the level of acceptability it needs for mental health consultations and activities.

$$W = \sum (Xi * Fi)$$

N

W = Weighted Mean

Xi = Number of Responses

Fi = Rating Scale

N = Total number of respondents

Summary of Findings

The following are the summary of findings based from the survey results:

3. Factors of Interpersonal Relationships Needed to Promote the Effectiveness of an Online Mental Health Services Platform
 - 1.1. Factors that Promote Good Mental Health

Based on the findings, in terms of being knowledgeable about mental health, it has a mean of 3.25 which means that **most of the young adults have prior knowledge of issues regarding mental health.** As for **positive communication affecting the respondents during a mental breakdown**, it has a mean of 3.58. Another coping mechanism in the form of journals, hobbies, and activities, **the majority of the respondents turn to these activities as a counter from mental breakdowns** that scored a weighted mean of 3.25. Following another question regarding positive communication affecting relationships with other individuals, it showed that **most respondents agreed that it had significant effects** with a mean score of 3.25. Moving onto e-achievements, **a majority of the respondents feel motivated when they receive an e-achievement**, in which it has a mean of 3.25. Similar to this, most of the **respondents are more motivated to interact with other individuals when they receive an e-achievement in the form of a badge or certificate** in which it scored a mean of 3.13. In terms of assisting individuals in assessing their

current mental state through an EMA (Ecological Momentary Assessment), most **respondents agreed that it may give patients a brief summary of their current mental state, while giving mental professionals an insight to the patient's condition** scored a weighted mean of 3.25.

1.2. Platforms Used for Consultations

Based on the gathered data, **most respondents never considered seeking professional help regarding mental health** which made up 57.5% of responses. For consulting through the use of a platform, a large sum of the respondents (37.5%) use face-to-face consultations to acquire mental health services, 30% go through web-based applications or websites, 27.5% use mobile apps, 25% utilizes social media, while 52.5% never used any of these platforms. In terms of reaching out to mental health care services, **face-to-face meetings still had a large majority of responses with 52.5%**, followed by social media with 35%, websites or web-based applications having 32.5% of respondents, only 25% reaching out through mobile apps, while 30% of respondents neither reached out or used any of the platforms. Regarding other individuals and mental health professionals engaging each other with the help of an online mental health services platform, it has a weighted mean of 3.05 in **which most respondents agreed that it would more likely assist them with interaction**. In addition, **most respondents are likely to use an online mental health services platform** with a mean score of 3.05. For

payment, 85% of respondents are willing to pay for professional services through Mentalit-E.

1.3. Privacy

In terms of privacy, if individuals are given a private space to confide in, **the respondents feel more secure and comfortable to open up to other individuals**, thus achieving a weighted mean of 3.45. Furthermore, **private spaces provide them a sense of belongingness and inclusiveness** in which it scored a mean of 3.45. As for disclosing sensitive information, 95% of the **respondents are willing to share it with mental health professionals through the use of Mentalit-E**.

4. Effectiveness of Online Mental Health Services Platforms as a Means of Connecting Mental Health Professionals and People with Mental Health Disorders

2.1. Scheduling Consultations

According to the data gathered, Mobile Apps and the manual method (by hand) is used as a way to schedule appointments, in which both methods of consultation scored 40% of responses from clinics, and lastly 20% uses a website or a system. As for existing booking systems, **80% of clinics have none while only 20% have a pre-existing system**, which is Konsulta MD. Regarding the clinics that have no systems, **100% find it more convenient to use one in order to schedule consultations**. For delays, **60% of clinics experience issues with their scheduling processes**. According to clinics, some problems or delays may occur because of

hospital procedures during a pandemic and also with the problem of not being able to fully examine a patient through an online consultation. In addition, 60% of clinics spend about less than 30 minutes managing schedules, **while two clinics spend about 1-2 hours organizing schedules.** To relay information to the patient regarding a delay in schedule or in case of an emergency, 80% opted to use SMS or calls, while 20% use social media. Finally, the most preferred method of consultation is through face-to-face meetings with 60%, telecommunications and mobile applications both ranking second with 20%.

2.2 Managing Patient Records

Based on the results, **manually managing patient records is the method used by most clinics with only one clinic using a website or system.** Most of the clinics which make up of **60% responses experience delays managing patient records.** All clinics are not restricted to access patient records, although most clinics do not let patients access their own medical records. Reasons may vary because of confidentiality or policies, but medical certificates can be requested in abstract or simplified form free of confusing medical jargon. **For the most preferred method of storing medical data, most clinics would rather use websites or systems.**

2.3 Additional Features

For additional features, **all clinics agreed that forums can be a beneficial addition to an online platform as it can bolster interaction between mental health professionals and individuals.** Furthermore, **all clinics agreed that e-**

achievements such as badges can help motivate and improve an individual's mental state. Another additional feature that all clinics agreed that it may help them in assessing individuals further is an EMA test implemented on an online mental health services platform. For managing financial data, 80% do it manually, while 20% use a website or a system. Finally, all clinics agreed that an online mental health service platform can be an effective tool for providing statistics and data from consultations and financial data.

2.4 Effectiveness of an Online Mental Health Service Platform

Based on the responses of the survey, it shows that all clinics believe that an online mental health services platform can effectively connect individuals with mental health professionals, and this scored a weighted mean of 4. All mental health clinics also agreed that having an online platform for mental health can raise awareness for mental health in the Philippines, with a mean score of 4. Another question which scored a weighted mean of 4 stated that having this type of platform can be effective in managing patient records. For the inclusion of mental health forums in an online mental health services platform (having a mean score of 3.6), it meant that clinics believed that forums have an effective use in raising awareness among individuals. For the last finding which scored a weighted mean of 3.8, the clinics agreed that an online mental health services platform can streamline payment processes.

Conclusion

Based on the summary of findings as stated previously, the researchers were able to conclude the following:

5. Young adults agreed upon the stated factors such as positive communication, journals, activities, e-achievements, and EMAs indeed promote good mental health because it has significant effects in protecting them from mental breakdowns as well as motivating them in interacting and maintaining their relationships with other individuals. It would even help professionals have an insight from their mental health. The majority of young adults never considered seeking professional help regarding mental health and prefer face-to-face consultations, but the majority of them will likely use an online platform. It was also stated that online consultations would likely help in assisting the patients as long as the professionals are interactive with them, with the supporting result that they are also willing to pay for professional services through the researchers' proposed system. For their privacy, young adults stated that they feel secure and comfortable in opening up to other individuals when they confide in a private space. Furthermore, they are willing to disclose their sensitive information with mental health professionals through the use of the proposed system.
6. The majority of clinics use mobile apps and manual methods (by hand) as a way to schedule appointments, in which few of them only use a website/web

application. It is concluded that there is indeed a need for an online mental health platform because a lot of clinics don't have a pre-existing booking system. Moreover, it would be convenient for clinics to use the proposed system because it is useful in scheduling consultations, given that they struggle with problems such as issues involving scheduling processes. Meanwhile, most clinics spend less than 30 minutes organizing schedules, and professionals prefer consultation through face-to-face meetings. Upon managing patient records, the majority of clinics manually manage patient records, in which they experience delays managing patient records. Thus, most clinics would rather use websites or systems as their most preferred method of storing medical data.

7. Features such as EMAs, e-achievements, and display of financial data & statistics being added to the proposed online mental health platform are all agreed by clinicians as beneficial tools in maintaining its effectiveness in bridging individuals with mental health professionals. It was also concluded that an online platform for mental health can significantly raise awareness for mental health in the Philippines.

Recommendations

Based on the results and findings, the researchers recommend the following:

8. There is indeed a need for a mental health services platform for its users such as teenagers and young adults because the stated features of the proposed system has a significant impact on promoting good mental health. It also promotes comfort and security as they consult with mental health professionals in a private space. Hence, it is recommended they should use the proposed mental health services platform.
9. As the common problems stated by clinics based on the findings include experiencing delays in managing patient records and scheduling consultations as a result of the majority of them using the manual method (by hand), it is therefore recommended for them to consider utilizing a web application/system to ease their processes instead of using the manual method.
10. Based on the stated findings, the majority of doctors find convenience in using a web application/system for their clinics because a lot of them don't have a pre-existing booking system and it serves as their the most preferred method of storing medical data as well as streamlining payment processes. Furthermore, it is considered by them as an effective tool in providing statistics and data from consultations and financial data. Thus, it is

recommended for them to avail themselves of using a web application/system developed with booking system, payment system, and storage features.

11. For the future researchers, it is recommended that they explore more on the features and functionalities of what makes a mental health services platform effective. Moreover, they should research and study the variables emphasizing the need for a mental health services platform as well to book & schedule appointments, manage patient records, and display statistics of financial data.

12. It is also recommended for future researchers that they should conduct an extensive study with regards to the description of their respondents not limited to only teenagers and young adults. Specifically, the quantity of respondents including clinics must be increased and the area of focus must also not only be limited to Metro Manila but to other locations in the Philippines as well. Lastly, future researchers should be boundless in choosing their research design and methodology when conducting a study regarding the need for a mental health service platform.

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Appendix A**Letter of Request (for Teenagers to Young Adults)**

Good day! We are 4th Year students from De La Salle - College of Saint Benilde under the Information Systems department, and we aim to know the adequacy of technological intervention and the needs of emotional support towards individuals with mental health problems and develop a system based on the results to be acquired in this study.

We, Miguel Cerrer, Ralph Dahilig, Michail Dela Cruz, and Zach Estrella, kindly ask for your precious time in helping us with our research by answering the questionnaires we have for you. We have prepared a series of questions for you to answer that will help with garnering the data to answer queries with regards to the adequacy of technological intervention and the needs of emotional support towards individuals with mental health problems.

Please read the instructions carefully before proceeding and answer the questions with full and utmost honesty. Rest assured that your answers will be treated with absolute confidentiality and your identity will be kept safe and hidden.

Data Privacy Notice

The researchers respect the individual's right to privacy. We are committed to protect the confidentiality of the personal information you will provide and we are bound to comply with the Data Privacy Act of 2012 (RA 10173). By answering this survey form, you are consenting to our collection and use of information in accordance with this Privacy Notice. In this survey form, you will be required to input some of your personal information which is necessary for the study we are conducting. The researchers will not disclose the information stated herein without your permission.

- I have read and understood the above Data Privacy Notice and I voluntarily and knowingly agree to disclose my personal data to the researchers.

Appendix B

Data Gathering Instrument

Survey A: Teenagers to young adults

Part 1: Profile of the respondents / demographics

Full name:

Email Address:

Age:

School/Workplace:

Part 2: Questions

1. How knowledgeable are you in terms of mental health issues?

1 2 3 4

Least Likely

○ ○ ○ ○

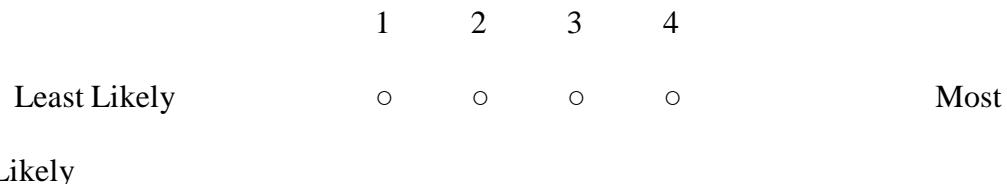
○

○

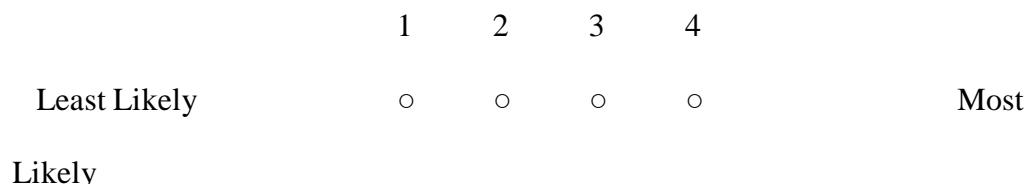
Most

Likely

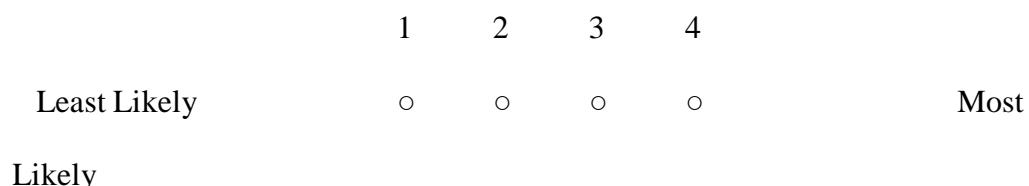
2. How does positive communication (i.e. motivation, support, eg.) affect your mental health during mental breakdowns



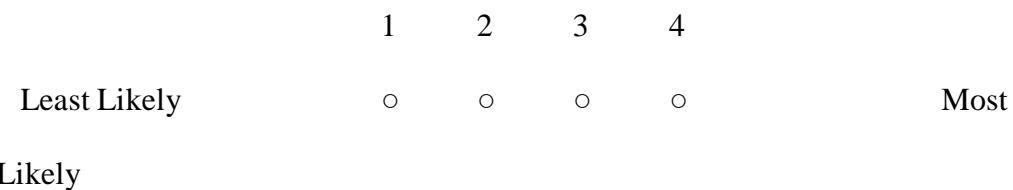
3. How does positive communication (i.e. motivation, support, eg.) affect your relationships with other people?



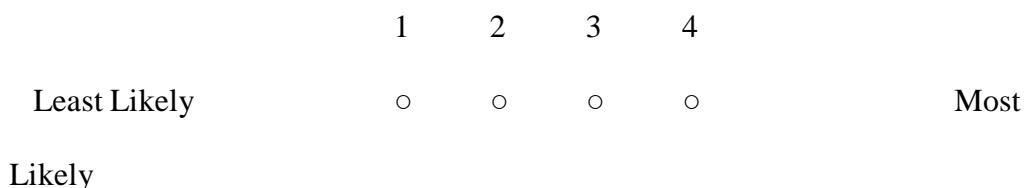
4. How does getting any kind of e-achievement (i.e. badges, certificates, eg.) motivate yourself?



5. How does getting any kind of e-achievement (i.e. badges, certificates, eg.) make you feel good and motivate you to interact with other people?



6. How does writing/expressing your own thoughts (i.e. journals , activities, hobbies, eg.) help you during mental health breakdowns?



EMA — Ecological Momentary Assessment - It involves a set of questions that aims to assess the behavior of individuals. (source of the example below:

<https://content.iospress.com/media/jad/2019/71-4/jad-71-4-jad190091/jad-71-jad190091-g001.jpg?width=755>

<i>Over the past day...*</i>	<i>Not at all</i>	<i>A little of the time</i>	<i>A lot of the time</i>	<i>Nearly all of the time</i>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1. I enjoy my friends ^a	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I have been feeling nervous anxious or on edge ^b	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I have not been able to stop or control worrying ^b	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Overall I expect more good things to happen to me than bad ^a	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I have been feeling down, depressed, or hopeless ^c	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I have had little interest or pleasure in doing things ^c	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The thought of harming myself has occurred to me ^d			yes	no

* If two telephone EMA checks are initiated in the same day, the wording, "since we last spoke" is used.
^a Item not scored
^b Anxiety subscale item
^c Depression subscale item
^d Suicidal ideation item

7. How does receiving daily assessments (such as EMAs) assist you in recognizing your current mental health state?

1	2	3	4	
Least Likely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most
Likely				

8. How does confiding in a private space (consultation/session with friends/health professional) make you feel more secure and comfortable to open up to others?

1	2	3	4
---	---	---	---

O O O C

Most

Likely

O O O C

Likely

9. How does confiding in a private space (consultation/session with friends/health professional) make you feel the sense of belongingness and inclusiveness?

1 2 3 4

○ ○ ○ C

Most

Likely

10. Have you considered seeking professional help in relation to Mental Health?

1 2 3 4

○ ○ ○ ○

Likely

11. If yes from the previous question, Which platform do you utilize in acquiring mental health services?

- Web based/websites
 - Mobile Apps
 - Social Media
 - Face-to-face consultations

Not applicable

12. How do you reach out to Mental Health care services?

Web based/websites

Mobile Apps

Social Media

Face-to-face consultations

Not applicable

13. How likely are you going to engage with other individuals and mental health professionals through an online mental health services platform?

1 2 3 4

Least Likely

○ ○ ○ ○

Most

Likely

14. How likely are you going to use an online mental health service platform?

1 2 3 4

Least Likely

○ ○ ○ ○

Most

Likely

15. Are you willing to pay for a mental health professional's services through our online platform?

Yes

No

16. Are you willing to disclose your information to mental health professionals through our online platform?

Yes

No

17. Do you have any comments / suggestions regarding the application "Mentalit-E"?

Thank you for your cooperation. Your feedback will be beneficial for the Development of an Online Mental Health Services Platform "Mentalit-E"!

Survey B: Mental Health Professionals**Letter of Request (for Mental Health Professionals)**

Good day! We are 4th Year students from De La Salle - College of Saint Benilde under the Information Systems department, and we aim to know the adequacy of technological intervention and the needs of emotional support towards individuals with mental health problems and develop a system based on the results to be acquired in this study.

We, Miguel Cerrer, Ralph Dahilig, Michail Dela Cruz, and Zach Estrella, kindly ask for your precious time in helping us with our research by answering the questionnaires we have for "Licensed Mental Health Professionals/Health Care Providers WHO HAVE EXPERIENCE/CURRENTLY WORKING ON CLINICS/HOSPITALS (i.e. Doctors, Nurses, Psychologists, Psychiatrists, etc.)". We have prepared a series of questions for them to answer that will help with garnering the data to answer queries with regards to the adequacy of technological intervention and the needs of emotional support towards individuals with mental health problems.

Please read the instructions carefully before proceeding and answer the questions with full and utmost honesty. Rest assured that your answers will be treated with absolute confidentiality and your identity will be kept safe and hidden.

Data Privacy Notice

The researchers respect the individual's right to privacy. We are committed to protect the confidentiality of the personal information you will provide and we are bound to comply with the Data Privacy Act of 2012 (RA 10173). By answering this survey form, you are consenting to our collection and use of information in accordance with this Privacy Notice. In this survey form, you will be required to input some of your personal information which is necessary for the study we are conducting. The researchers will not disclose the information stated herein without your permission.

- I have read and understood the above Data Privacy Notice and I voluntarily and knowingly agree to disclose my personal data to the researchers.

Privacy Consent

- Are you willing to disclose the information of your patient and your clinic through the online mental health platform?

Part 1: Profile of the respondents / demographics

Name:

Email:

Address:

Age:

Gender:

- Male
- Female
- Prefer not to say

Name of the Hospital / Clinic

Position in the Hospital / Clinic

PRC License

Address of the Hospital / Clinic

Part 2: Questions**Scheduling Consultations**

1. How do you schedule your consultations?

- Manual
- Excel
- Website / System
- Mobile Apps

2. Does your hospital/clinic/company have an existing booking system?

- Yes
- No

3. If yes from the previous question, state the name of the system?

4. If not, would you find it easier to use an application or system to schedule a patient's consultation?

- Yes
- No

5. Do you experience delay during the scheduling process?

Yes

No

6. How much time do you spend managing the list of schedules of consultation?

Less than 30 minutes

30 minutes - 1 hour

1 - 2 hours

More than 2 hours

7. How do you relay information to the patient if there is an emergency or delay to their appointment?

SMS / Call

Manual

Social Media

Systems

8. Please specify any problems encountered when scheduling a patient's consultation (either online or face-to-face). if none answer n/a

9. What is your most preferred type of scheduling consultation?

Face-to-face consultations

- Teleconsultations
- Website / System
- Mobile Applications

Managing Patient Records

1. How do you manage patient records?

- Manual
- Excel
- Website / System
- Mobile Apps

2. How much time do you spend managing the patient's medical records?

- Less than 30 minutes
- 30 minutes - 1 hour
- 1 - 2 hours
- 2 hours or more

3. Do you experience delays during the managing of patients' medical records?

- Yes
- No

4. If yes from the previous question, state the reason why.

5. Do you have access to the patient records?

Yes

No

6. If no from the previous question, state the reason why

7. Does your clinic let the patient access their own medical records?

Yes

No

8. If yes from the previous question, how can the patient access their own medical records?

9. If no from the previous question, state the reason why.

10. What is your most preferred type of storing medical records?

Manual

- Excel
- Websites / System
- Mobile Apps

Additional features

1. Do you think that an interaction between individuals and mental health professionals (through online community forums) will be beneficial for both parties?

- Yes
- No

2. Do you think that e-achievements and badges will motivate individuals and boost their mental health state?

- Yes
- No

3. Do you think that a pre-assessment exam answered by individuals can help them?

- Yes
- No

4. How do you manage your financial data?

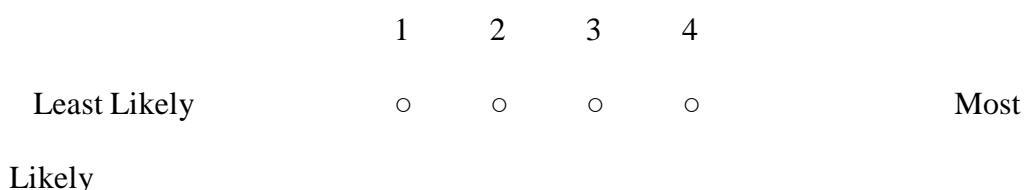
- Manual
- Excel
- Websites / System
- Mobile Apps

5. Do you think that an online mental health service platform that can provide statistics and data regarding the consultations by your clinic will be effective in managing your financial data?

- Yes
- No

Effectiveness of an Online Mental Health Service Platform

1. I believe that having an online mental health service platform will be an effective way to bridge individuals with mental health professionals.



2. I believe that having an online mental health service platform will effectively raise mental health awareness among individuals in the Philippines.

