**CHAPTER 1**

**THE PROBLEM AND ITS BACKGROUND**

* 1. **Introduction**

On March 11, 2020, the World Health Organization identified COVID-19 as a pandemic (WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020, 2020). Due to the COVID-19 pandemic, multiple quarantines around the world had occurred and had changed people’s accustomed lives. Many schools have adopted online methods of teaching while most employees were asked to work from home and participate in more virtual meetings.

The COVID-19 pandemic is affecting poor people the hardest, uncovering imbalances in getting access to health care. In the Philippines, President Rodrigo Duterte announced on March 16, 2020 that the entire Luzon archipelago will be on enhanced community quarantine (Memorandum from the Executive Secretary On Community Quarantine Over the Entire Luzon and Further Guidelines for the Management of the Coronavirus Disease 2019 (COVID-19) Situation, 2020). During the early phase of the pandemic in the Philippines, one-fourth of respondents reported moderate-to-severe anxiety and one-sixth reported moderate-to-severe depression and psychological impact (Tee, et al., 2020). Numerous individuals are arrested for violations related to lockdown and curfew orders, in reaction to the pandemic. Many people have also lost their jobs due to lockdowns shuttering thousands of businesses.

The purpose of this study is to raise awareness regarding the circumstances the pandemic has fostered. By simulating the COVID-19 pandemic as a visual novel game, users will be able to apply their knowledge about the situation and turn it into real time actions. Simulations facilitate fast learning by providing immediate feedback on the outcomes of their decisions. The visual novel game will assist in equipping users with realistic knowledge so that they can better respond to real-life situations during the COVID-19 pandemic.

* 1. **Background of the Study**

The coronavirus disease-2019 (COVID-19) pandemic, caused by the new coronavirus SARS-CoV-2, has spread around the world, wreaking havoc on the health of millions of people. Although the pandemic is still ongoing, and new events are recorded every day, the global society's resilience is constantly being tested (Zoumpourlis, Goulielmaki, Rizos, Baliou, & Spandidos, 2020). WHO first learned of this new virus on 31 December 2019, following a report of a cluster of cases of ‘viral pneumonia’ in Wuhan, People’s Republic of China (Coronavirus disease (COVID-19), 2020).

Among those who develop symptoms, most (about 80%) recover from the disease without needing hospital treatment. About 15% become seriously ill and require oxygen and 5% become critically ill and need intensive care. Complications leading to death may include respiratory failure, acute respiratory distress syndrome (ARDS), sepsis and septic shock, thromboembolism, and/or multiorgan failure, including injury of the heart, liver or kidneys (Coronavirus disease (COVID-19), 2020).

The study was conducted in order to help raise awareness regarding the real-life problems the COVID-19 pandemic has facilitated. This was implemented through narrative simulations from a visual novel named Quarantine Life. A visual novel is an interactive fiction video game genre that features a text-based story with a narrative style like literature and interactivity aided by static or sprite-based visuals, or video game footage. The gameplay in visual novels differs from that of other game genres in that it is generally minimal. Most of the player interaction is usually limited to clicking to keep the graphics and narrative going, as well as making narrative choices along the way.

Novel, a visual novel on COVID-19 (Shah, n.d.), is a similar visual novel that informs about the COVID-19 pandemic. The game teaches children about COVID-19 and how to avoid it. To tell the story and engage young children, it relies on the "choose your own adventure" gameplay mechanism. Educators in Singapore used it, as did parents who shared it with their children.

Another similar study is the game, “COVID-19–Did You Know?”. The study met the proposed objectives of developing a serious game and making it available to young people, as well as providing reliable information on COVID-19 prevention topics (Gaspar, et al., 2020).

This game's learning content was divided into six topics that presented specific WHO recommendations for the population, with an emphasis on issues related to teenagers' daily lives.

* 1. **Objectives of the Study**

The aim of this study was to develop a visual novel with interactive and dynamic stories that focuses on realistic themes from a person’s daily life during quarantine, consisting of branching paths with multiple endings. The intention was to create a realistic, relatable casts of characters and themes drawn from daily life teaching facts about COVID-19 and personal responsibilities. The purpose of this project is to increase awareness about the circumstances that the pandemic has created, and how people can better respond to the real-life issues during the pandemic. Users will be able to apply their knowledge of the situation and turn it into real-time actions by simulating the COVID-19 pandemic as a visual novel game.

The study was aimed to achieve this through the following objectives:

* To provide information regarding the prevention of COVID-19.
* To indicate the possible outcomes of handling a COVID-19 quarantine.
* To convey the importance of social distancing during the COVID-19 pandemic.
* To teach users the importance of personal care during the COVID-19 pandemic.
* To create realistic character designs that enhances the visual novel’s relatability.
  1. **Scope and Limitation**

The scope of this study was to primarily focus on the design, development, testing, and evaluation of Quarantine Life – A Visual Novel Game for iOS and Android. The visual novel game is created using Ren’Py, a visual novel engine that uses words, images, and sounds to tell interactive stories (The Ren'Py Visual Novel Game Engine, n.d.). The game supports iOS 11+ and Android 5.0+. It was intended to be a single player game and allows for offline usage.

The study was aimed to cover the COVID-19 guidelines in the Philippines. As the study was made during the COVID-19 pandemic