1 2 3 4

Likely

3. I believe that having an online mental health service platform will be effective in terms of managing a patient's schedule.

1 2 3 4

Likely

4. I believe that having an online mental health service platform will be effective in terms of managing a patient's medical records.

1 2 3 4

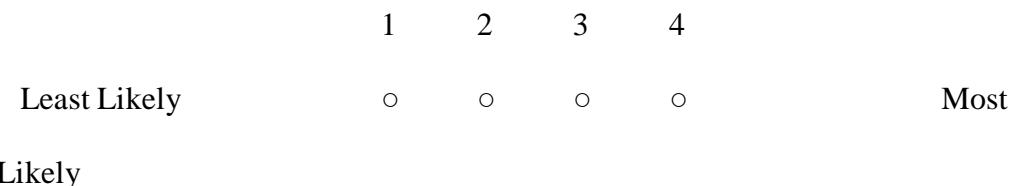
Likely

5. I believe that having a community forum inside the online mental health service platform will be effective to the mental health awareness of the individuals.

1 2 3 4

Likely

6. I believe that having an online mental health service platform will effectively streamline the payment processes.



Questions regarding the system

1. Would you be interested in using an online-mental health service platform "Mentalit-E" once it is ready to implement?

- Yes
- No

2. How much are you willing to pay in order to use the functionalities provided by the "Mentalit-E" (scheduling, managing of patient's records, community forum, financial statistics data based on consultations conducted) on a MONTHLY basis?

- Php 200-300
- Php 400-500
- Php 600-700
- Php 800 and above

3. Do you have any comments and/or suggestions?

**Thank you for your cooperation. Your feedback will be beneficial for the
Development of an Online Mental Health Services Platform "Mentalit-E"!**

Appendix C
Curriculum Vitae

Reeno Miguel Cerrer

14 Monroe Bend, Parkwood Greens Executive

Village, Phase 1-D, Maybunga, Pasig City

Contact No. +63 9477967917

E-mail Address: cerrermogui@yahoo.com



EDUCATION

Bachelor of Science in Information Systems

2018 – Present

School of Management and Information Technology (SMIT)

De La Salle College of Saint Benilde

2544 Taft Ave., Malate, Manila, Philippines

High School and Senior High School Graduate

2013 – 2018

Sacred Heart Academy of Pasig

3 M. Suarez Avenue, Maybunga,

Pasig City

Secondary Education

2007 – 2013

Sacred Heart Academy of Pasig

3 M. Suarez Avenue, Maybunga,

Pasig City

AWARDS, SEMINARS AND TRAININGS ATTENDED

Financial Wellness 101 Webinar

Graduate's Survival Guide for

Winning a Career

SKILLS

- Proficient in English speaking and writing skills.
- Computer literate
- Time management
- Familiar with Programming (HTML & CSS, C#, and Java)

Curriculum Vitae

Ralph Lance Martin Dahilig



Lot 34 Block 28-A Tulingan St., Kaunlaran Village

Caloocan City

Contact No. +63 9950429880

E-mail Address: ralphlance11@gmail.com

EDUCATION

Bachelor of Science in Information Systems

2018 – Present

School of Management and Information Technology (SMIT)

De La Salle College of Saint Benilde

2544 Taft Ave., Malate, Manila, Philippines

High School and Senior High School Graduate

2015 – 2018

Notre Dame of Greater Manila – Caloocan

Madre Ignacia Ave., Grace Park

Caloocan City

Secondary Education

2011 – 2014

Scuola Media “Eugenio Colorni”

Via Paulo Uccello, 1/A, 20148

Milan, Italy

AWARDS, SEMINARS AND TRAININGS ATTENDED

Benilde Hacks 2019 – Hackathon

June 9, 2019

Topic: Exhibiting passion in developing

solutions towards agricultural sustainability

Web Design

De La Salle College of Saint Benilde

SKILLS

- Proficient in speaking English and Filipino
- Speaking and writing basic Italian
- Computer Literate
- Easily Adaptable
- Time Management
- Programming (HTML/CSS, C#, Java)

Curriculum Vitae

Michail Joaquin Teodosio Dela Cruz

22 Concerto St., Sta. Cecilia Village

Las Piñas City

Contact No. +63 9565103287

E-mail Address: delacruzchail@gmail.com



EDUCATION

Bachelor of Science in Information Systems

2018 – Present

School of Management and Information Technology (SMIT)

De La Salle College of Saint Benilde

2544 Taft Ave., Malate, Manila, Philippines

High School and Senior High School Graduate

2015 – 2018

San Beda College Alabang

8 Don Manolo Blvd, Cupang, Muntinlupa, 1770 Metro Manila

Muntinlupa City

AWARDS, SEMINARS AND TRAININGS ATTENDED

Business of Fashion Professional (BoF)

June 25, 2021

User-Education Training Session

De La Salle College of Saint Benilde

SKILLS

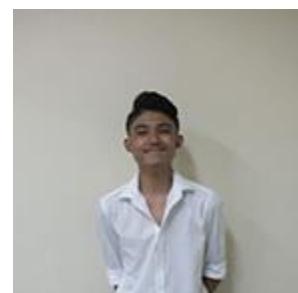
- English fluency
- Strong communication skills
- Good writing skills
- Computer literate
- Time and stress management
- Good work ethics
- Teamwork and collaboration values
- Programming (Web Design, C#, PHP, Java, Database)

Curriculum Vitae

Curriculum Vitae

Zach Gabriel Salonga Estrella

Unit 715 #945 Estrada bldg., Estrada St.



Malate Manila City

Contact No. +63 9770971214

E-mail Address: zachgabriel27@gmail.com

EDUCATION

Bachelor of Science in Information Systems

2018 – Present

School of Management and Information Technology (SMIT)

De La Salle College of Saint Benilde

2544 Taft Ave., Malate, Manila, Philippines

Senior High School 2016-2018

Philippine Women's University Manila - JASMS

High School 2014 – 2016

San Isidro Catholic School

1830 Taft Avenue

Pasay City

Secondary Education 2011 – 2014

Little Angel Study Center

32 W 3rd St, Olongapo City

Zambales

AWARDS, SEMINARS AND TRAININGS ATTENDED

Benilde Hacks 2019 – Hackathon

June 9, 2019

Topic: Exhibiting passion in developing
solutions towards agricultural sustainability

Web Design

De La Salle College of Saint Benilde

SKILLS

- Proficient in speaking English and Filipino
- Computer Literate
- Easily Adaptable
- Time Management
- Programming (Web Design, C#, PHP)

Appendix D

User Manual

Mentalit-e

PRODUCT USER MANUAL

I. Introduction

I.I. System Overview

The limited number of mental health resources and facilities in the Philippines severely affects the nation's ability to remedy the growing number of mental health disorders. Mental health organizations in the Philippines are trying to face these challenges by implementing better services and have a wider reach to accommodate those that cannot or easily avail these services.

Mentalit-E aims to address the need for an online mental health services platform in the Philippines. By booking sessions through a list of available clinics that offer therapeutic services. The user can connect with mental health clinics all around the country. The platform will also bridge the gap between users and mental health professionals through the use of forums. Clinics can also utilize the platform's health record keeping and track previous transactions.

I.II. Users

I.II.I. Patients

Regular users or patients are one of the primary users of the system, they are required to sign-up in order to book sessions, view forums, set schedules, and report any concerns about the system through ticketing.

I.II.II. Clinic Employees

Clinic employee is a user of the system that will manage the clinic's appointment schedules and edit clinic information for patients to see. Similar to the patient user clinic, employee users can issue tickets about the system.

II. Getting Started

To register an account go to the Mentalit-E homepage and click on register on the top right corner of the system.

Mentalit-E[Login](#) [Register](#)**Mentalit-E**

Welcome to the Philippines' leading mental health services platform. Book now with our quick and manual booking features. Register and choose your very own professional in the simplest and efficient way possible. Help us and become a medical professional to provide the best services for your potential patients.

[Be a User](#)[Be a Medical Professional](#)

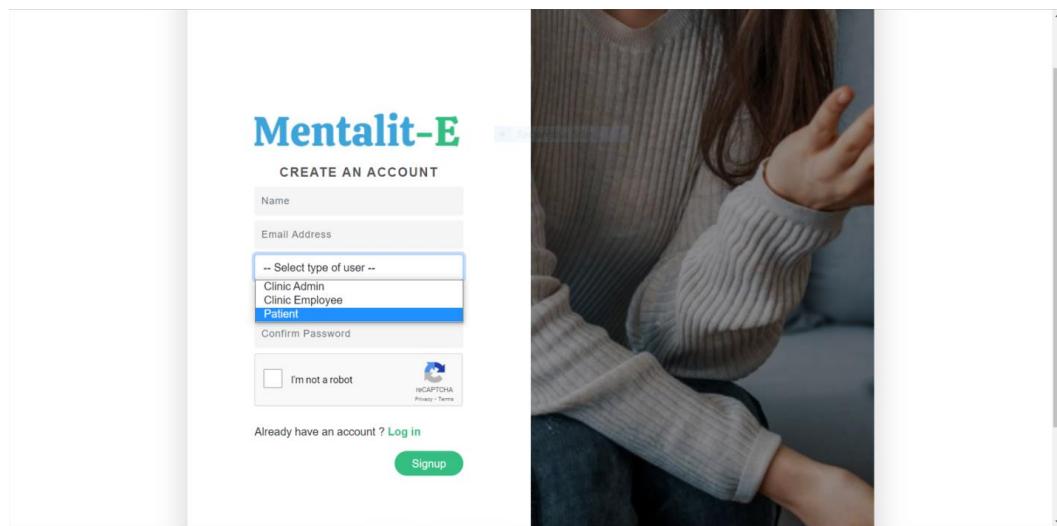
Once clicking register it will redirect you to the registration page

Mentalit-E

CREATE AN ACCOUNT

Name
Email Address
-- Select type of user --
Password
Confirm Password
<input type="checkbox"/> I'm not a robot
<small>reCAPTCHA Privacy - Terms</small>

[Already have an account ? Log in](#)[Signup](#)



Fill out the required information and select the type of user that would like to register as. Once completing the form, complete the CAPTCHA and click on sign up, then you will be redirected to the Mentalit-E homepage.

The image contains two vertically stacked screenshots of a web application interface. Both screenshots show a header with the text "Mentalit-E" and navigation links for "Community Forum", "Clinic", "Profile", and "Ralph Lance". Below the header is a form titled "Apply to a clinic". The first screenshot shows the initial state of the form with fields for "Clinic list" (containing the placeholder "Select the clinic") and "PRC License" (with a file input field showing "Choose File" and "No file chosen"). A green "Apply to a clinic" button is at the bottom. The second screenshot shows the same form after an application has been submitted, with a green message bar at the top stating "Your application is ongoing. Please contact your Clinic Administrator". The rest of the form is identical to the first screenshot.

If you registered as a clinic employee, you must apply to your clinic and have a PRC license as a requirement. After applying the you must contact your clinic administrator in order to confirm your application

Access Level	Privileges	Process to gain access
PATIENTS	<ul style="list-style-type: none"> ● Edit Personal Info ● View Booking ● Book Session ● View Calendar ● Manage Medical Records ● Create Journal Entries <p>Send a ticket (report issue/s about the system)</p>	Users must register to the system to gain access.
CLINIC EMPLOYEES	<ul style="list-style-type: none"> ● Edit Personal Info ● View Booking ● View Calendar ● Create Forum ● Send a ticket (report issue/s about the system) 	Users must register and apply for a clinic. The application must be confirmed by the clinic admin.

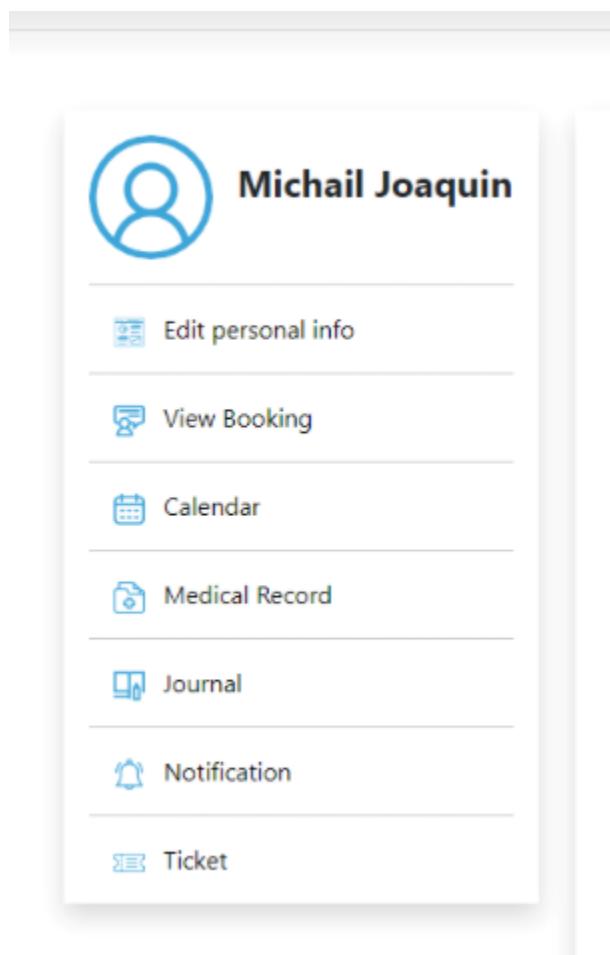
III. Patient Privileges

III.I. Edit Personal Info

To navigate to your profile click on the top right corner of the navbar and select your profile



After clicking on your profile the system will display the following options on the left side of the screen. From there you can select the option to edit personal info, there will be specific fields on the general information that may wish to change.



The screenshot shows the 'General Information' section of the Mentalit-E application. On the left, there is a sidebar with icons for 'Medical Record', 'Journal', 'Notification', and 'Ticket'. The main area contains fields for First Name (Michal Joquin), Middle Name (T.), Last Name (Dela Cruz), City (Paranaque), Barangay (Barangay Lambot), Street # (143), Zip Code (1020), Birth Date (2022-03-20), and Contact Number (09123456789). Below these fields are 'Gender: Male' and a 'Save changes' button. To the right of the save button is an envelope icon.

III.II. Booking

To book at a clinic you can go to your navbar and select quick booking or manual booking if you want to look for a specific clinic.

The screenshot shows the 'Book now!' section of the Mentalit-E application. It features two clinic cards. The first card is for 'Clinic' (No ratings yet) located at Bulacan Great Clinic, with a 'View' button. The second card is for 'Wow Clinic' (No ratings yet) located at Bataan Zubic Orani Wow Malibangdami, also with a 'View' button. At the top right, there is a search bar and a magnifying glass icon. The top navigation bar includes links for Community Forum, Quick Booking, Manual Booking, Profile, and Dela Cruz.

The image displays two screenshots of a mobile application interface for "Mentalit-E".

Screenshot 1: Services offered by Clinic

This screen shows a service listing for "Massage (5 hours)". The details are:

- Service: Massage
- Duration: 5 hours
- Price: PHP 500

A green "Schedule" button is located at the bottom right of the card.

Screenshot 2: Clinic Profile

This screen shows a clinic profile for "Great Clinic". The details are:

- Rating: 0 stars out of 5 | Total of 2 booking/s conducted
- Services Offered: Massage
- Location: Bulacan
- Price Range: 500 to 500 PHP

A green "View schedule" button is located at the top right of the card.

Both screenshots include a small green circular icon with a white envelope symbol in the bottom right corner.

Mentalit-E Community Forum Quick Booking Manual Booking Profile Dela Cruz ▾

Book Massage

Service Name: Massage
Service Description: Massage
Service Price: 500 PHP
Service Length: 5 hour/s
Date of booking available
(2022-03-21 00:15:00 to 2022-03-22 00:16:00)

mm/dd/yyyy --> mm/dd/yyyy -->

Payment

Choose File No file chosen Payment Info

I give my consent for processing my confidential data

Book



Selecting a clinic will provide you information about the clinic's location, what services are available and the prices they offer, and ratings. You can also view their schedules to check for availability.

Mentalit-E

The screenshot shows a user interface for managing bookings. On the left, a sidebar for 'Michail Joaquin' lists options: Edit personal info, View Booking, Calendar, Medical Record, Journal, Notification, and Ticket. The main area is titled 'List of booking' and displays two entries:

#	Clinic	Service	Booking Date	Status	Link	Actions
1	Clinic	Massage	2022-03-21 17:20:00 to 2022-03-21 18:20:00	To Pay	No Link yet	View Cancel
2	Clinic	Massage	2022-03-22 17:41:00 to 2022-03-22 18:41:00	To Pay	No Link yet	View Cancel

Showing 1 to 2 of 2 entries

Mentalit-E

The screenshot shows a similar user interface. The sidebar for 'Michail Joaquin' is identical. The main area is titled 'Patient Booking History for Clinic' and displays two entries:

#	Service	Booking Date	Status	Actions
1	Massage	2022-03-21 17:20:00 to 2022-03-21 18:20:00	To Pay	View
2	Massage	2022-03-22 17:41:00 to 2022-03-22 18:41:00	To Pay	View

The screenshot shows a user profile for Michail Joaquin. On the left, there's a sidebar with options: Edit personal info, View Booking, Calendar, Medical Record, Journal, Notification, and Ticket. The main area displays a green banner saying "Booking is successful". Below it is a table titled "List of booking" with columns: #, Clinic, Service, Booking Date, Status, Link, and Actions. There are two entries:

#	Clinic	Service	Booking Date	Status	Link	Actions
1	Clinic	Massage	2022-03-21 17:20:00 to 2022-03-21 18:20:00	To Pay	No Link yet	<button>-</button>
2	Clinic	Massage	2022-03-22 17:41:00 to 2022-03-22 18:41:00	To Pay	No Link yet	<button>-</button>

Showing 1 to 2 of 2 entries.

The screenshot shows a detailed view of a booking for Dela Cruz, Michail Joaquin T. The top bar includes links for Community Forum, Quick Booking, Manual Booking, Profile, and Dela Cruz. The sidebar on the left is identical to the previous screenshot. The main area is titled "View Booking" and contains the following information:

- Patient name: Dela Cruz, Michail Joaquin T.
- Date: 2022-03-21 17:20:00 to 2022-03-21 18:20:00
- Clinic: Clinic
- Status: To Pay
- Service availed: Massage
- Massage

You can view booking history and upcoming appointments in your profile, it will indicate whether or not the appointment has been paid. Actions will consist of viewing or canceling an appointment.

The screenshot shows a user profile for 'Michail Joaquin' on the left, featuring a photo placeholder, a name, and a sidebar with links: Edit personal info, View Booking, Calendar, Medical Record, Journal, Notification, and Ticket. To the right is a 'List of notifications' table with two entries:

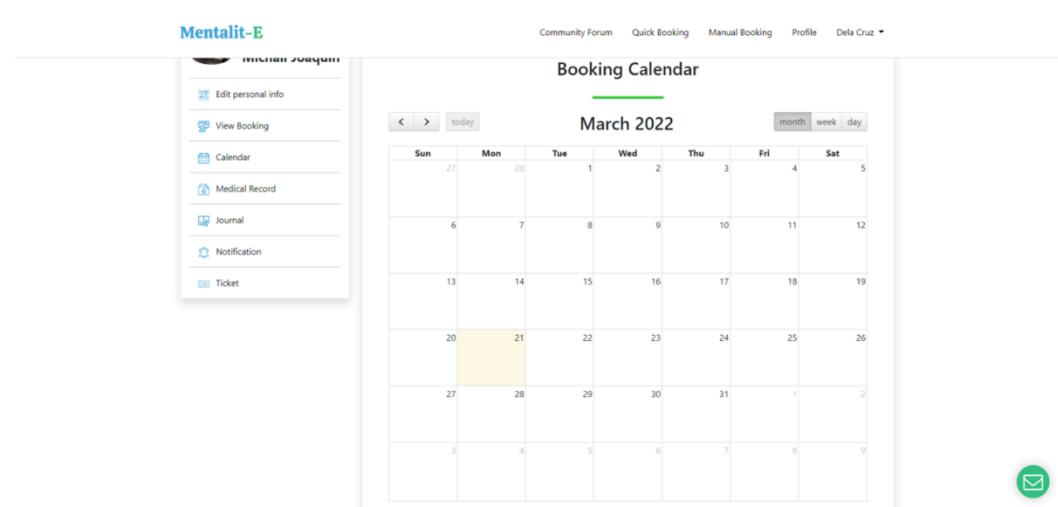
	Description	Date
1	Dela Cruz has booked an appointment for 2022-03-21T17:20 to 2022-03-21T18:20	2022-03-21 04:39:59
2	Dela Cruz has booked an appointment for 2022-03-22T17:41 to 2022-03-22T18:41	2022-03-21 04:42:04

Below the table, it says 'Showing 1 to 2 of 2 entries' and has 'Previous' and 'Next' buttons. A green envelope icon is visible on the right side of the page.

Any actions you make for these appointments will create notifications for the user.

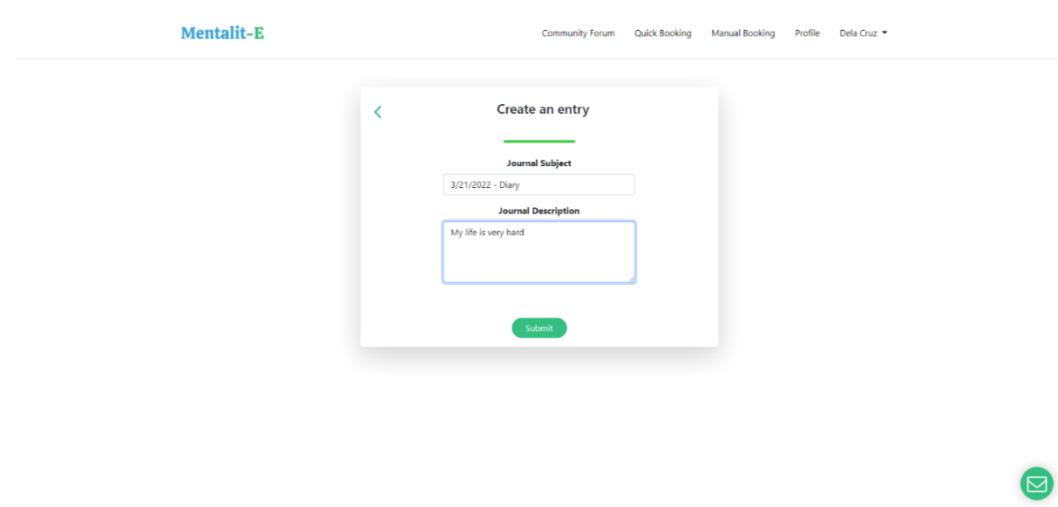
III.III. Calendar

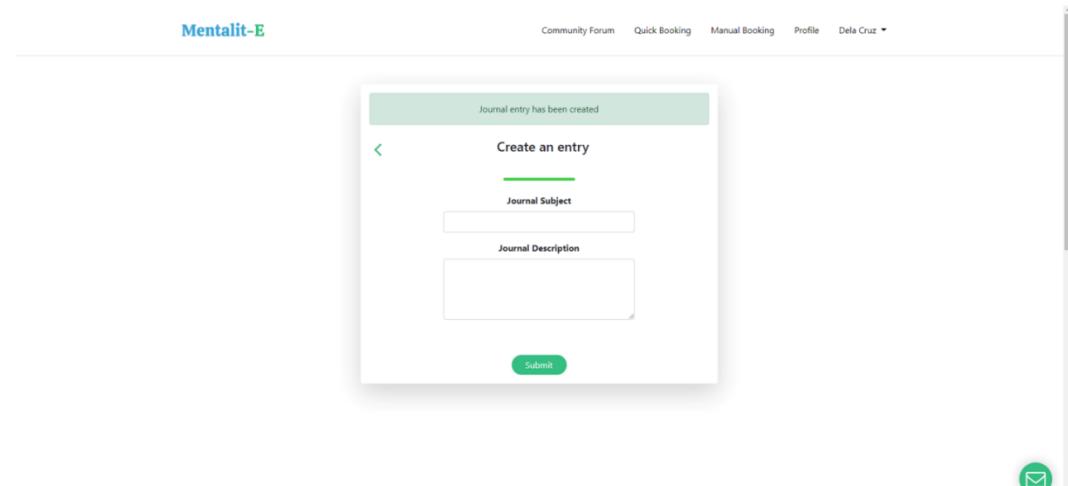
The calendar is also located in profile, the calendar will provide you information about any upcoming appointments you have scheduled with clinics during the month, week, and day.



III.IV. Creating a Journal Entry

The journal entries will be located in your profile, feel free to write any subject in your journal rest assured that any private information in your journal will be confidential.





Once you have created a journal entry it will be moved onto a list of entries you have created.

III.V. Viewing Medical Record

The medical record is located inside the user profile, once you have selected “medical record” on the profile options a list of previous sessions will pop up including the clinic that conducted the session. To see more info hover the mouse to the view action.

The screenshot shows a user profile for "Michail Joaquin". The sidebar includes links for Edit personal info, View Booking, Calendar, Medical Record, Journal, Notification, and Ticket. The main area displays a "List of medical records" with one entry:

#	Clinic Name	Date Created	Date Updated	Actions
1	Clinic	2022-03-21 04:39:59	2022-03-21 04:42:04	<button>View</button>

Showing 1 to 1 of 1 entries



The screenshot shows a "Patient Medical Record for Clinic" for "Name: Michail Joaquin Dela Cruz" with a "Date first consulted: 2022-03-21 04:39:59". The page includes sections for Emergency contact number, Name of person, Address, Contact Number, Medical History, Family History, and Social史.



III.VI. Creating a ticket

If you have experienced errors or difficulties with the system, users can send a ticket to the system administrator. The ticketing system is located in the user profile, to send a ticket click the “file a ticket” button.

The screenshot shows the Mentalit-E platform interface. On the left, there is a sidebar for a user named Michail Joaquin with options like Edit personal info, View Booking, Calendar, Medical Record, Journal, Notification, and Ticket. The main area is titled "List of tickets" and shows a single entry with the subject "12345", category "Feedback", date issued "2022-03-20 12:25:20", date resolved "2022-03-20 12:27:51", and status "Archived". A green "View" button is visible next to the entry. Below the table, it says "Showing 1 to 1 of 1 entries". At the bottom right of the main area, there is a small envelope icon.

To view a ticket, move your mouse over the actions button called “view”.

Users can keep track of their tickets and check whether it is resolved or not.

The screenshot shows a detailed view of a ticket for Michail Joaquin. The ticket subject is "12345" and the category is "Feedback". The date issued is "2022-03-20 12:25:20" and the ticket status is "Archived". There is a section for "Add your feedback" with a text input field. At the bottom right of the main area, there is a small envelope icon.

IV. Clinic Employee Privileges

IV.I. Edit Personal Info

To edit your profile information you must hover your mouse over to the upper right corner and click on your profile name. In your profile there are options at the left and click “edit personal info”.

The screenshot shows a user profile for "Ralph Lance". On the left, a sidebar menu includes "Edit personal info", "View Booking", "Calendar", "Notification", and "Ticket". The main area displays the user's name, "Ralph Lance M. Dahilig", and their contact details: Email Address (clinicemployee@gmail.com), Type of user (ClinicEmployee), Birth date (2022-03-21), Gender (Male), Contact Number (09123456789), Address (Barangay Tibay #69 Caloocan, 1000), and Awards (None). A green envelope icon is visible in the bottom right corner.

The screenshot shows the "Edit personal info" form for "Ralph Lance". The left sidebar remains the same. The main area features a placeholder profile picture with a "Choose File" button and a "Upload" button. Below this is a "General Information" section with two columns of input fields. The first column contains: First Name (Ralph Lance), Middle Initial (M.), Last Name (Dahilig), and Contact Number (09123456789). The second column contains: City (Caloocan), Barangay (Barangay Tibay), Street (#69), and Zip Code (1000). A green envelope icon is visible in the bottom right corner.

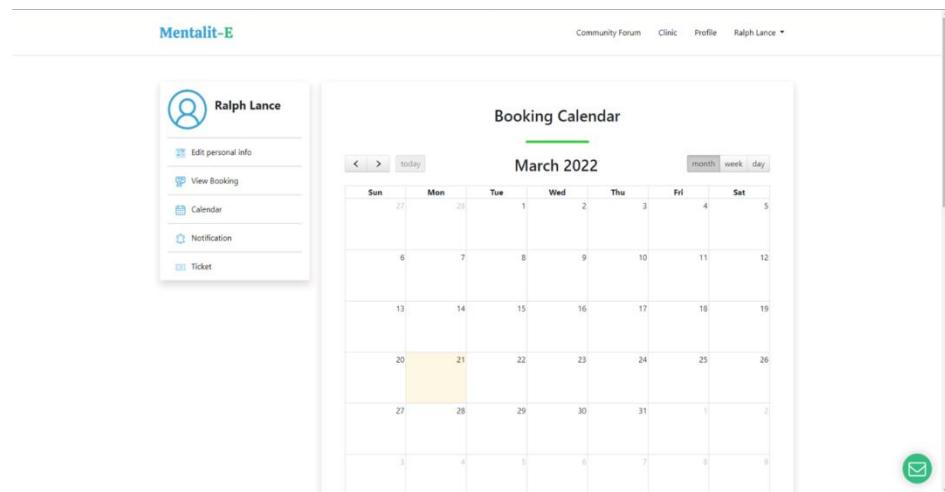
IV.II. Manage Bookings

To view your assigned bookings, it is located in your user profile options.

The screenshot shows the 'Mentalit-E' software interface. At the top, there is a navigation bar with links to 'Community Forum', 'Clinic', 'Profile', and 'Ralph Lance'. Below the navigation bar, on the left, is a sidebar for 'Ralph Lance' with options: 'Edit personal info', 'View Booking', 'Calendar', 'Notification', and 'Ticket'. The main content area is titled 'List of assigned bookings'. It includes a search bar, a table header with columns for '#', 'Patient Name', 'Service', 'Booking Date', 'Status', 'Link', and 'Actions', and a message 'Loading...'. Below the table, it says 'Showing 0 to 0 of 0 entries' and has 'Previous' and 'Next' buttons. In the bottom right corner of the main window, there is a green circular icon with a white envelope symbol.

IV.III. Calendar

The calendar is also located in profile, the calendar will provide you information about any upcoming appointments you have scheduled with your patients during the month, week, and day.



IV.IV. Create Forum

To create forum posts go to the navbar located on top and click on “community forums”, once you are redirected to the forums community hover your mouse to the “add post button” to create a forum post.

Mentalit-E

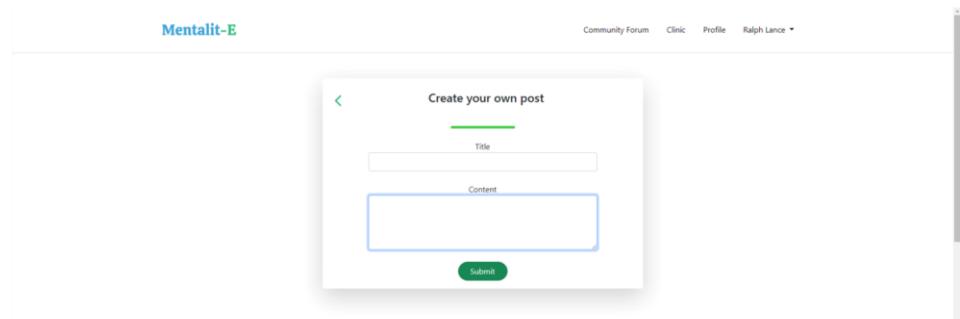
Create your own post

Title

Content

Submit

Community Forum Clinic Profile Ralph Lance ▾



✉

Mentalit-E

Community Forum

Add new post

Search... Q

No posts yet

✉

IV.V. Creating a Ticket

If you have experienced errors or difficulties with the system, users can send a ticket to the system administrator. The ticketing system is located in the user profile, to send a ticket click the “file a ticket” button.

The screenshot shows the user profile page for 'Ralph Lance' on the 'Mentalit-E' platform. On the left, there is a sidebar with options: 'Edit personal info', 'View Booking', 'Calendar', 'Notification', and 'Ticket'. The 'Ticket' option is highlighted. On the right, the main area is titled 'List of tickets' and features a green horizontal bar. Below it is a button labeled 'File a ticket'. A table header includes columns for '#', 'Subject', 'Category', 'Date Issued', 'Date Resolved', 'Status', and 'Actions'. A note at the bottom states 'No data available in table'. At the bottom of the page, there are 'Previous' and 'Next' buttons. A small envelope icon is visible on the far right.

V. Rating a clinic

For patients, they can write a review and rating for a specific clinic. All they have to do is just go to Manual Booking page, click on a clinic, and click the “rate” clinic button. Then they just have to fill out and submit the details of their rating as well as the star rating.

The screenshot shows the Mentalit-E application interface. At the top, there is a navigation bar with links: Community Forum, Quick Booking, Manual Booking, Profile, and a dropdown for 'Dela Cruz'. On the left, there is a sidebar with icons for Edit personal info, View Booking, Calendar, Medical Record, Journal, Notification, and Ticket. The main content area displays patient information: Patient name: Dela Cruz, Michail Joaquin T., Date: 2022-03-25 04:06:00 to 2022-03-26 04:06:00, Clinic: Clinic Admin clinics, and Status: To rate. Below this, it says Service availed: Psychotherapy. There is a text input field for Comments / Suggestions containing placeholder text 'asdasdasdasdasdasd'. Below the input field is a row of five stars, all of which are filled. A green 'Submit' button is located at the bottom right of the form. In the bottom right corner of the main window, there is a small circular icon with a white envelope symbol inside.

Mentalit-e

SYSTEM ADMIN USER MANUAL

I. Introduction

I.I The System

Mental health issues such as anxiety and depression are one of the most prominent problems experienced by people in the Philippines. With the shortage of mental healthcare workers and limited facilities to offer services for mental health patients, it continues to be a hindrance for their well-being. According to the survey conducted by the researchers, 35 out of 40 people are likely going to use an online mental health service platform.

This resulted to the researchers executing an action to pursue Mentalit-E. It is a system that aims to provide booking services for patients and clinics. Furthermore, it serves as a bridge to connect between them, minimizing the time-consuming experience of finding a mental health professional for patients. This also applies to clinics in conveniently finding individuals struggling with mental health problems.

This user manual is made to see the how the system works in the perspective of a system administrator.

I.II The Role of the System Administrator

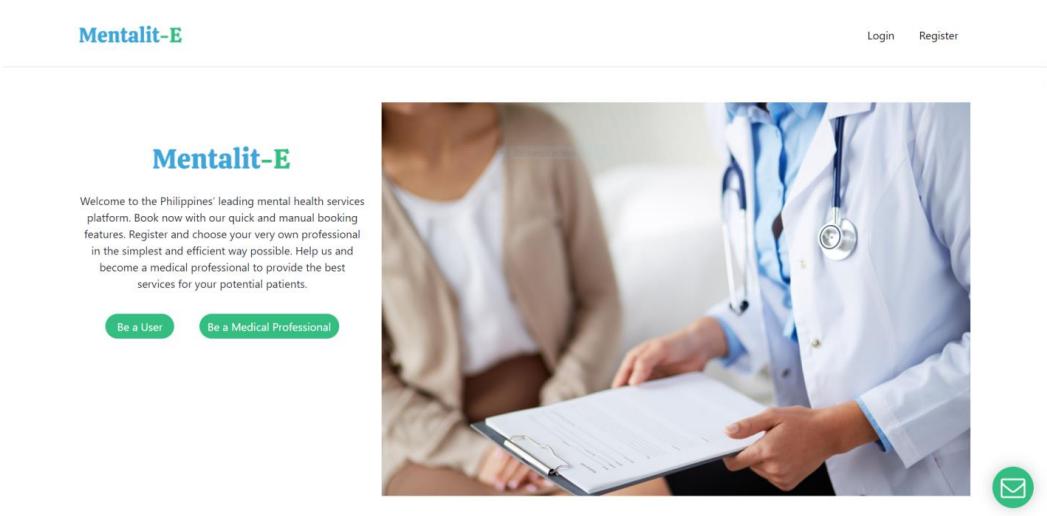
The System Administrator is responsible for managing the users, clinics and maintaining a healthy environment inside the community forum. It also has access to the audit logs of the system.

The System Administrator have the privileges to manage the following modules:

- User Profile – enable users to view and edit user profile information
- Audit logs – enable users to view audit logs and export to .pdf
- Manage users - enable users to manage all the users
- Tickets - enable users to file, view and track their own tickets
- Answer tickets - enable users to address the tickets filed
- Community Forum - enable users to create, view and reply in the community forum
- Notification – allow users to receive notifications in their personal accounts
- View bookings – enable users to manage booking appointments

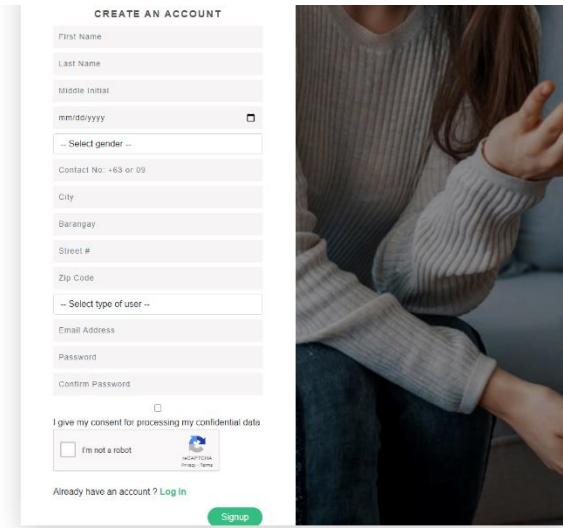
II. Setting up your account

To register an account, go to the Mentalit-E homepage and click on register on the top right corner of the system.



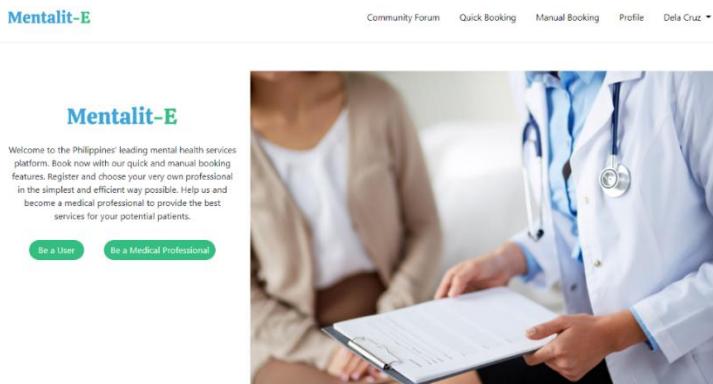
After clicking the “Register” button, the user must fill up and submit the forms with valid inputs.

A screenshot of the 'CREATE AN ACCOUNT' form on the Mentalit-E website. The form is titled 'CREATE AN ACCOUNT' in bold capital letters. It contains several input fields: 'First Name', 'Last Name', 'Middle Initial', 'mm/dd/yyyy' (date of birth), 'Select gender', 'Contact No. +63 or 09', 'City', 'Barangay', 'Street #', 'Zip Code', 'Select type of user', 'Email Address', 'Password', and 'Confirm Password'. Below these fields are two checkboxes: one for giving consent to process confidential data and another for being a robot. At the bottom of the form, there is a link 'Already have an account? Log in' and a CAPTCHA verification box.



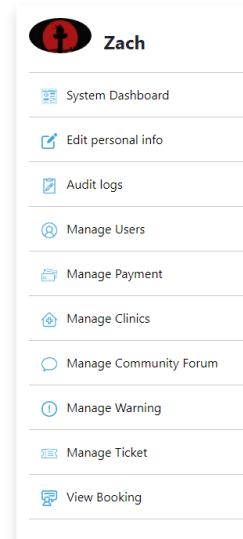
The image is a composite of two parts. On the left, there is a screenshot of a web-based account creation form titled "CREATE AN ACCOUNT". The form includes fields for First Name, Last Name, Middle Initial, Date of Birth (mm/dd/yyyy), Gender (with a dropdown menu showing "-- Select gender --"), Contact No. (+63 or 09), City, Barangay, Street #, Zip Code, User Type (with a dropdown menu showing "-- Select type of user --"), Email Address, Password, Confirm Password, and a checkbox for "I give my consent for processing my confidential data". Below these fields are two smaller checkboxes: "I'm not a robot" and a CAPTCHA box containing the text "MENTALIT-E". At the bottom of the form are links for "Already have an account? Log in" and a green "Signup" button. On the right side of the image, there is a photograph showing a close-up of a person's hands. The person is wearing a light-colored ribbed sweater and is interacting with a dark-colored electronic device, possibly a smartphone or a small tablet.

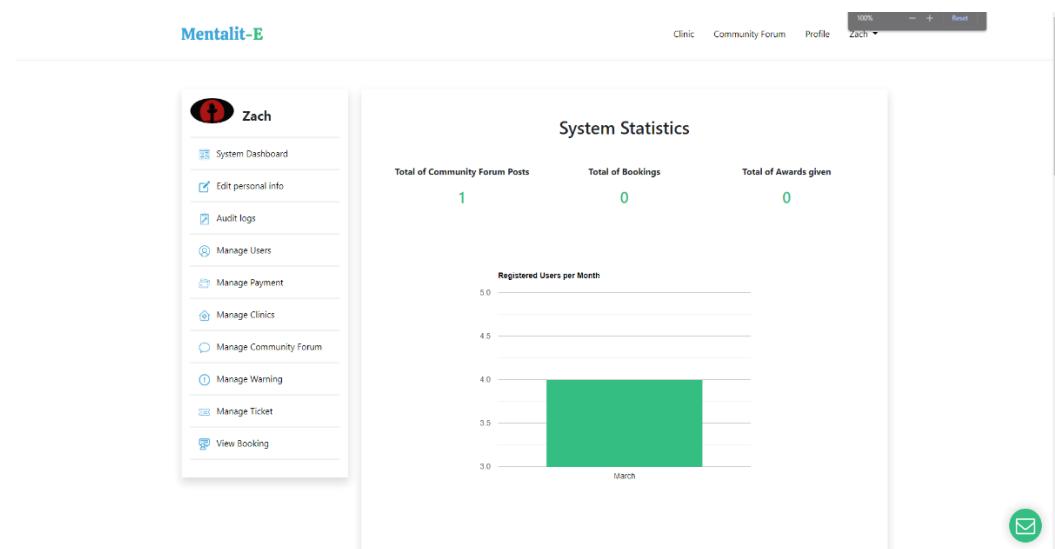
After registering, the user will now be required by the system to verify their account via email. If the email verification is successful, the registered system admin can now access Mentalit-E's features and functionalities designated for the stated role.



I. View System Dashboard

To view the system dashboard, the user must click the “System Dashboard” button placed on the left side of the interface.





In here, you can see the system's statistics regarding its total number of bookings, community forum posts, awards given in the form of bar graphs, pie charts, etc.

III. Edit personal info

To edit the personal info, the user must click the "Edit personal info" button placed on the left side of the interface.

The screenshots show the 'Edit personal info' section of the application. On the left, the user's profile picture is displayed, and there is a file input field with the placeholder 'Choose File' and a green 'Upload!' button. On the right, the 'General Information' form is shown with the following fields:

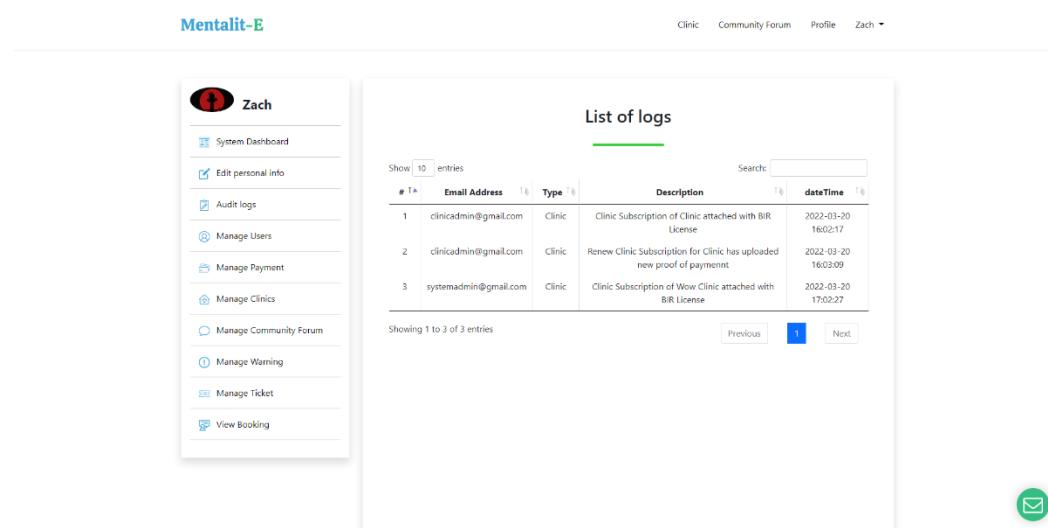
Field	Value	Notes
First Name	Zach	
Middle Name	Z.	
Last Name	Estrella	
Contact Number	09950429880	
City	Bulacan	<small>The field must start with an uppercase letter and must consist of only letters and spaces.</small>
Barangay	Barangay Magtitbay 1	
Street #	12345	
Zip Code	1405	

Below the form, the birth date is listed as 'Birth Date: 2022-03-20'. A gender selection field shows 'Gender: Male'. At the bottom right of the form area is a green 'Save changes!' button. To the right of the form, there is a green circular icon with a white envelope symbol.

The user should fill up their personal information to the fields given and the details will display upon their profile.

IV. Audit logs

To audit logs, the user must click the “Audit logs” button placed on the left side of the interface.



The screenshot shows the 'Mentalit-E' application interface. On the left, there is a sidebar menu titled 'Zach' with the following items:

- System Dashboard
- Edit personal info
- Audit logs
- Manage Users
- Manage Payment
- Manage Clinics
- Manage Community Forum
- Manage Warning
- Manage Ticket
- View Booking

The main content area is titled 'List of logs'. It includes a search bar and a table with the following data:

	Email Address	Type	Description	dateTime
1	clinicadmin@gmail.com	Clinic	Clinic Subscription of Clinic attached with BIR License	2022-03-20 16:02:17
2	clinicadmin@gmail.com	Clinic	Renew Clinic Subscription for Clinic has uploaded new proof of payment	2022-03-20 16:03:09
3	systemadmin@gmail.com	Clinic	Clinic Subscription of Wow Clinic attached with BIR License	2022-03-20 17:02:27

At the bottom, it says 'Showing 1 to 3 of 3 entries' and has 'Previous' and 'Next' buttons. A green envelope icon is located at the bottom right of the main content area.

This will show the list of logs happened in the system. This monitors the actions done by every user.

V. Manage users

To manage users, the user must click the “Manage users” button placed on the left side of the interface.

The screenshot shows the 'Mentalit-E' application interface. On the left, there is a sidebar menu titled 'Zach' with the following items: System Dashboard, Edit personal info, Audit logs, Manage Users (which is highlighted in blue), Manage Payment, Manage Clinics, Manage Community Forum, Manage Warning, Manage Ticket, and View Booking. At the top right, there are links for Clinic, Community Forum, Profile, and Zach. The main content area is titled 'List of users'. It features a table with columns: #, Email Address, Role, Warning, Status, and Actions. There are 4 entries listed:

#	Email Address	Role	Warning	Status	Actions
1	systemadmin@gmail.com	SystemAdmin	0	Active	+
2	clinicadmin@gmail.com	ClinicAdmin	0	Active	Deactivate
3	clinicemployee@gmail.com	ClinicEmployee	0	Active	Notify
4	patient@gmail.com	Patient	0	Active	Warning

Below the table, it says 'Showing 1 to 4 of 4 entries' and has 'Previous' and 'Next' buttons. A small envelope icon is visible on the right side of the screen.

This shows the lists of users registered in the system, regardless of their types. Upon clicking the dropdown button, the system administrator has 4 actions, including deactivate, notify, send warning, and award.

V.I Awarding a user

The system administrator can award a user when the user has done something meaningful in the system.

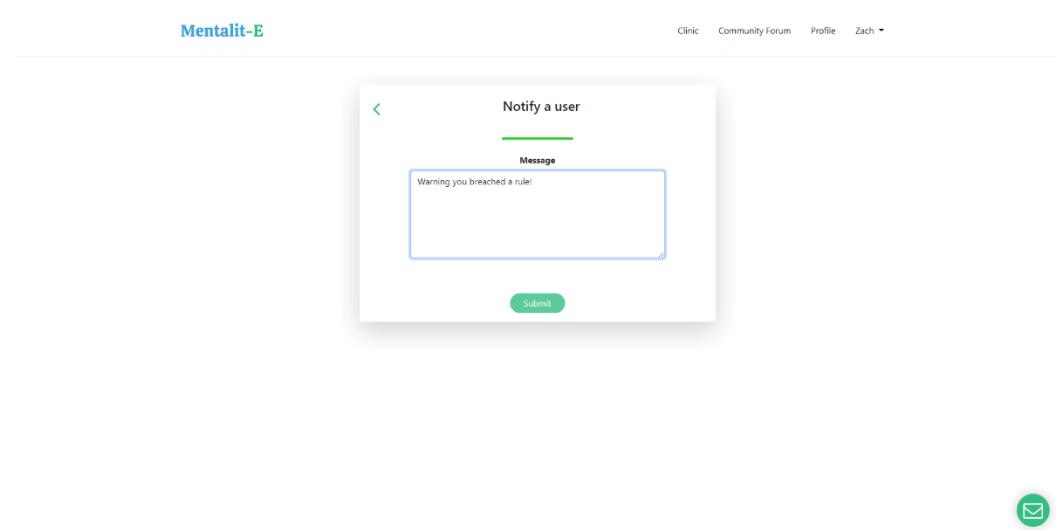
A screenshot of the Mentalit-E application interface. At the top, there's a navigation bar with links for 'Clinic', 'Community Forum', 'Profile', and a dropdown for 'Zach'. Below the navigation, a modal window is centered with the title 'Award a user'. Inside the modal, there's a section for 'Awards' with a single option 'Helpful in Community' selected. Below that is a 'Message' field containing the text 'The Best!'. At the bottom of the modal is a green 'Submit' button.

 When the user has been awarded, the award badge can be displayed upon the user's profile.

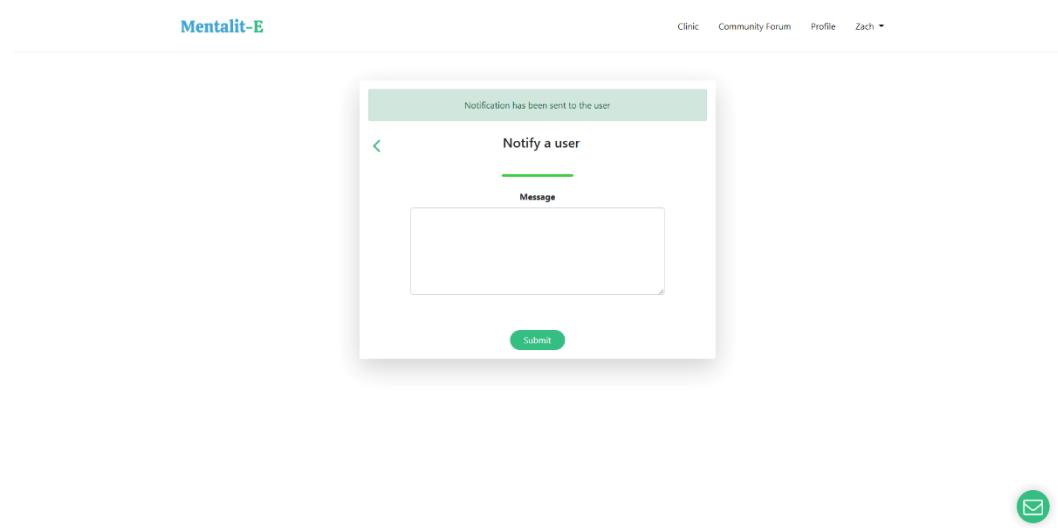
A screenshot of the Mentalit-E application interface showing a user profile. On the left, a sidebar for 'Zach' lists management functions: System Dashboard, Edit personal info (checked), Audit logs, Manage Users, Manage Payment, Manage Clinics, Manage Community Forum, Manage Warning, Manage Ticket, and View Booking. The main area displays the profile of 'Zach Z. Estrella' with the following details:
Email Address: systemadmin@gmail.com
Type of user: SystemAdmin
Birth date: 2022-03-20
Gender: Male
Contact Number: 09950429880
Address: Barangay Megtibay 1 12345 Bulacan, 1405
Awards: 

V.II Notifying a user

The system administrator can also notify a user when he/she wants to send a message towards him in the system.



The field must be filled with the message and upon clicking submit, the notification will now be sent to the user.



VI. Manage payment

To manage payment, the user must click the “Manage payment” button placed on the left side of the interface.

The screenshot shows the 'Mentalit-E' application interface. On the left, there is a sidebar with a profile picture of 'Zach' and a list of navigation items: System Dashboard, Edit personal info, Audit logs, Manage Users, Manage Payment (which is highlighted in blue), Manage Clinics, Manage Community Forum, Manage Warning, Manage Ticket, and View Booking. The main content area is titled 'List of payments'. It features a table with columns: Clinic Name, Email Address, Package availed, Proof, Date, Status, and Actions. There are three entries in the table:

Clinic Name	Email Address	Package availed	Proof	Date	Status	Actions
Clinic	clinicadmin@gmail.com	Basic	Download	2022-03-20 16:02:17	Pending	Accept Decline
Clinic	clinicadmin@gmail.com	Premium	Download	2022-03-20 16:03:09	Pending	Accept Decline
Wow Clinic	systemadmin@gmail.com	Advanced	Download	2022-03-20 17:02:27	Pending	Accept Decline

Below the table, it says 'Showing 1 to 3 of 3 entries'. There are 'Previous' and 'Next' buttons. A green envelope icon is located on the right side of the main content area.

This shows the list of payments done by the clinics, automatically setting its status into “pending”. In here, the system administrator has a set of actions which can be done to the payment of a clinic, including accept payment and decline payment.

VI.I Accept a payment

Upon clicking the “accept payment” button, its status will now be changed into “accepted”.

The screenshot shows the 'List of payments' page in the Mentalit-E system. At the top, a green banner displays the message: 'Payment regarding the subscription has been accepted and the clinic will be notified'. The main table lists three entries:

#	Clinic Name	Email Address	Package availed	Proof	Date	Status	Action
1	Clinic	clinicadmin@gmail.com	Basic	Download	2022-03-20 16:02:17	Accepted	Decline
2	Clinic	clinicadmin@gmail.com	Premium	Download	2022-03-20 16:03:09	Pending	Accept
3	Wow Clinic	systemadmin@gmail.com	Advanced	Download	2022-03-20 17:02:27	Pending	Accept

Showing 1 to 3 of 3 entries

VI.II Decline a payment

Upon clicking the “decline payment”, its status will now be changed into “declined”.

The screenshot shows the 'List of payments' page in the Mentalit-E system. At the top, a green banner displays the message: 'Payment regarding the subscription has been declined and the clinic will be notified'. The main table lists three entries:

#	Email Address	Package availed	Proof	Date	Status	Actions
1	clinicadmin@gmail.com	Basic	Download	2022-03-20 16:02:17	Accepted	Delete
2	clinicadmin@gmail.com	Premium	Download	2022-03-20 16:03:09	Pending	Accept Decline
3	systemadmin@gmail.com	Advanced	Download	2022-03-20 17:02:27	Declined	Delete

Showing 1 to 3 of 3 entries

VI.III Deleting a payment

Upon clicking the “delete” button in a specific payment, it will now be removed from the list of payments.

#	Clinic Name	Email Address	Package availed	Proof	Date	Status	Action
1	Clinic	clinicadmin@gmail.com	Basic	Download	2022-03-20 16:02:17	Accepted	D
2	Clinic	clinicadmin@gmail.com	Premium	Download	2022-03-20 16:03:09	Pending	Accept

VII. Manage clinics

To manage clinics, the user must click the “Manage clinics” button placed on the left side of the interface. In here, the system administrator has 2 actions; he can either activate or deactivate a clinic.

VII.I Deactivating a clinic

Upon clicking “deactivate” button in a specific clinic, its status will now be set to “inactive”.

List of clinics

#	Clinic Name	Email Address	Name	Subscription	Status	Actions
1	Clinic	clinicadmin@gmail.com	Cerrer	30	Active	Deactivate
2	Wow Clinic	systemadmin@gmail.com	Estrella	0	Inactive	Activate

VII.II Activating a clinic

Upon clicking “activate” button in a specific clinic, its status will now be set to “active”.

List of clinics

#	Clinic Name	Email Address	Name	Subscription	Status	Actions
1	Clinic	clinicadmin@gmail.com	Cerrer	30	Active	Deactivate
2	Wow Clinic	systemadmin@gmail.com	Estrella	0	Active	Deactivate

VIII. Manage community forums

To manage community forums, the user must click the “Manage community forums” button placed on the left side of the interface. In here, the

system administrator has actions in which he/she can view comments or delete a specific forum post.

VIII.I Adding a post to forum

Like every user, system administrators can also add a post to the community forum.

They should fill up the fields including the title and content of the forum.

The screenshot shows the Mentalit-E Community Forum interface. At the top, there is a navigation bar with links for Community Forum, Quick Booking, Manual Booking, Profile, and Dela Cruz. Below the navigation bar, a green banner displays the message "Your post has been added". The main area is titled "Mentalit-E Community Forum". On the left, there is a button labeled "Add new post". On the right, there is a search bar with the placeholder "Search..." and a magnifying glass icon. In the center, a post card is displayed with the following content:

This system is very good
by Michail Joaquin
I learned a lot using this system it makes job easier and productive.

Below the post card, there are two small icons: a blue circle with a white arrow and a blue square with a white arrow. To the right of the post card, there is a green circular icon with a white envelope symbol.

Upon clicking the “submit” button, the post will now be added to the Mentalit-E community forum page.

VIII.II Commenting on a post

System administrators can also comment on a specific post in the forum.

The screenshot shows the Mentalit-E Community Forum interface. At the top, there is a navigation bar with links for Community Forum, Quick Booking, Manual Booking, Profile, and Dela Cruz. Below the navigation bar, a post card is displayed with the following content:

This system is very good
by Michail Joaquin
I learned a lot using this system it makes job easier and productive.

To the right of the post card, there is a timestamp "2022-03-21 04:30:20". Below the post card, there is a comment input field with the placeholder "Add a comment". At the bottom right of the input field, there is a green "Submit" button. To the right of the input field, there is a green circular icon with a white envelope symbol.

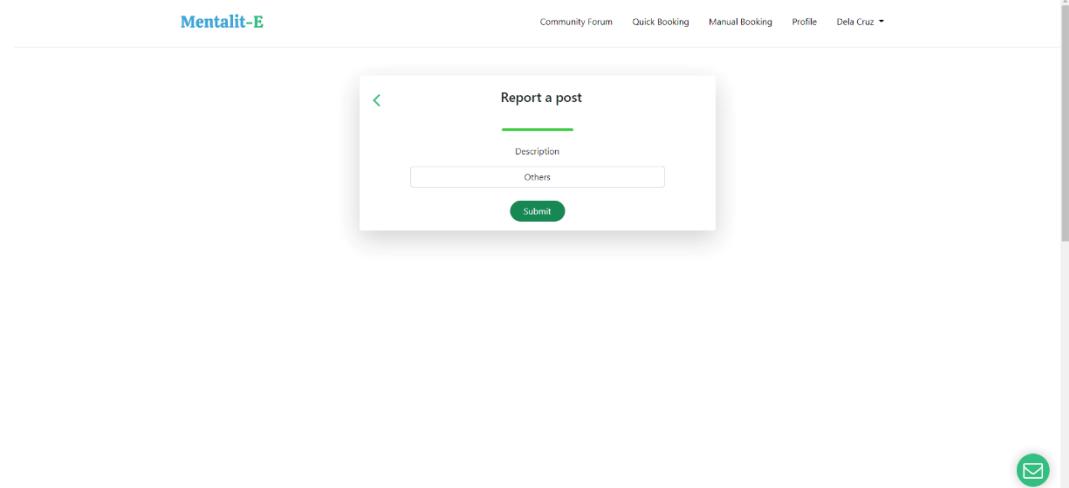
They must input their comment on the given field below the “Add a comment”.

The screenshot shows a forum interface with a green header bar at the top containing the text "Your comment has been posted". Below this, a post by "Michael Joaquin" is displayed, reading "This system is very good" and "I learned a lot using this system it makes job easier and productive." A timestamp "2022-03-21 04:30:20" is shown next to the post. At the bottom of the screen, there is a "Add a comment" input field with a "Submit" button and a small envelope icon.

Upon submitting the comment, it will now be posted to the specific forum post.

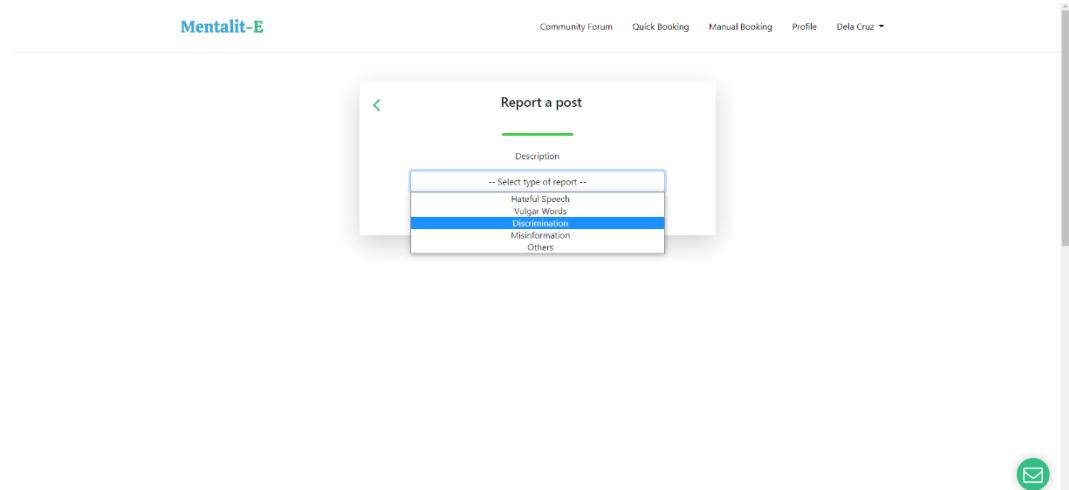
VIII.III Reporting a post

Like every user, system administrator can also report a post.



The screenshot shows a reporting interface titled "Report a post". At the top, there is a "Description" input field containing the word "Others". Below the input field is a "Submit" button. Above the input field, there is a small green arrow pointing left and a "Report a post" title. At the very top of the page, there is a navigation bar with links: Community Forum, Quick Booking, Manual Booking, Profile, and Dela Cruz.

They must click the dropdown to choose what type of issue they are reporting.



The screenshot shows the same reporting interface as above, but the "Description" input field is now empty. A dropdown menu titled "Select type of report" is open, listing several options: "Hateful Speech", "Vulgar Words", "Dissemination", "Misinformation", and "Others". The option "Dissemination" is highlighted with a blue background. The rest of the interface remains the same, including the navigation bar at the top.

They can also fill up the description field to provide some details about the issue.

The screenshot shows a user interface for reporting a post. At the top, there is a green header bar with the text "Your report has been submitted". Below this is a white form titled "Report a post". The form includes a back arrow, a title "Report a post", a "Description" input field containing "... Select type of report ...", and a "Submit" button.



Upon clicking “submit” button, the report will now be sent to admins.

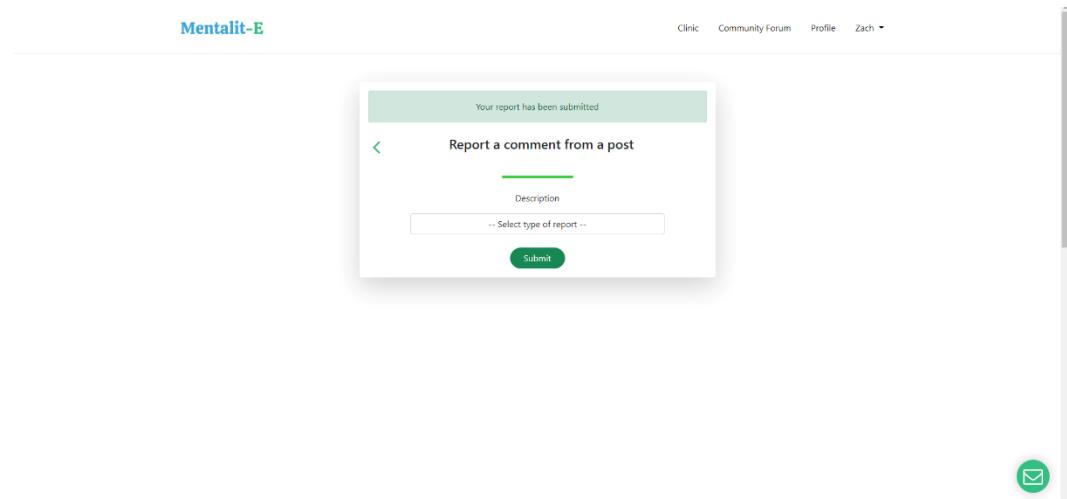
VIII.IV Reporting a comment on a post

Reporting a comment is also included in the system. This applies on the same way how a forum post is reported.

The screenshot shows a user interface for reporting a comment. At the top, there is a header bar with the text "Clinic Community Forum Profile Zach ▾". Below this is a white form titled "Report a comment from a post". The form includes a back arrow, a title "Report a comment from a post", a "Description" input field containing "Vulgar Words", and a "Submit" button.



Upon clicking “submit” the reported comment will now be sent to the admins.



IX. Manage warning

To manage warning, the user must click the “Manage warning” button placed on the left side of the interface. In here, the system administrators can see the list of warnings sent to the users.

The screenshot shows a user interface for managing warnings. On the left, there is a sidebar with a user profile for "Zach" and a list of administrative functions: System Dashboard, Edit personal info, Audit logs, Manage Users, Manage Payment, Manage Clinics, Manage Community Forum, Manage Warning (which is highlighted), Manage Ticket, and View Booking. The main area is titled "List of warnings" and displays a table with columns for User reported, Type, Category, Description, and Date. The table is currently empty, showing "No data available in table". There are search and filter options at the top of the table. The background of the page includes a navigation bar with links for Clinic, Community Forum, Profile, and a user account named Zach.

X. Manage tickets

To manage tickets, the user must click the “Manage tickets” button placed on the left side of the interface.

The screenshot shows the 'Mentalit-E' system interface. On the left, there is a sidebar with various administrative links: System Dashboard, Edit personal info (highlighted in green), Audit logs, Manage Users, Manage Payment, Manage Clinics, Manage Community Forum, Manage Warning, Manage Ticket (highlighted in green), and View Booking. At the top right, there are links for Clinic, Community Forum, Profile, and a dropdown for 'Zach'. The main area is titled 'List of tickets' and contains a table with the following data:

Subject	Category	Date Issued	Date Updated	Date Resolved	Status	Actions
12345	Feedback	2022-03-20 12:25:20	2022-03-20 12:27:51	2022-03-20 12:27:51	Archived	<button>View</button>
1234	General Inquiry	2022-03-20 11:23:23			Open	<button>View</button>
1	Feedback	2022-03-20 10:59:37			Open	<button>View</button>
1	General Inquiry	2022-03-20 10:58:54			Open	<button>View</button>
Test 1	General Inquiry	2022-03-20 10:47:37			Open	<button>View</button>

At the bottom, it says "Showing 1 to 5 of 5 entries" and has navigation buttons for Previous, Next, and a mail icon.

In here, the system administrator has a set of actions he can do in a specific ticket, including view and archive.

The screenshot shows a web-based ticket management system. On the left, there is a sidebar with a user profile picture of 'Zach' and a list of navigation links: System Dashboard, Edit personal info (with a checked checkbox), Audit logs, Manage Users, Manage Payment, Manage Clinics, Manage Community Forum, Manage Warning, Manage Ticket, and View Booking. The main area is titled 'List of Tickets' and contains a table with the following data:

Object	Category	Date Issued	Date Updated	Date Resolved	Status	Actions
12345	Feedback	2022-03-20 12:25:20	2022-03-20 12:27:51	2022-03-20 12:27:51	Archived	<button>View</button>
1234	General Inquiry	2022-03-20 11:23:23	2022-03-21 04:37:07	2022-03-21 04:37:07	Closed	<button>View</button> <button>Archive</button>
1	Feedback	2022-03-20 10:59:37			Open	<button>View</button>
1	General Inquiry	2022-03-20 10:58:54			Open	<button>View</button>
Test 1	General Inquiry	2022-03-20 10:47:37			Open	<button>View</button>

At the bottom of the table, it says 'Showing 1 to 5 of 5 entries'. There are navigation buttons for 'Previous', 'Next', and a mail icon.

X.I Viewing a ticket

Upon view a specific ticket, the system administrator can see the details displayed such as the date issued when the ticket was received, and its status. The sender's name, ticket subject and description are also displayed as well.

The screenshot shows a detailed view of a ticket for 'Zach Estrella'. The left sidebar is identical to the previous screenshot. The main area is titled 'View a ticket' and displays the following information:

- Name: Zach Estrella
- Date Issued: 2022-03-20 11:23:23
- Ticket Status: Pending
- Ticket Subject: 1234
- Ticket Category: General Inquiry
- Description: 1234
- Feedback Area: Add your feedback (with a large empty text input field)

A mail icon is located at the bottom right of the main area.

X.II Adding feedback to a ticket

The system administrators can add feedback to the chosen ticket, and by clicking “submit”, the feedback will now be added towards the feedback history as the user scrolls down on the page.

The screenshot shows the Mentalit-E application interface. On the left, there is a sidebar menu for 'Zach' with various administrative options like System Dashboard, Edit personal info, Audit logs, Manage Users, Manage Payment, Manage Clinics, Manage Community Forum, Manage Warning, Manage Ticket, and View Booking. The main content area displays a ticket submission confirmation message: "Ticket feedback has been submitted!" Below this, it shows a ticket summary: "View a ticket", "Name: Zach Estrella", "Date Issued: 2022-03-20 11:23:23", "Ticket Status: Pending", "Ticket Subject: 1234", "Ticket Category: General Inquiry", and "1234". At the bottom, there is a section titled "Add your feedback" with a text input field and a green "Submit" button.

This screenshot shows the same Mentalit-E application interface as the previous one, but it has been scrolled down to show the "Feedback history" section. It displays a single entry from "Zach Z. Estrella (SystemAdmin)" dated "2022-03-21 04:36:40" with the message "The issue can be resolved by doing this...". A green "Submit" button is visible at the top of the feedback form in the previous section.

This is where sender and system administrator can see the feedbacks given for each other regarding the ticket.

X.III Archiving a ticket

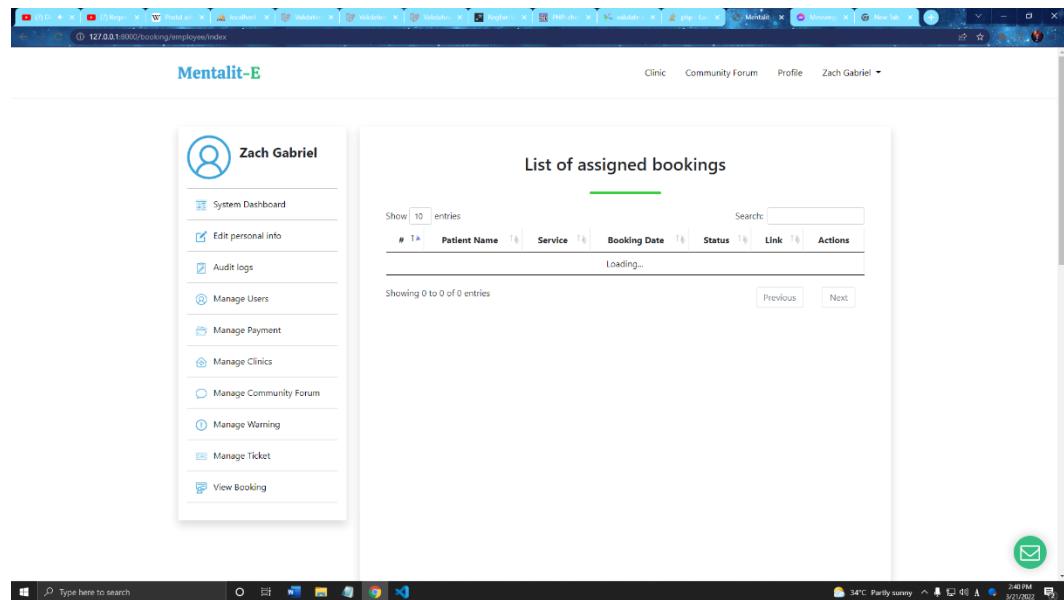
Upon clicking the “archive” on a specific ticket, its status will change to “archived”

#	User	Subject	Category	Date Issued	Date Updated	Date Resolved	Status
1	patient@gmail.com	12345	Feedback	2022-03-20 12:25:20	2022-03-20 12:27:51	2022-03-20 12:27:51	Archived
2	systemadmin@gmail.com	1234	General Inquiry	2022-03-20 11:23:23	2022-03-21 04:37:07	2022-03-21 04:37:07	Archived
3	systemadmin@gmail.com	1	Feedback	2022-03-20 10:59:37			Open
4	systemadmin@gmail.com	1	General Inquiry	2022-03-20 10:59:54			Open

XI. View booking

To view booking, the user must click the “View booking” button placed on the left side of the interface. In here, the system administrator can see the list of assigned bookings on a specific patient, together with the service name,

booking date, status, and link. The system administrator also has a set actions to do in a specific booking.



Appendix E

Test Results

The researchers conducted pre-testing and beta testing to the users before deploying the system to the server. These consists of the test case analysis together with the filled up beta testing forms below.

Test case analysis (Pre-testing)

TCP - Patient

TCD - Doctor (Clinic employees and clinic admins)

TCA - System Administrator

PATIENT

Test Case Scenario: Register

Test Case no.	Action/Ca se	Test Steps	Input	Expecte d Output	Actual Output
TCP - A00 1	Verify if user will be able to register with valid email address, and valid password s	1. Input Name and email address at the name field and email address field 2. Select Patient type of user from user type dropdown option	1. Jose Mill 2. patienttest@gmail.com 3. 123456	User should be signed in and redirected to the Mentalit-E homepage	Behav ed as expect ed

		<p>3. Input Password and Confirm Password to the Password and confirm password field</p> <p>4. Click reCAPTC HA</p> <p>5. Click Signup</p>			
TCP - A00 2	Verify if user will be able to register with invalid email address, valid passwords	<p>1. Input Name and invalid email address at the name field and email address field</p> <p>2. Select Patient type of user from user type dropdown option</p> <p>3. Input Password and Confirm Password to the Password and confirm</p>	<p>1. Jose Mill 2. patient@gmail.com 3. 123456</p>	User Should not be able to register and display error message	Behaved as expected

		<p>password field</p> <p>4. Click reCAPTC HA</p> <p>5. Click Signup</p>			
TCP - A00 3	Verify if user will be able to register with valid email address, invalid password, and valid confirm password	<p>1. Input Name and invalid email address at the name field and email address field</p> <p>2. Select Patient type of user from user type dropdown option</p> <p>3. Input invalid Password and Confirm Password to the Password</p>	<p>1. Jose Mill</p> <p>2. patienttest@gmail.com</p> <p>3. 12345</p> <p>4. 123456</p>	User Should not be able to register and display error message	Behaved as expected

		<p>and confirm password field</p> <ol style="list-style-type: none"> 4. Click reCAPTC HA 5. Click Signup 			
TCP - A00 4	Verify if user will be able to register with valid email address, valid password, and invalid confirm password	<ol style="list-style-type: none"> 1. Input Name and invalid email address at the name field and email address field 2. Select Patient type of user from user type dropdown option 3. Input Password and Confirm Password to the Password and confirm password field 4. Click reCAPTC HA 5. Click Signup 	<ol style="list-style-type: none"> 1. Jose Mill 2. patienttest@gmail.com 3. 123456 4. 12345 	User Should not be able to register and display error message	Behav ed as expect ed

TCP - A00 5	Verify if the user will be able to register with a valid email address , valid password s, and no reCaptcha validation .	<ol style="list-style-type: none"> 1. Input Name and email address at the name field and email 2. Select Patient type of user from user type 3. Input Password and Confirm Password to the Password and confirm password field 4. Do not click reCAPTCHA 5. Click Signup 	<ol style="list-style-type: none"> 1. Jose Mill 2. patienttest@gmail.com 3. 123456 4. 12345 	User Should not be able to register and display error message	Behav ed as expect ed
TCP - A00 6	Verify if the user will be able to register with a valid email address, and valid password s. But with no	<ol style="list-style-type: none"> 1. Input Name and email address at the name field and email 2. Do not select any type of user from user type 3. Input Password 	<ol style="list-style-type: none"> 1. Jose Mill 2. patienttest@gmail.com 3. 123456 4. 12345 	User Should not be able to register and display error message	Behav ed as expect ed

	selected user type.	<p>and Confirm Password to the Password and confirm password field</p> <p>4. Do not click reCAPTC HA</p> <p>5. Click Signup</p>			
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Test Case Scenario: Login

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP - B001	Verify if user will be able to login with valid email address and valid password	<p>1. Input email at the email address field</p> <p>2. Input Password to the Password field</p> <p>3. Click Signup</p>	<p>1. patienttest@gmail.com</p> <p>2. 123456</p>	User Should be signed in and redirected to the Mentalit-E homepage	Behaved as expected
TCP - B002	Verify if user will be able to login with invalid	1. Input invalid email address at the	<p>1. patient@gmail.com</p> <p>2. 123456</p>	User should not be able to login	Behaved as expected

	email address and valid password	email address field 2. Input Password to the Password field 3. Click Signup		and the system will display error messages to the user.	
TCP - B00 3	Verify if user will be able to login with valid email address and invalid password	1. Input email at the email address field 2. Input invalid password at the password field 3. Click Signup	1. patienttest@gmail.com 2. 12345	User should not be able to login and the system will display error messages to the user.	Behaved as expected
TCP - B00 4	Verify if user will be able to login with invalid email address and invalid password	1. Input invalid email address at the email address field 2. Input invalid password at the password field 3. Click Signup	1. patient@gmail.com 2. 12345	User should not be able to login and the system will display error messages on both fields	Behaved as expected

TCP - B005	Verify if user will be able to login with no email address and no password	4. Input no email address at the email 5. Input no password at the password field 6. Click Signup	N/A	User should not be able to login and the system will display error messages on both fields	Behaved as expected
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Test Case Scenario: Forgot Password

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TC P-C001	Verify if user will be able to receive password reset link with valid email	1. Input email at the email address field 2. Click send password reset link button	patienttest@gmail.com	User Should receive password reset link through email	Behaved as expected
TC P-	Verify if user will not	1. Input invalid	patient@gmail.com	User should	Behaved as

C00 2	be able to receive password reset link with invalid email	email at the email address field 2. Click send password reset link button		not be able receive password reset link and the system will display error message	expected
TC P- C00 3	Verify if system will be able to accept invalid verification code input	1. Input email at the email address field 2. Click send password reset link button 3. Input Invalid verification	1. patienttest@gmai.com 2. Invalid verification code by user	System should not confirm invalid code and the system will display error message	Behaved as expected
TC P- C00 4	Verify if system will be able to accept valid verification code input	1. Input email at the email address field 2. Click send password reset link button 3. Input Invalid	1. patienttest@gmai.com 2. Sent valid verification code	System should confirm verification code and the user will be redirected to change password page	Behaved as expected

		verifica tion			
TC P- C00 5	Verify if system will confirm and valid passw ord and invalid confirm password	<ol style="list-style-type: none"> 1. Input email at the email address field 2. Click send password reset link button 3. Input valid verification code 4. Input valid password the new password field 5. Input invalid confirm password at the confirm password field. 	<ol style="list-style-type: none"> 1. patienttest@gmail.com 2. Sent valid verification code 3. 123456 4. 12345 	System should not confirm invalid password and display error message	Behav ed as expect ed

Test Case Scenario: Profile Editing

Test Case no.	Action/Cas e	Test Steps	Input	Expected Output	Actual Output

TCP - D00 1	Verify if the system can redirect the user to their profile	1. Click on profile on the right corner of the navbar	N/A	User should be redirected to their profile page	Behaved as expected
TCP - D00 2	Verify if user is able to view their profile info	1. Click edit personal info on the options list	N/A	System should display general information about the user	Behaved as expected
TCP - D00 3	Verify if user is able to update their profile info	1. Input first name at the first name field 2. Input last name at the last name field 3. Input contact number on the contact number field. 4. Input city at the city field 5. Input barangay at the	1. Jose 2. Mill 3. 091234567890 4. Paranaque 5. 143 6. 1020	System should update all inputs by the user.	Behaved as expected

		<p>barang y field</p> <p>6. Input street at the street field</p> <p>7. Input zip code at zip code field</p> <p>8. Save Change s</p>			
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Test Case Scenario: Booking

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-E001	Verify if the system can redirect the user to the booking page.	<p>1. Go to the navbar and click on manual booking.</p>	N/A	User should be redirected to the booking page	Behaved as expected
TCP-E002	Verify if the system cannot allow a different file other than a .png or .jpeg as a proof of payment for booking a clinic.	<p>1. Click on view from any of the clinics.</p> <p>2. Choose any available schedule.</p> <p>3. Send a proof of payment by clicking choose a file and input an invalid file</p> <p>4. Click Book.</p>	sample.doc	User should not be able to book and display error message	Behaved as expected

TCP-E003	Verify if the system cannot allow no input as a proof of payment for booking a clinic.	<ol style="list-style-type: none"> 1. Click on view from any of the clinics. 2. Choose any available schedule. 3. Click Book. 	N/A	User should not be able to book and display error message	Behaved as expected
TCP-E004	Verify if the user can schedule for an appointment	<ol style="list-style-type: none"> 1. Click on “view” from any of the clinics. 2. Choose any available schedule. 3. Send a proof of payment by clicking choose a file and input valid photo. 4. Click Book 5. Go back to your profile and click on view booking. 	sample.png	System should be able to send the appointment schedule to the clinic employee for confirmation. Patient users should be able to see the appointment on the booking list in their profile.	Behaved as expected
TCP-E005	Verify if the system had send a notification and receipt for the appointment	<ol style="list-style-type: none"> 1. Go to profile and click on notifications 	N/A	System should display receipts for the scheduled appointment.	Behaved as expected

Test Case Scenario: View and editing appointments and calendar

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-F001	Verify if the user can view the booked appointment.	<ol style="list-style-type: none"> Click "view booking" in the user profile. Click on "Actions" Select view 	N/A	System should display booking details of the appointment.	Behaved as expected
TCP-F002	Verify if the system can update appointments and update the schedule on the calendar.	<ol style="list-style-type: none"> Click "view booking" in the user profile. Click on "Actions" Select "cancel" Click "Calendar" in the user profile. 	N/A	System should cancel the appointment and update the calendar.	Behaved as expected

Test Case Scenario: Journal

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output

TCP-G001	Verify if the user can create a journal entry and archive entries.	<ol style="list-style-type: none"> 1. Click "Journal" in the user profile. 2. Click on the "Add an entry" button. 3. Input valid sample journal title. 4. Input valid sample journal description. 5. Click submit 	<ol style="list-style-type: none"> 1. My first entry 2. Dear journal 	<p>System should display the message "journal entry has been created. System should archive and display journal entries in a list of journals.</p>	Behaved as expected
TCP-G002	Verify if the user can edit a journal entry and archive entries.	<ol style="list-style-type: none"> 1. Click the "Actions" button. 2. Select "Edit" 3. Input valid sample journal title. 4. Input valid sample journal 5. Click submit 	<ol style="list-style-type: none"> 1. My first re-entry 2. Dear Diary 	<p>System should update journal entries and display entries in the list of journals.</p>	Behaved as expected
TCP-G003	Verify if the user can delete a journal entry.	<ol style="list-style-type: none"> 1. Click the "Actions" button. 2. Select "Delete" 	N/A	<p>System has deleted the entry and will no longer display the entry.</p>	Behaved as expected

Test Case Scenario: Filing a ticket

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-H001	Verify if the user can file a ticket with a valid ticket subject and valid description.	<ol style="list-style-type: none"> 1. Click "ticket" in the user profile. 2. Click on "File a ticket" button 3. Input valid ticket subject 4. Input valid ticket description 5. Click submit 	System crash	The system should display ticket and ticket status at the ticket list.	Behaved as expected
TCP-H002	Verify if the user can file a ticket with an empty ticket subject field.	<ol style="list-style-type: none"> 1. Click "ticket" in the user profile. 2. Click on "File a ticket" button 3. Click submit 	N/A	User cannot file a ticket and show an error message.	Behaved as expected
TCP-H003	Verify if the user can create a feedback on the ticket.	<ol style="list-style-type: none"> 1. Click "ticket" in the user profile. 2. Click on "File a ticket" button 3. Click submit 		The system should display feedback on the ticket.	Behaved as expected

TCP-H004	Verify if the user can file a ticket with a valid ticket subject, description, and attachment on the ticket.	<ol style="list-style-type: none"> 1. Click "ticket" in the user profile. 2. Click on "File a ticket" button 3. Input valid ticket subject 4. Input valid ticket description 5. Input a file attachment 6. Click submit 		The system should display ticket subject, ticket description, and ticket attachment on the ticket list.	Behaved as expected
TCP-H004	Verify if the user can file a ticket with a valid ticket subject, description, and invalid attachment on the ticket.	<ol style="list-style-type: none"> 1. Click "ticket" in the user profile. 2. Click on "File a ticket" button 3. Input valid ticket subject 4. Input valid ticket description 5. Input an invalid file attachment 6. Click submit 		Users cannot file a ticket and show an error message on the file attachment..	Behaved as expected

Test Case Scenario: Forum

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP - I001	Verify if the user can create a forum post with a valid title and valid content.	<ol style="list-style-type: none"> Click "Community Forum" at the navbar on top of the screen. Click "add post" Input valid sample title Input valid sample content Click submit 	<ol style="list-style-type: none"> Daily mental exercises Touch grass 	System should display forum post at the community forum	Behaved as expected
TCP - I002	Verify if the user can create a forum post with a valid title and empty content.	<ol style="list-style-type: none"> Click "Community Forum" at the navbar on top of the screen.. Click "add post" Input valid sample title Click submit 	Daily mental exercises	User should not be able to post and show error message	Behaved as expected
TCP - I003	Verify if the user can create a forum post with an empty title and empty content	<ol style="list-style-type: none"> Click "Community Forum" at the navbar on top of the screen.. Click "add post" Click Submit 	N/A	User should not be able to post and system should show error message	Behaved as expected

TCP - I004	Verify if the user can create a forum post with empty title field and valid content.	<ol style="list-style-type: none"> 1. Click “Community Forum” at the navbar on top of the screen. 2. Click “add post” 3. Input valid sample content 4. Click submit 	Touch grass	User should not be able to post and show error message	Behaved as expected
TCP - I005	Verify if the user can report a forum post.	<ol style="list-style-type: none"> 1. Click “flag icon” on a forum post to report. 2. Click any reason from the list of dropdown menu reports. 3. Click submit 	N/A	System should notify System Admin about report	Behaved as expected
TCP - I006	Verify if the user can report a comment on a forum post.	<ol style="list-style-type: none"> 1. Click “flag icon” on a forum comment to report. 2. Click any reason from the list of dropdown menu report. 3. Click submit 	N/A	System should notify System Admin about report	Behaved as expected
TCP - I007	Verify if the user can input valid comments on a forum post.	<ol style="list-style-type: none"> 1. Click on “Chat bubble icon” on forum post 2. Input valid comment 	Nice insight	System should be able to display user comments on the	Behaved as expected

		3. Click Submit		forum post.	
TCP - I008	Verify if the user can delete self-made forum posts.	1. Click on delete button on forum post.	N/A	System should be able to delete the user's forum post.	Behaved as expected

Test Case Scenario: Rating a clinic

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-J001	Verify if the user will be able to rate with valid description and star rating.	1. Input valid description at the description field 2. Input star rating 3. Click the "submit" button.		The submitted rating of the user will now be displayed to the rated clinic page.	Behaved as expected
TCP-J002	Verify if the user will be able to rate with invalid description and empty star rating.	1. Input invalid description at the description field 2. Click the "submit" button.		Users should not be able to rate the clinic and the system will display error messages to the user.	Behaved as expected
TCP-J003	Verify if the user will be able to rate with an empty			Users should not be able to rate the clinic and the	Behaved as expected

	description field and empty star rating.	1. Click the “submit” button.		system will display error messages to the user.	
TCP-J004	Verify if the user will be able to view the added and updated ratings on the clinic together with its reviews on the clinic page.	1. Click the view button on a specific clinic.		Users should be able to view the ratings and reviews of a specific clinic.	Behaved as expected

Test Case Scenario: Chatbot

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-K001	Verify if the system's built-in chatbot is working and responsive according to its instructions.	1. Go to the Mentalit-E homepage. 2. Insert necessary input according to its instructions. 3. Hit the “enter” button.		The chatbot will display necessary data as per condition.	Behaved as expected

Test Case Scenario: EMA

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-L001	Verify if the system's built-in EMA is working and responsive.	1. Insert input on radio buttons. 2. Click "next".		The system will now display the generated results to the user.	Behaved as expected
TCP-L002	Verify if the system's built-in EMA will display error message.	3. Do not input on radio buttons. 4. Click "next".		The system will display the error message to the user.	Behaved as expected

DOCTOR (Clinic Employees and Clinic Admins)

Test Case Scenario: Register

Test Case no.	Action/Ca se	Test Steps	Input	Expecte d Output	Actual Output
TC D-A00 1	Verify if user will be able to register with valid email address, and valid password s	1. Input Name and email address at the name field and email address field 2. Select Doctor type of	1. Jorge Riz 2. doctortest@gmail.com 3. 123456	User Should be signed in and redirect ed to the Mentalit -E homepa ge	Behav ed as expect ed

		<p>user from user type dropdown option</p> <ol style="list-style-type: none"> 3. Input Password and Confirm Password to the Password and confirm password field 4. Click reCAPTC HA 5. Click Signup 			
TC D- A00 2	Verify if user will be able to register with invalid email address, valid passwords	<ol style="list-style-type: none"> 1. Input Name and invalid email address at the name field and email address field 2. Select Clinic Employee type of user from user type dropdown option 3. Input Password and Confirm Password 	<ol style="list-style-type: none"> 1. Jorje Riz 2. doctortest@gmail.com 3. 123456 	User Should not be able to register and display error message	Behav ed as expect ed

		<p>to the Password and confirm password field</p> <p>4. Click reCAPTC HA</p> <p>5. Click Signup</p>			
TC D- A00 3	Verify if user will be able to register with valid email address, invalid password, and valid confirm password	<p>1. Input Name and invalid email address at the name field and email address field</p> <p>2. Select Patient type of user from user type dropdown option</p> <p>3. Input invalid Password and Confirm Password to the Password</p>	<p>1. Jorje Riz</p> <p>2. doctortest@gmail.com</p> <p>3. 12345</p> <p>4. 123456</p>	User Should not be able to register and display error message	Behaved as expected

		<p>and confirm password field</p> <ol style="list-style-type: none"> 4. Click reCAPTC HA 5. Click Signup 			
TC D- A00 4	Verify if user will be able to register with valid email address, valid password, and invalid confirm password	<ol style="list-style-type: none"> 1. Input Name and invalid email address at the name field and email address field 2. Select Patient type of user from user type dropdown option 3. Input Password and Confirm Password to the Password and confirm password field 4. Click reCAPTC HA 5. Click Signup 	<ol style="list-style-type: none"> 1. Jorge Riz 2. doctortest@gmail.com 3. 123456 4. 12345 	User Should not be able to register and display error message	Behav ed as expect ed

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TC D- A00 5	Verify if the user will be able to register with a valid email address , valid password s, and no reCaptcha validation .	<ol style="list-style-type: none"> 1. Input Name and email address at the name field and email 2. Select Patient type of user from user type 3. Input Password and Confirm Password to the Password and confirm password field 4. Do not click reCAPTCHA 5. Click Signup 	<ol style="list-style-type: none"> 1. Jorje Riz 2. doctortest@gmail.com 3. 123456 4. 12345 	User Should not be able to register and display error message	Behav ed as expect ed
TC D- A00 6	Verify if the user will be able to register with a valid email address, and valid password s. But with no	<ol style="list-style-type: none"> 1. Input Name and email address at the name field and email 2. Do not select any type of user from user type 3. Input Password 	<ol style="list-style-type: none"> 1. Jorje Riz 2. doctortest@gmail.com 3. 123456 4. 12345 	User Should not be able to register and display error message	Behav ed as expect ed

	selected user type.	and Confirm Password to the Password and confirm password field 4. Do not click reCAPTCHA 5. Click Signup			
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Test Case Scenario: Login

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD - B00 1	Verify if user will be able to login with valid email address and valid password	1. Input email at the email address field 2. Input Password to the Password field 3. Click Signup	1. doctortest@gmail.com 2. 123456	User Should be signed in and redirected to the Mentalit-E homepage	Behaved as expected
TCD - B00 2	Verify if user will be able to login with invalid email address	1. Input invalid email address at the email	1. doctortest@gmail.com 2. 123456	User Should not be able to login and display	Behaved as expected

	and valid password	<p>address field</p> <p>2. Input Password to the Password field</p> <p>3. Click Signup</p>		error message	
TCD - B00 3	Verify if user will be able to login with valid email address and invalid password	<p>1. Input email at the email address field</p> <p>2. Input invalid password at the password field</p> <p>3. Click Signup</p>	<p>1. doctortest@gmail.com</p> <p>2. 12345</p>	User Should not be able to login and display error message	Behaved as expected
TCD - B00 4	Verify if user will be able to login with invalid email address and invalid password	<p>1. Input invalid email address at the email</p> <p>2. Input invalid password at the password field</p> <p>3. Click Signup</p>	<p>1. doctortest@gmail.com</p> <p>2. 12345</p>	User Should not be able to login and display error messages on both fields	Behaved as expected

TCD - B005	Verify if user will be able to login with no email address and no password	4. Input no email address at the email 5. Input no password at the password field 6. Click Signup	N/A	User Should not be able to login and display error messages on both fields	Behaved as expected
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Test Case Scenario: Forgot Password

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TC D-C001	Verify if user will be able to receive password reset link with valid email	1. Input email at the email address field 2. Click send password reset link button	doctortest@gmail.com	User Should receive password reset link through email	Behaved as expected
TC D-C002	Verify if user will not be able to receive password reset link	1. Input invalid email at the email	doctortest@gmail.com	User Should not be able receive password	Behaved as expected

	with invalid email	address field 2. Click send password reset link button		reset link and display error message	
TC D-C00 3	Verify if system will be able to accept invalid verification code input	1. Input email at the email address field 2. Click send password reset link button 3. Input Invalid verification	1. doctortest@gmail.com 2. Invalid verification code by user	System should not confirm invalid code and display error message	Behaved as expected
TC D-C00 4	Verify if system will be able to accept valid verification code input	1. Input email at the email address field 2. Click send password reset link button 3. Input Invalid verification	1. doctortest@gmail.com 2. Sent valid verification code	System should confirm verification code and redirect to change password page	Behaved as expected

TC D- C00 5	Verify if system will confirm and valid password and invalid confirm password	<ol style="list-style-type: none"> 1. Input email at the email address field 2. Click send password reset link button 3. Input valid verification code 4. Input valid password the new password field 5. Input invalid confirm password at the confirm password field. 	<ol style="list-style-type: none"> 1. doctortest@gmail.com 2. Sent valid verification code 3. 123456 4. 12345 	System should not confirm invalid confirm password and display error message	Behaved as expected
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Test Case Scenario: Clinic Application

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD - D001	Verify if the user can submit a clinic	<ol style="list-style-type: none"> 1. Click “choose file button” 	sample.png	User Should redirected to the	Behaved as expected

	application with valid file type for PRC license	2. Input valid file type 3. Click “Apply to a clinic” button		homepage	
TCD - D002	Verify if the user can submit a clinic application with invalid file type for PRC license	1. Click “choose file button” 2. Input invalid file type 3. Click “Apply to a clinic” button	sample.doc	User Should not be able to apply and display error message	Behaved as expected
TCD - D003	Verify if user is able to update their profile info	1. Input first name at the first name field 2. Input last name at the last name field 3. Input contact number on the contact number field. 4. Input city at	1. Jorge 2. Riz 3. 091234567890 4. Paranaque 5. 143 6. 1020	System should update all inputs by the user.	Behaved as expected

		<p>the city field</p> <p>5. Input barangay at the barangay field</p> <p>6. Input street at the street field</p> <p>7. Input zip code at street field</p> <p>8. Save Changes</p>			
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Test Case Scenario: Profile Editing

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD - E001	Verify if the system can redirect the user to their profile	1. Click on profile on the right corner of the navbar	N/A	User Should redirected to their profile page	Behaved as expected
TCD - E002	Verify if user is able to go to their profile info	1. Click edit persona l info on the	N/A	System should display general informatio	Behaved as expected

		options list on		n about the user	
TCD - E003	Verify if user is able to update their profile info	1. Input first name at the first name field 2. Input last name at the last name field 3. Input contact number on the contact number field. 4. Input city at the city field 5. Input barangay at the barangay field 6. Input street at the street field 7. Input zip code at zip code field	1. Jorge 2. Riz 3. 09123456789 4. 00 5. Paranaque 6. 143 7. 1020	System should update all inputs by the user.	Behaved as expected

		8. Save Change s			
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Test Case Scenario: View and editing appointments and calendar

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD-F001	Verify if the user can view the booked appointment.	<ol style="list-style-type: none"> Click "view booking" in the user profile. Click on "Actions" Select view 	N/A	System should display booking details of the appointment.	Behaved as expected
TCD-F002	Verify if the system can update appointments and update the schedule on the calendar.	<ol style="list-style-type: none"> Click "view booking" in the user profile. Click on "Actions" Select "cancel" Click "Calendar" in the user profile. 	N/A	System should cancel the appointment and update the calendar.	
TCD-F003	Very if the user can approve the booking of the patient.	<ol style="list-style-type: none"> Click "view booking" in the user profile. Click on "Actions" Select "approve" 	N/A	System should update the booking status into "approved".	Behaved as expected
TCD-F004	Very if the user can decline the	<ol style="list-style-type: none"> Click "view booking" in the user profile. 	N/A	System should update the booking status	Behaved as expected

	booking of the patient.	2. Click on “Actions” 3. Select “decline”		into “declined”.	
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Test Case Scenario: Manage patient records

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD - G001	Verify if the user can add patient records.	1. Click “medical record” 2. Click on “View booking” button 3. Click on the Action dropdown on a specific user. 4. Click “Patient Record” button. 5. Input all fields.	1. Hannah Baker 2. 09635478521 3. 22 Blabla Manila Malate 4. Her family has history of suicides 5. She is sociable but sometimes shy 6. She had a recent fever last May, 2021. And also had clavicle injury from biking 7. She is anxious and having hallucinations 8. I prescribe her ProZac 90mg and Antidepressants from Mercury drug. And also liveraide	The system should add the specific medical record of a patient.	Behaved as expected
TCD - G002	Verify if the user can update patient records.	1. Click “medical record” 2. Click on “View	1. Hannah Cooker 2. 09999999999 3. 22 Blabla Manila Makati	The system should update the	Behaved as expected

		<p>booking” button</p> <p>3. Click on the Action dropdown on a specific user.</p> <p>4. Click “Patient Record” button.</p> <p>5. Replace all fields.</p>	<p>4. Her family has history of depression</p> <p>5. She is not shy but sometimes clingy</p> <p>6. She had headache last tuesday, May 13.</p> <p>7. She is having panic attacks</p> <p>8. I prescribed her some water therapy.</p>	specific medical record of a patient.	
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Test Case Scenario: Assign consultations

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD-H001	Verify if the user can assign consultation to a specific doctor.	<p>1. Click the “Manage consultation” button.</p> <p>2. Click the “assign consultation” button on a specific doctor.</p>	N/A	The system should assign the scheduled consultation to a specific doctor.	Behaved as expected

Test Case Scenario: Add a service

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output

TCD-J001	Verify if the user can add service information to a clinic with a valid service name, service description, service price, and service length	<ol style="list-style-type: none"> 1. Click the “clinic services” button. 2. Click the “add clinic service” button. 3. Input the necessary fields. 4. Click the “submit” button. 	N/A	The system should add and display the service information to the clinic.	Behaved as expected
TCD-J002	Verify if the user can add service information to a clinic with an invalid service name, service description, service price, and service length	<ol style="list-style-type: none"> 1. Click the “clinic services” button. 2. Click the “add clinic service” button. 3. Input the necessary fields. 4. Click the “submit” button. 		The system should display an error message regarding the invalid input to the user.	Behaved as expected
TCD-J003	Verify if the user can add service information to a clinic with empty service name, service description, service price, and service length	<ol style="list-style-type: none"> 1. Click the “clinic services” button. 2. Click the “add clinic service” button. 3. Click the “submit” button. 	N/A	The system should display an error message regarding the empty input to the user.	Behaved as expected

Test Case Scenario: Forum

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCD - K001	Verify if the user can create a forum post with a valid title and valid content.	<ol style="list-style-type: none"> 1. Click "Community Forum" at the navbar on top of the screen. 2. Click "add post" 3. Input valid sample title 4. Input valid sample content 5. Click submit 	<ol style="list-style-type: none"> 1. Daily mental exercises 2. Touch grass 	System should display forum post at the community forum	Behaved as expected
TCD - K002	Verify if the user can create a forum post with a valid title and empty content.	<ol style="list-style-type: none"> 1. Click "Community Forum" at the navbar on top of the screen.. 2. Click "add post" 3. Input valid sample title 4. Click submit 	Daily mental exercises	User should not be able to post and system should show error message	Behaved as expected
TCD - K003	Verify if the user can create a forum post with an empty title and empty content	<ol style="list-style-type: none"> 1. Click "Community Forum" at the navbar on top of the screen.. 2. Click "add post" 3. Click Submit 	N/A	User should not be able to post and system should show error message	Behaved as expected

TCD - K004	Verify if the user can create a forum post with empty title field and valid content.	<ol style="list-style-type: none"> 1. Click “Community Forum” at the navbar on top of the screen. 2. Click “add post” 3. Input valid sample content 4. Click submit 	Touch grass	User should not be able to post and system should show error message	Behaved as expected
TCD - K005	Verify if the user can report a forum post.	<ol style="list-style-type: none"> 1. Click “flag icon” on a forum post to report. 2. Click any reason from the list of radio buttons to report. 3. Click submit 	N/A	System should notify System Admin about report	Behaved as expected
TCD - K006	Verify if the user can report a comment on a forum post.	<ol style="list-style-type: none"> 1. Click “flag icon” on a forum comment to report. 2. Click any reason from the list of dropdown menu report. 3. Click submit 	N/A	System should notify System Admin about report	Behaved as expected
TCD - K006	Verify if the user can input valid comments	<ol style="list-style-type: none"> 1. Click on “Chat bubble 	Nice insight	System should be able to display	Behaved as expected

	on a forum post.	icon" on forum post 2. Input valid comment 3. Click Submit		user comments on the forum post.	
TCD - K007	Verify if the user can delete self made forum posts.	1. Click on delete button on forum post	N/A	System should be able to delete the user's forum post.	Behaved as expected

Test Case Scenario: Filing a ticket

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCP-L001	Verify if the user can file a ticket with a valid ticket subject and valid description.	6. Click "ticket" in the user profile. 7. Click on "File a ticket" button 8. Input valid ticket subject 9. Input valid ticket description 10. Click submit	System crash	The system should display ticket and ticket status at the ticket list.	Behaved as expected
TCP-L002	Verify if the user can file a ticket with an empty ticket subject field.	4. Click "ticket" in the user profile. 5. Click on "File a ticket" button	N/A	Users cannot file a ticket and show an error message.	Behaved as expected

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		6. Click submit			
TCP-L003	Verify if the user can create a feedback on the ticket.	4. Click "ticket" in the user profile. 5. Click on "File a ticket" button 6. Click submit		The system should display feedback on the ticket.	Behaved as expected
TCP-L004	Verify if the user can file a ticket with a valid ticket subject, description, and attachment on the ticket.	7. Click "ticket" in the user profile. 8. Click on "File a ticket" button 9. Input valid ticket subject 10. Input valid ticket description 11. Input a file attachment 12. Click submit		The system should display ticket subject, ticket description, and ticket attachment on the ticket list.	Behaved as expected
TCP-L004	Verify if the user can file a ticket with a valid ticket subject, description, and invalid attachment on the ticket.	7. Click "ticket" in the user profile. 8. Click on "File a ticket" button 9. Input valid ticket subject 10. Input valid ticket description 11. Input an invalid file attachment		Users cannot file a ticket and show an error message on the file attachment..	Behaved as expected

		12. Click submit			
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SYSTEM ADMINISTRATORS

Test Case Scenario: Login

Test Case no.	Action/Ca se	Test Steps	Input	Expecte d Output	Actual Output
TCA - B00 1	Verify if user will be able to login with valid email address and valid password	1. Input email at the email address field 2. Input Password to the Password field 3. Click Signup	1. admintest@gmail.com 2. 123456	User Should be signed in and redirected to the Mentalit-E homepage	Behave d as expecte d
TCA - B00 2	Verify if user will be able to login with invalid email address and valid password	1. Input invalid email address at the email address field 2. Input Password to the	1. admintest@gmail.com 2. 123456	User should not be able to login and the system will display error messages to the user.	Behave d as expecte d

		Passwo rd field 3. Click Signup			
TCA - B00 3	Verify if user will be able to login with valid email address and invalid password	1. Input email at the email address field 2. Input invalid password at the password field 3. Click Signup	1. admintest@gmail.com 2. 12345	User should not be able to login and the system will display error messages to the user.	Behave d as expe cted
TCA - B00 4	Verify if user will be able to login with valid email address and no password	1. Input email at the email address field 2. Input invalid password 3. Click Signup	1. admintest@gmail.com	User should not be able to login and the system will display error messages to the user.	Behave d as expe cted
TCA - B00 5	Verify if user will be able to login with valid email address and	1. Input email at the email address field 2. Input valid password	1. 123456	User should not be able to login and the system will display	Behave d as expe cted

	invalid password	rd at the password field 3. Click Signup		error messages to the user.	
TCA - B00 6	Verify if user will be able to login with invalid email address and invalid password	1. Input invalid email address at the email 2. Input invalid password at the password field 3. Click Signup	N/A	User should not be able to login and the system will display error messages on both fields	Behaved as expected
TCA - B00 7	Verify if user will be able to login with no email address and no password	1. Input no email address at the email 2. Input no password at the password field 3. Click Signup	N/A	User should not be able to login and the system will display error messages on both fields	Behaved as expected

Test Case Scenario: Forgot Password

Test Cas	Action/Case	Test Steps	Input	Expected Output	Actual Output
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Test Case no.					
TC A-C001	Verify if user will be able to receive password reset link with valid email	1. Input email at the email address field 2. Click send password reset link button	admintest@gmail.com	User Should receive password reset link through email	Behaved as expected
TC A-C002	Verify if user will not be able to receive password reset link with invalid email	1. Input invalid email at the email address field 2. Click send password reset link button	admin@gmail.com	User should not be able receive password reset link and the system will display error message	Behaved as expected
TC A-C003	Verify if system will be able to accept invalid verification code input	1. Input email at the email address field 2. Click send password reset link button 3. Input Invalid verification code	1. admin@gmail.com 2. Invalid verification code by user	System should not confirm invalid code and the system will display error message	Behaved as expected
TC A-	Verify if system will be able to	1. Input email at the email	1. admin@gmail.com	System should confirm	Behaved as

C00 4	accept valid verification code input	<p>address field</p> <p>2. Click send password reset link button</p> <p>3. Input Invalid verification</p>	<p>2. Sent valid verification code</p>	verification code and the user will be redirected to change password page	expected
TC A- C00 5	Verify if system will confirm and valid password and invalid confirm password	<p>6. Input email at the email address field</p> <p>7. Click send password reset link button</p> <p>8. Input valid verification code</p> <p>9. Input valid password the new password field</p> <p>10. Input invalid confirm password at the confirm password field.</p>	<p>5. admin@gmail.com</p> <p>6. Sent valid verification code</p> <p>7. 123456</p> <p>8. 12345</p>	System should not confirm invalid confirm password and display error message	Behaved as expected

Test Case Scenario: Manage users

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA - D00 1	Verify if user can input award to another user in manage	<p>1. Select any user and click “Actions” button</p> <p>2. Select and click the</p>	<p>1. Helpful in Community</p> <p>2. The Best</p>	User should receive award from system admin	Behaved as expected

	users option	<p>“Award” button.</p> <ol style="list-style-type: none"> 3. Input valid award name at “awardName” field 4. Input valid message 5. Submit 			
TCA - D00 2	Verify if user can input notification to another user in manage users option	<ol style="list-style-type: none"> 1. Select any user and click “Actions” button 2. Select and click the “Notify” button. 3. Input valid notification at “notify” field 4. Submit 	Warning you breach a rule!	User should received notification from system admin	Behaved as expected
TCA - D00 3	Verify if user can deactivate another user in manage users option	<ol style="list-style-type: none"> 1. Select any user and click “Actions” button 2. Select and click the “Deactivate” button. 	N/A	User account should be deactivated by system admin	Behaved as expected
TCA - D00 4	Verify if the user can send warnings to another user.	<ol style="list-style-type: none"> 1. Go to “Manage users” in user profile options. 2. Click the dropdown button to a 	Please be warned!	Warning count in the users list must be updated depending on the	Behaved as expected

		<p>specific user.</p> <p>3. Click the “warning” button.</p>		warnings sent.	
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Test Case Scenario: Manage payments

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA-E001	Verify if user is able to download png/jpeg file from proof of payment	1. Click “download” from proof column	N/A	Users should be able to download png/jpeg file.	Behaved as expected
TCA-E002	Verify if the user is able to change clinic status to “accepted” by clicking accept payment.	1. Click “accept payment” from actions column	N/A	System should change clinic status to “accepted”.	Behaved as expected
TCA-E003	Verify if the user is able to change clinic status to “declined” by clicking accept payment.	1. Click “decline payment” from actions column	N/A	System should change clinic status to “declined”.	Behaved as expected
TCA-E004	Verify if the user is able to delete a payment from the list of payment.	2. Click “delete” from actions column	N/A	System should remove payment from the list of payments.	Behaved as expected

Test Case Scenario: Manage clinics

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA-F001	Verify if the user will be able to activate a specific clinic.	<ol style="list-style-type: none"> 1. Go to the “Manage clinics” page. 2. Click the “Activate” button to a specific clinic. 	N/A	The user should be notified that the clinic is activated and its status will change into “Activated”.	Behaved as expected
TCA-F002	Verify if the user will be able to deactivate a specific clinic.	<ol style="list-style-type: none"> 1. Go to the “Manage clinics” page. 2. Click the “Deactivate” button to a specific clinic. 	N/A	The user should be notified that the clinic is deactivated and its status will change into “Deactivated”.	Behaved as expected

Test Case Scenario: Manage tickets

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA-G001	Verify if the user can view a specific ticket.	<ol style="list-style-type: none"> 1. Go to the “Manage tickets” page. 2. Click on a specific ticket by clicking the dropdown and “View” button. 	N/A	System should display the ticket information page to the user.	Behaved as expected
TCA-G002	Verify if the user can add	<ol style="list-style-type: none"> 1. Go to the “Manage tickets” page. 		The feedback will be added to the ticket and is	Behaved as expected

	feedback to the ticket.	<ol style="list-style-type: none"> 2. Click on a specific ticket by clicking the dropdown and “View” button. 3. Input a feedback on the “Add your feedback” field. 4. Click the “submit” button. 		viewable for both users.	
TCA-G003	Verify if the user can archive a ticket	<ol style="list-style-type: none"> 1. Go to the “Manage tickets” page. 2. Click on a specific ticket by clicking the dropdown and “View” button. 3. Click the “Archive” button. 	N/A	The chosen ticket will now be archived from the list.	Behaved as expected

Test Case Scenario: Forum

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA-H001	Verify if the user can create a forum post with a valid title and valid content.	<ol style="list-style-type: none"> 1. Click “Community Forum” at the navbar on top of the screen. 2. Click “add post” 3. Daily mental exercises 4. Touch grass 		System should display forum post at the community forum	Behaved as expected

		3. Input valid sample title 4. Input valid sample content 5. Click submit			
TCA-H002	Verify if the user can create a forum post with a valid title and empty content.	1. Click "Community Forum" at the navbar on top of the screen.. 2. Click "add post" 3. Input valid sample title 4. Click submit	Daily mental exercises	User should not be able to post and show error message	Behaved as expected
TCA-H003	Verify if the user can create a forum post with an empty title and empty content	1. Click "Community Forum" at the navbar on top of the screen.. 2. Click "add post" 3. Click Submit	N/A	User should not be able to post and system should show error message	Behaved as expected
TCA-H004	Verify if the user can create a forum post with empty title field and valid content.	4. Click "Community Forum" at the navbar on top of the screen. 5. Click "add post" 6. Input valid sample content 7. Click submit	Touch grass	User should not be able to post and show error message	Behaved as expected
TCA-H005	Verify if the user can report a forum post.	1. Click "flag icon" on a forum post to report.	N/A	System should notify System Admin	Behaved as expected

		2. Click any reason from the list of dropdown menu report. 3. Click submit		about report	
TCA-H006	Verify if the user can report a comment on a forum post.	1. Click “flag icon” on a forum comment to report. 2. Click any reason from the list of dropdown menu report. 3. Click submit	N/A	System should notify System Admin about report	Behaved as expected
TCA-H007	Verify if the user can input valid comment on a forum post.	1. Click on “Chat bubble icon” on forum post 2. Input valid comment 3. Click Submit	Nice insight	System should be able to display user comment on the forum post.	Behaved as expected
TCP-H008	Verify if the user can delete self made forum post.	1. Click on “delete button” on forum post	N/A	System should be able to delete the user’s forum post.	Behaved as expected

Test Case Scenario: Manage forums

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output

TCA-I001	Verify if the user can view comments of a forum post.	<ol style="list-style-type: none"> 1. Go to the “Manage Community Forum” in user profile options. 2. Click on actions button 3. Select the “View Comments” button. 	N/A	System should display forum comments of selected forum posts.	Behaved as expected
TCA-I002	Verify if the user can delete forum post.	<ol style="list-style-type: none"> 1. Go to the “Manage Community Forum” in user profile options. 2. Click on “actions button” 3. Select the “Delete” button. 		System should delete selected forum posts from the manage forum list.	Behaved as expected

Test Case Scenario: Audit Logs

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA-J001	Verify if the user can view audit logs.	<ol style="list-style-type: none"> 1. Go to “Audit logs” in user profile options. 	N/A	System should display a list of audit logs to the user.	Behaved as expected

Test Case Scenario: Manage Warnings

Test Case no.	Action/Case	Test Steps	Input	Expected Output	Actual Output
TCA-K001	Verify if the user can view warnings.	1. Go to “Manage Warnings” in user profile options.	N/A	System should display a list of warnings to the user.	Behaved as expected

Beta testing forms and results

Mentalit-E

Beta Testing Form

Name: Chan, Gian Lord R.

User type: Patient

Good day! 😊 If you can't remember, we are the researchers that provided you with the survey in developing a system called Mentalit-E, which is an Online Mental Health Services Platform in the Philippines. We are happy to share that we are close in finishing the development. However, before finalizing the system, we

are asking for your help in testing its functions. Therefore, the results from your testing efforts will evaluate and contribute towards its efficiency and effectiveness.

PART I. Instructions: After the presenter has navigated you throughout the website's functions, please fill up the necessary form below.

Module	Feedback (please select only one)	Suggestions/Comments (if any)
Register	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Login	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forgot password	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory	

	<input type="checkbox"/> Very unsatisfactory	
Profile editing	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	The profile picture becomes oblong when editing.
Patient medical records	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Chatbot	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	I think it would better to have buttons instead of typing the letter for actions.
Booking	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Notifications	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	I think it is better to have a notification icon if there is a new notification just like in Facebook

Rating a clinic	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Awards (i.e., receiving awards, displaying awards on profile)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
EMA (Ecological Momentary Assessment)	<input checked="" type="checkbox"/> Very satisfactory	

	<input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Viewing and editing appointments & calendar	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Journal (i.e., adding entries)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Filing a ticket (i.e., viewing and adding feedback)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forum (i.e., adding posts, commenting on posts, reporting a post & comment)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	I think it would be better to upload images in their post. For example, uploading an image of a medicine.

PART II. Instructions: Please answer the following questions based on your evaluation/perception upon using the website. Select only your best answer.

1. How useful do you think the Mentalit-E is to mental health patients and doctors?
 - Very useful
 - Somewhat useful
 - Not useful
 - Not very useful
2. Was Mentalit-E easy to use in terms of its features and functionalities?
 - Very easy
 - Somewhat easy
 - Somewhat uneasy
 - Very uneasy
3. Are there any changes you would like to make towards Mentalit-E's developed website?
 - Yes
 - No

If yes, please
specify: _____

4. Do you think Mentalit-E is effective in terms of its features and functionalities?
 - Very effective
 - Somewhat effective
 - Not effective
 - Not very effective
5. How appealing do you think Mentalit-E is effective in terms of web design?
 - Very appealing
 - Somewhat appealing
 - Not appealing

Not very appealing

6. Please provide any additional thoughts/comments below (if applicable).
-

Mentalit-E

Beta Testing Form

Name: John Bryan Garcia

User type: Patient

Good day! 😊 If you can't remember, we are the researchers that provided you with the survey in developing a system called Mentalit-E, which is an Online Mental Health Services Platform in the Philippines. We are happy to share that we are close in finishing the development. However, before finalizing the system, we are asking for your help in testing its functions. Therefore, the results from your testing efforts will evaluate and contribute towards its efficiency and effectiveness.

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Module	Feedback (please select only one)	Suggestions/Comments (if any)
Register	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Login	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forgot password	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory	

	<input type="checkbox"/> Very unsatisfactory	
Profile editing	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Patient medical records	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Chatbot	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Booking	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Notifications	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	

Rating a clinic	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Awards (i.e., receiving awards, displaying awards on profile)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
EMA (Ecological Momentary Assessment)	<input checked="" type="checkbox"/> Very satisfactory	

	<input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Viewing and editing appointments & calendar	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Journal (i.e., adding entries)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Filing a ticket (i.e., viewing and adding feedback)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forum (i.e., adding posts, commenting on posts, reporting a post & comment)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	

PART II. Instructions: Please answer the following questions based on your evaluation/perception upon using the website. Select only your best answer.

1. How useful do you think the Mentalit-E is to mental health patients and doctors?
 - Very useful
 - Somewhat useful
 - Not useful
 - Not very useful
2. Was Mentalit-E easy to use in terms of its features and functionalities?
 - Very easy
 - Somewhat easy
 - Somewhat uneasy
 - Very uneasy

3. Are there any changes you would like to make towards Mentalit-E's developed website?
 - Yes
 - No

If yes, please specify: _____

4. Do you think Mentalit-E is effective in terms of its features and functionalities?
 - Very effective
 - Somewhat effective
 - Not effective
 - Not very effective
5. How appealing do you think Mentalit-E is effective in terms of web design?
 - Very appealing
 - Somewhat appealing
 - Not appealing
 - Not very appealing
6. Please provide any additional thoughts/comments below (if applicable).

Mentalit-E

Beta Testing Form

Name: Eunice Buenaventura

User type: Patient

Good day! 😊 If you can't remember, we are the researchers that provided you with the survey in developing a system called Mentalit-E, which is an Online Mental Health Services Platform in the Philippines. We are happy to share that we are close in finishing the development. However, before finalizing the system, we are asking for your help in testing its functions. Therefore, the results from your testing efforts will evaluate and contribute towards its efficiency and effectiveness.

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Module	Feedback (please select only one)	Suggestions/Comments (if any)
Register	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Login	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forgot password	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory	

	<input type="checkbox"/> Very unsatisfactory	
Profile editing	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Patient medical records	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Chatbot	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Booking	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Notifications	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	

Rating a clinic	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Awards (i.e., receiving awards, displaying awards on profile)	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
EMA (Ecological Momentary Assessment)	<input checked="" type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory	

	<input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Viewing and editing appointments & calendar	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Journal (i.e., adding entries)	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Filing a ticket (i.e., viewing and adding feedback)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forum (i.e., adding posts, commenting on posts, reporting a post & comment)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	

PART II. Instructions: Please answer the following questions based on your evaluation/perception upon using the website. Select only your best answer.

1. How useful do you think the Mentalit-E is to mental health patients and doctors?
 - Very useful
 - Somewhat useful
 - Not useful
 - Not very useful
2. Was Mentalit-E easy to use in terms of its features and functionalities?
 - Very easy
 - Somewhat easy
 - Somewhat uneasy
 - Very uneasy

3. Are there any changes you would like to make towards Mentalit-E's developed website?
 - Yes
 - No

If yes, please specify: _____

4. Do you think Mentalit-E is effective in terms of its features and functionalities?
 - Very effective
 - Somewhat effective
 - Not effective
 - Not very effective
5. How appealing do you think Mentalit-E is effective in terms of web design?
 - Very appealing
 - Somewhat appealing
 - Not appealing
 - Not very appealing
6. Please provide any additional thoughts/comments below (if applicable).

N/A

Mentalit-E

Beta Testing Form

Name: Jericho Andrei V. Ladrica

User type: Patient

Good day! 😊 If you can't remember, we are the researchers that provided you with the survey in developing a system called Mentalit-E, which is an Online Mental Health Services Platform in the Philippines. We are happy to share that we are close in finishing the development. However, before finalizing the system, we are asking for your help in testing its functions. Therefore, the results from your testing efforts will evaluate and contribute towards its efficiency and effectiveness.

PART I. Instructions: After the presenter has navigated you throughout the website's functions, please fill up the necessary form below.

Module	Feedback (please select only one)	Suggestions/Comments (if any)
Register	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Login	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Forgot password	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory	N/A

	<input type="checkbox"/> Very unsatisfactory	
Profile editing	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Patient medical records	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Chatbot	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Booking	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Notifications	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A

Rating a clinic	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Awards (i.e., receiving awards, displaying awards on profile)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
EMA (Ecological Momentary Assessment)	<input checked="" type="checkbox"/> Very satisfactory	N/A

	<input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Viewing and editing appointments & calendar	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Journal (i.e., adding entries)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Filing a ticket (i.e., viewing and adding feedback)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A
Forum (i.e., adding posts, commenting on posts, reporting a post & comment)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	N/A

PART II. Instructions: Please answer the following questions based on your evaluation/perception upon using the website. Select only your best answer.

1. How useful do you think the Mentalit-E is to mental health patients and doctors?
 Very useful
 Somewhat useful
 Not useful
 Not very useful

2. Was Mentalit-E easy to use in terms of its features and functionalities?
 Very easy
 Somewhat easy
 Somewhat uneasy
 Very uneasy

3. Are there any changes you would like to make towards Mentalit-E's developed website?
 Yes
 No

If yes, please specify: _____

4. Do you think Mentalit-E is effective in terms of its features and functionalities?
 Very effective
 Somewhat effective
 Not effective
 Not very effective

5. How appealing do you think Mentalit-E is effective in terms of web design?
 Very appealing
 Somewhat appealing
 Not appealing
 Not very appealing

6. Please provide any additional thoughts/comments below (if applicable).

N/A

Mentalit-E

Beta Testing Form

Name: Loisa M. Dahilig

User type: Clinic Employee/Clinic Admin

Good day! 😊 If you can't remember, we are the researchers that provided you with the survey in developing a system called Mentalit-E, which is an Online Mental Health Services Platform in the Philippines. We are happy to share that we are close in finishing the development. However, before finalizing the system, we are asking for your help in testing its functions. Therefore, the results from your testing efforts will evaluate and contribute towards its efficiency and effectiveness.

PART I. Instructions: After the presenter has navigated you throughout the website's functions, please fill up the necessary form below.

Module	Feedback (please select only one)	Suggestions/Comments (if any)
Register	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Login	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forgot password	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory	

	<input type="checkbox"/> Very unsatisfactory	
Clinic Application (i.e., PRC License Verification)	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Profile editing	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Awards	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Payment and Subscription (i.e., uploading proof of payments, being subscribed to a specific package)	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Assigning consultations	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	

View dashboard	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
View patient's medical records	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Booking comments	<input checked="" type="checkbox"/> Very satisfactory	

(i.e., giving remarks, diagnosis, etc.)	<input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Viewing and editing appointments & calendar	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Filing a ticket (i.e., viewing and adding feedback)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Chatbot	<input type="checkbox"/> Very satisfactory <input checked="" type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	
Forum (i.e., adding posts, commenting on posts, reporting a post & comment)	<input checked="" type="checkbox"/> Very satisfactory <input type="checkbox"/> Somewhat satisfactory <input type="checkbox"/> Somewhat unsatisfactory <input type="checkbox"/> Very unsatisfactory	

PART II. Instructions: Please answer the following questions based on your evaluation/perception upon using the website. Select only your best answer.

1. How useful do you think the Mentalit-E is to mental health patients and doctors?
 Very useful
 Somewhat useful
 Not useful
 Not very useful

2. Was Mentalit-E easy to use in terms of its features and functionalities?
 Very easy
 Somewhat easy
 Somewhat uneasy
 Very uneasy

3. Are there any changes you would like to make towards Mentalit-E's developed website?
 Yes
 No

If yes, please specify: _____

4. Do you think Mentalit-E is effective in terms of its features and functionalities?
 Very effective
 Somewhat effective
 Not effective
 Not very effective

5. How appealing do you think Mentalit-E is effective in terms of web design?
 Very appealing
 Somewhat appealing
 Not appealing
 Not very appealing

6. Please provide any additional thoughts/comments below (if applicable).

DE LA SALLE-COLLEGE OF SAINT BENILDE

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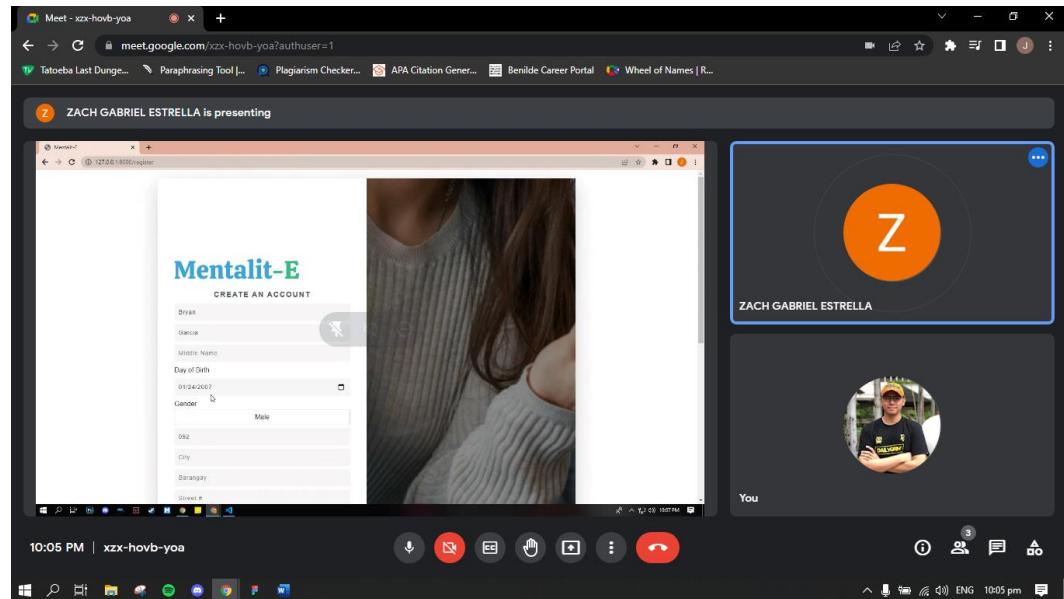
N/A

Appendix F

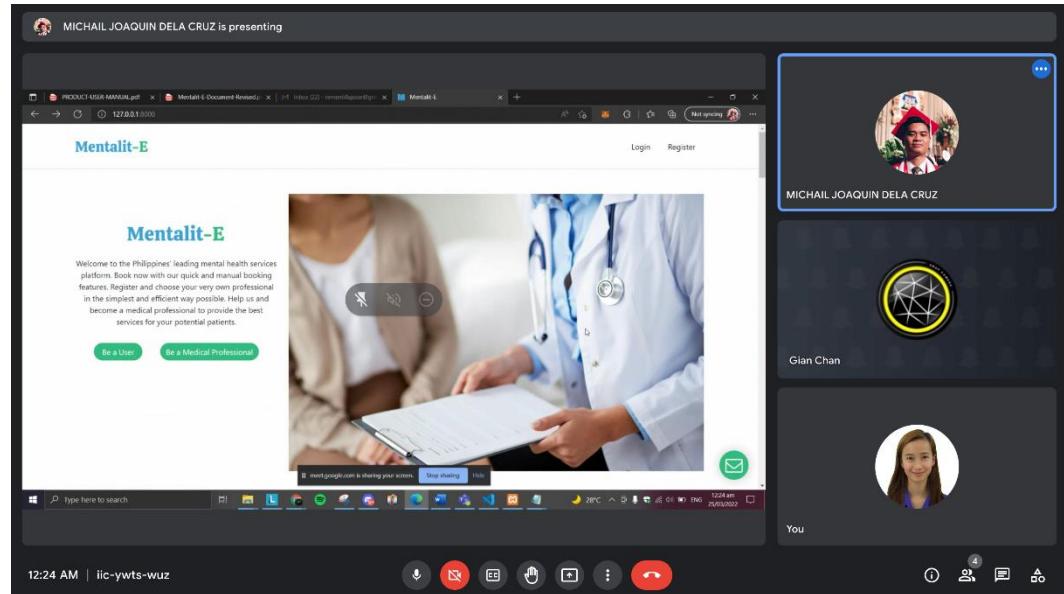
Pictures showcasing data gathering and investigation done

User role: Patient

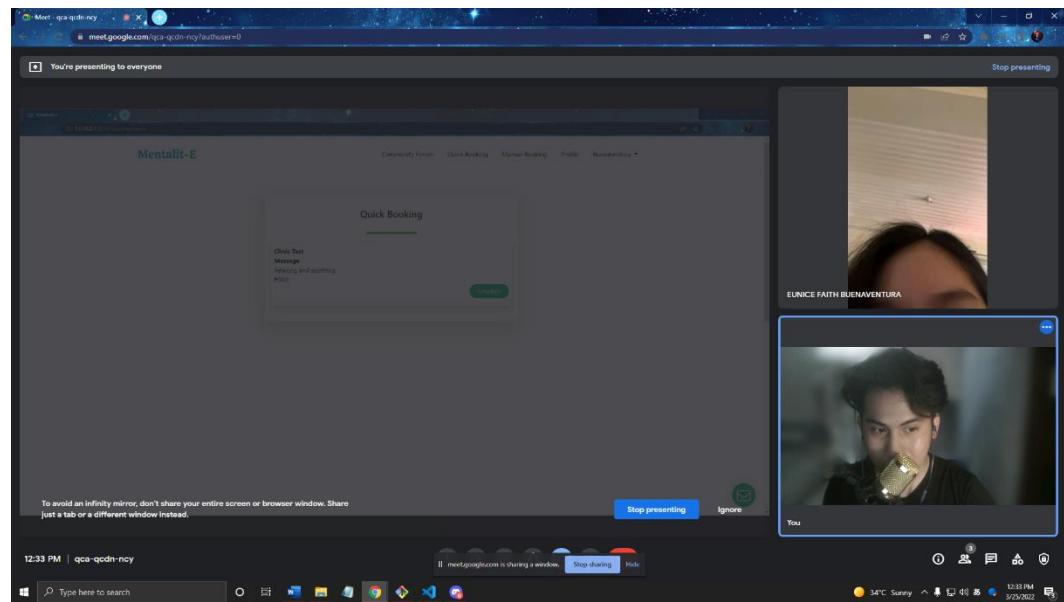
Respondent name: John Bryan Garcia
Date: 24/03/2022



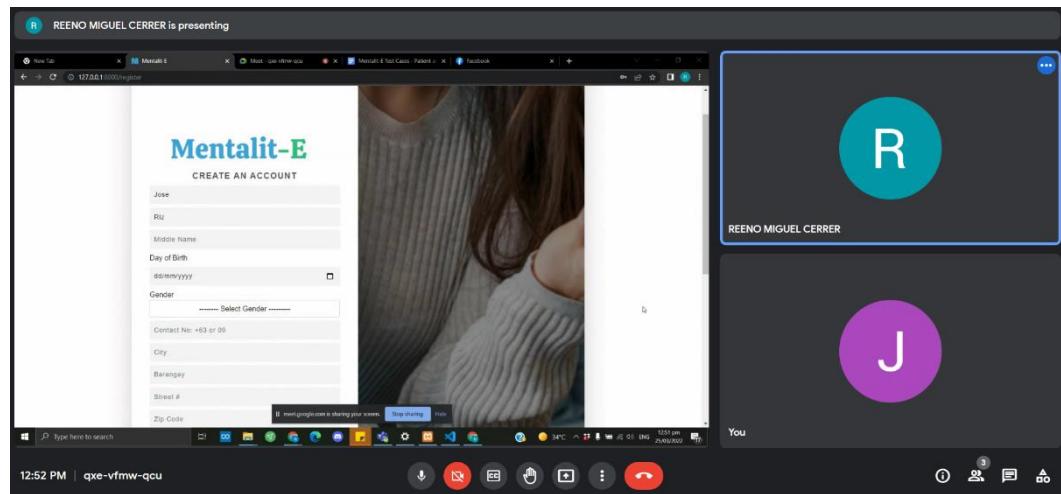
Respondent name: Gian Chan
Date: 25/03/2022



Respondent name: Eunice Buenaventura
Date: 25/03/2022



Respondent/s name: Jericho Ladriza
Date: 25/03/2022

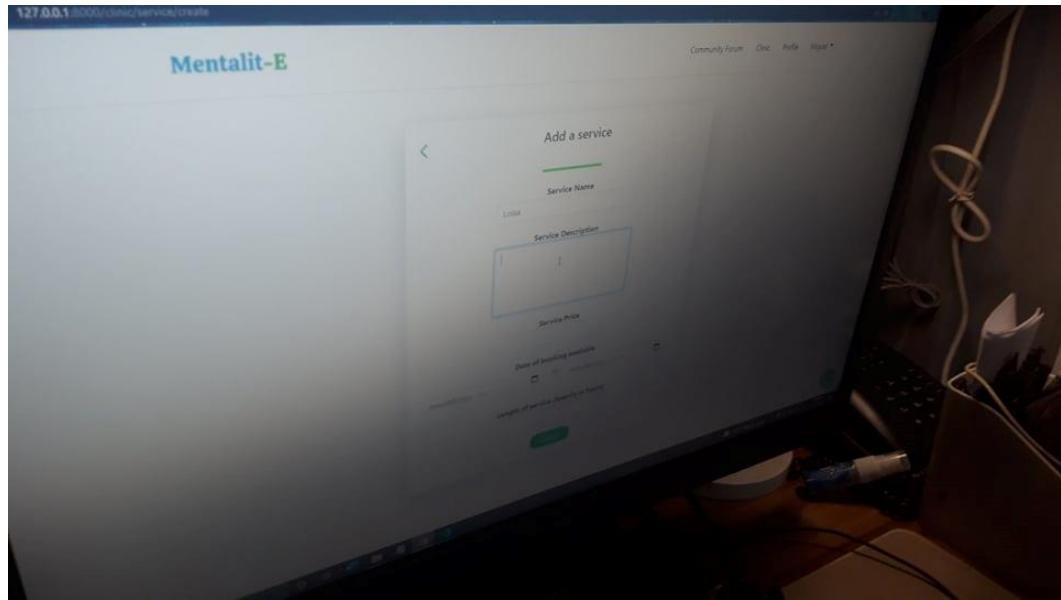


User role: Clinic Employee/Clinic Administrator

Respondent/s name: Loisa M. Dahilig

Date: 25/03/2022





Appendix G

Sample generated output

3/24/22, 10:36 PM

MentalH-E

Audit Logs

ID

1

User ID

2

Type

Clinic

Description

clinicadmin@gmail.com is waiting for approval of Cerrer Clinics Company attached with BIR License

Date Time

2022-03-24 13:36:21

ID

2

User ID

2

Type

User

Description

Cerrer Clinics status has been updated

Date Time

2022-03-24 13:42:45

ID

3

User ID

2

Type

User

Description

Cerrer Clinics Company payment approved for subscription

Date Time

2022-03-24 13:44:27

ID

4

3/24/22, 10:36 PM

MentalH-E

User ID
2**Type**
User**Description**

Cerrer Clinics Company status has been updated

Date Time

2022-03-24 13:47:10

ID
5**User ID**
2**Type**
User**Description**

Cerrer Clinics Company status has been updated

Date Time

2022-03-24 13:47:13

ID
6**User ID**
2**Type**
Clinic**Description**

clinicadmin@gmail.com is waiting for approval of Cerrer Clinic attached with BIR License

Date Time

2022-03-24 13:48:53

ID
7**User ID**
2**Type**
User**Description**

Cerrer Clinic payment approved for subscription

Date Time

2022-03-24 13:49:14

3/24/22, 10:36 PM	Mental-E
ID	8
User ID	6
Type	User
Description	delacruzchail@gmail.com has posted a discussion in the forum
Date Time	2022-03-24 13:54:30
ID	9
User ID	6
Type	User
Description	delacruzchail@gmail.com has updated information
Date Time	2022-03-24 13:54:46
ID	10
User ID	2
Type	Clinic
Description	clinicadmin@gmail.com has updated the information of Cerrer Clinic
Date Time	2022-03-24 13:58:41
ID	11
User ID	2
Type	Clinic
Description	clinicadmin@gmail.com has created a service for

3/24/22, 10:36 PM

MentalHealth

Date Time

2022-03-24 14:01:10

ID

12

User ID

2

Type

Clinic

Description

clinicadmin@gmail.com has created a service for

Date Time

2022-03-24 14:09:54

ID

13

User ID

6

Type

Clinic

Description

delacruzchail@gmail.com has booked an appointment for 2022-04-12T14:15 to 2022-04-12 17:15:00

Date Time

2022-03-24 14:12:53

ID

14

User ID

6

Type

Clinic

Description

delacruzchail@gmail.com appointment link has been updated by Cerrer Clinic

Date Time

2022-03-24 14:15:12

ID

15

User ID

6

Type

Clinic

3/24/22, 10:36 PM

MentalII-E

Description

delacruzchail@gmail.com appointment link has been updated by Cerrer Clinic

Date Time

2022-03-24 14:15:52

ID

16

User ID

6

Type

Clinic

Description

delacruzchail@gmail.com appointment link has been updated by Cerrer Clinic

Date Time

2022-03-24 14:21:04

ID

17

User ID

6

Type

Clinic

Description

delacruzchail@gmail.com has been updated by Cerrer Clinic

Date Time

2022-03-24 14:22:25

ID

18

User ID

6

Type

Clinic

Description

delacruzchail@gmail.com booking is done and waiting for ratings of Cerrer Clinic

Date Time

2022-03-24 14:29:10

ID

19

User ID

6

DE LA SALLE-COLLEGE OF SAINT BENILDE

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3/24/22, 10:36 PM

Mental-E

Type

Clinic

Description

delacruzchail@gmail.com booking has been rated for Cerrer Clinic

Date Time

2022-03-24 14:32:11

Appendix H

Third-party source codes/APIs

The researchers utilized the function of FullCalendar using Ajax upon viewing scheduled consultations and appointments of the clinics and patients. The source codes used as reference are placed below:

Controller

```
<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;

use App\Models\Event;

class FullCalenderController extends Controller

{
    /**
     * Write code on Method

```

```
* @return response()

*/
public function index(Request $request)
{
    if ($request->ajax()) {
        $data = Event::whereDate('start',
        '>=', $request->start)
            ->whereDate('end',
        '<=', $request->end)
            ->get(['id', 'title',
        'start', 'end']);

        return response()->json($data);
    }

    return view('fullcalendar');
}
```

```
 /**
 * Write code on Method
 *
 * @return response()
 */

public function ajax(Request $request)
{

    switch ($request->type) {

        case 'add':

            $event = Event::create([
                'title' => $request->title,
                'start' => $request->start,
                'end' => $request->end,
            ]);

            return response()->json($event);

        break;
    }
}
```

```
case 'update':  
    $event = Event::find($request->id)->update([  
        'title' => $request->title,  
        'start' => $request->start,  
        'end' => $request->end,  
    ]);  
  
    return response()->json($event);  
    break;  
  
case 'delete':  
    $event = Event::find($request->id)->delete();  
  
    return response()->json($event);  
    break;  
  
default:  
    # code...
```

```
        break;

    }

}

}
```

Blade

```
<!DOCTYPE html>

<html>

<head>

    <title>Laravel Fullcalender Tutorial
Tutorial - ItSolutionStuff.com</title>

    <meta name="csrf-token" content="{!! csrf_token() !!}">

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" />

    <script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>

    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fullcalendar/3.9.0/fullcalendar.css" />
```

```
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/moment.js/2.24.0/moment.min.js"></script>  
  
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/fullcalendar/3.9.0/fullcalendar.js"></script>  
  
  
  
<script  
src="https://cdnjs.cloudflare.com/ajax/libs/toastr/latest/toastr.min.js"></script>  
  
<link rel="stylesheet"  
href="https://cdnjs.cloudflare.com/ajax/libs/toastr/latest/toastr.min.css" />  
  
</head>  
  
<body>  
  
  
  
<div class="container">  
  
<h1>Laravel FullCalender Tutorial Example -  
ItSolutionStuff.com</h1>  
  
<div id='calendar'></div>  
  
</div>  
  
  
  
<script>  
$(document).ready(function () {
```



```
    } }  
    event.allDay =  
false;  
  
    }  
  
    } ,  
  
    selectable: true,  
  
    selectHelper: true,  
  
    select: function (start,  
end, allDay) {  
  
        var title =  
prompt('Event Title:');  
  
        if (title) {  
  
            var start =  
$.fullCalendar.formatDate(start, "Y-MM-DD");  
  
            var end =  
$.fullCalendar.formatDate(end, "Y-MM-DD");  
  
            $.ajax({  
  
                url: SITEURL +  
"/fullcalenderAjax",  
  
                data: {  
  
                    title:  
title,
```

```
        start:  
        start,  
  
        end: end,  
  
        type: 'add'  
  
    },  
  
    type: "POST",  
  
    success:  
function (data) {  
  
    displayMessage("Event Created Successfully");  
  
    calendar.fullCalendar('renderEvent',  
  
    {  
  
        id:  
        data.id,  
  
        title: title,  
  
        start: start,  
  
        end:  
        end,  
  
        allDay: allDay
```

```
calendar.fullCalendar('unselect') ;  
    }  
}  
});  
}  
},  
eventDrop: function (event,  
delta) {  
    var start =  
$.fullCalendar.formatDate(event.start, "Y-MM-  
DD");  
  
    var end =  
$.fullCalendar.formatDate(event.end, "Y-MM-DD");  
  
    $.ajax({  
        url: SITEURL +  
'fullcalenderAjax',  
        data: {  
            title:  
event.title,  
            start: start,
```

```
        end: end,  
  
        id: event.id,  
  
        type: 'update'  
  
    },  
  
    type: "POST",  
  
    success: function  
(response) {  
  
    displayMessage("Event Updated Successfully");  
  
}  
  
} );  
  
},  
  
eventClick: function (event)  
{  
  
    var deleteMsg =  
confirm("Do you really want to delete?");  
  
    if (deleteMsg) {  
  
        \$.ajax({  
  
            type: "POST",  
  
            url: SITEURL +  
'fullcalendarAjax',  
  
            data: {  
                _method: 'DELETE'  
            }  
        });  
    }  
};
```

```
        id:  
        event.id,  
  
        type:  
        'delete'  
  
    } ,  
  
    success:  
function (response) {  
  
    calendar.fullCalendar('removeEvents', event.id);  
  
    displayMessage("Event Deleted Successfully");  
  
}  
  
}) ;  
  
}  
  
}  
  
}) ;  
  
}  
  
});  
  
function displayMessage(message) {  
    toastr.success(message, 'Event');  
}
```

```
}
```

```
</script>
```

```
</body>
```

```
</html>
```

Hardik, S (2019) Laravel Fullcalendar Example Tutorial (Version 1.0) [Source code]. <https://www.itsolutionstuff.com/post/laravel-fullcalendar-example-tutorialexample.html>

Secondly, the researchers used Botman to generate the chatbot feature. It is used to provide information and FAQs of Mentalit-E. The source codes used as reference are placed below:

Command line

Installing Botman

```
composer require botman/botman
```

Installing Botman driver

```
composer require botman/driver-web
```

Controller

```
<?php

namespace App\Http\Controllers;

use BotMan\BotMan\BotMan;
use Illuminate\Http\Request;
use BotMan\BotMan\Messages\Incoming\Answer;

class BotManController extends Controller

{
    /**
     * Place your BotMan logic here.
     */
    public function handle()
    {
        $botman = app('botman');
    }
}
```

```
$botman->hears('{message}',  
function($botman, $message) {  
  
    if ($message == 'hi') {  
  
        $this->askName($botman);  
  
    } else {  
  
        $botman->reply("write 'hi' for  
testing...");  
  
    }  
  
} );  
  
$botman->listen();  
}  
  
/**  
 * Place your BotMan logic here.  
 */  
  
public function askName($botman)  
{
```

```
$botman->ask('Hello! What is your  
Name?', function(Answer $answer) {  
  
    $name = $answer->getText();  
  
    $this->say('Nice to meet you  
' . $name);  
  
} );  
}  
}
```

Blade

```
<!doctype html>  
  
<html>  
  
    <head>  
  
        <meta charset="utf-8">  
  
        <meta name="viewport"  
content="width=device-width, initial-scale=1">  
  
        <title>How to install Batman Chatbot in  
Laravel 5? - ItSolutionStuff.com</title>
```

```
<link
  href="https://fonts.googleapis.com/css?family=Nunito:200,600" rel="stylesheet">

<style>
  html, body {
    background-color: #fff;
    color: #636b6f;
    font-family: 'Nunito', sans-serif;
    font-weight: 200;
    height: 100vh;
    margin: 0;
  }
</style>

</head>

<body>
</body>

<link rel="stylesheet" type="text/css"
  href="https://cdn.jsdelivr.net/npm/botman-web-widget@0/build/assets/css/chat.min.css">

<script>
```

```
var botmanWidget = {  
    aboutText: 'ssdsd',  
    introMessage: "👋 Hi! I'm form  
ItSolutionStuff.com"  
};  
</script>  
  
<script  
src='https://cdn.jsdelivr.net/npm/botman-web-  
widget@0/build/js/widget.js'></script>  
  
</html>
```

Hasan, M (2019) Laravel 8.x Botman Chatbot Example Tutorial (Version 1.0) [Source code]. <https://www.codecheef.org/article/how-to-install-botman-chatbot-in-laravel>

Thirdly, the researchers also used DataTables by Yajra. This is used to display the list of data among Mentalit-E's modules, and is integrated with a live searching feature. The source codes used as reference are placed below:

Command line

```
composer require yajra/laravel-datatables-oracle
```

Controller

```
<?php

namespace App\Http\Controllers;

use Illuminate\Http\Request;

use App\Models\Student;

use DataTables;

class StudentController extends Controller

{

    public function index()
```

```
    }

    return view('welcome');

}

public function getStudents(Request $request)

{

    if ($request->ajax()) {

        $data = Student::latest()->get();

        return Datatables::of($data)

            ->addIndexColumn()

            ->addColumn('action', function($row){

                $actionBtn = '<a href="javascript:void(0)"'

class="edit btn btn-success btn-sm">Edit</a> <a href="javascript:void(0)" class="delete btn btn-danger btn-sm">Delete</a>';

                return $actionBtn;
            });

    }
}
```

```
        return $actionBtn;

    })

->rawColumns(['action'])

->make(true);

}

}

}
```

Blade

```
<!DOCTYPE html>

<html>

<head>

    <title>Laravel 8|7 Datatables Tutorial</title>
```

```
<meta name="csrf-token" content="{{ csrf_token() }}">

<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/css/bootstrap.min.css"/>

<link
href="https://cdn.datatables.net/1.10.21/css/jquery.dataTables.min.css" rel="stylesheet">

<link
href="https://cdn.datatables.net/1.10.21/css/dataTables.bootstrap4.min.css" rel="stylesheet">

</head>

<body>

<div class="container mt-5">

<h2 class="mb-4">Laravel 7|8 Yajra Datatables Example</h2>

<table class="table table-bordered yajra-datatable">

<thead>
```

```
<tr>

<th>No</th>

<th>Name</th>

<th>Email</th>

<th>Username</th>

<th>Phone</th>

<th>DOB</th>

<th>Action</th>

</tr>

</thead>

<tbody>

</tbody>
```

```
</table>

</div>

</body>

<script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.js"><
/script>

<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery-
validate/1.19.0/jquery.validate.js"></script>

<script
src="https://cdn.datatables.net/1.10.21/js/jquery.dataTables.min.js"
></script>

<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.0/js/bootstrap
.min.js"></script>

<script
src="https://cdn.datatables.net/1.10.21/js/dataTables.bootstrap4.min
.js"></script>

<script type="text/javascript">
```

```
$(function () {  
  
    var table = $('.yajra-datatable').DataTable({  
  
        processing: true,  
  
        serverSide: true,  
  
        ajax: "{{ route('students.list') }}",  
  
        columns: [  
  
            {data: 'DT_RowIndex', name: 'DT_RowIndex'},  
  
            {data: 'name', name: 'name'},  
  
            {data: 'email', name: 'email'},  
  
            {data: 'username', name: 'username'},  
  
            {data: 'phone', name: 'phone'}  
        ]  
    });  
});
```

```
{data: 'dob', name: 'dob'},  
  
 {  
  
 data: 'action',  
  
 name: 'action',  
  
 orderable: true,  
  
 searchable: true  
  
 },  
  
 ]  
  
});  
  
});  
  
</script>
```

```
</html>
```

Digamber (2022) How to Use Yajra Datatables in Laravel 9 Application (Version 1.0) [Source code]. <https://www.positronx.io/laravel-datatables-example/>

Lastly, the researchers used Google Charts by Google. This is used to display the dashboard regarding the monthly data statics within the system in the form of pie charts, graphs, etc. The source codes used as reference are placed below:

Creating an options object (code that creates the chart):

```
var options = {
  width: 400,
  height: 240,
  title: 'Toppings I Like On My Pizza',
  colors: ['#e0440e', '#e6693e', '#ec8f6e', '#f3b49f', '#f6c7b6']
};

chart.draw(data, options);
```

Specifying options with draw() method:

```
chart.draw(data, {
  width: 400,
  height: 240,
  title: 'Toppings I Like On My Pizza',
  colors: ['#e0440e', '#e6693e', '#ec8f6e', '#f3b49f',
  '#f6c7b6'],
  is3D: true
});
```

Google (2021) How to Customize Charts (Version 1.0) [Source code].
https://developers.google.com/chart/interactive/docs/customizing_charts

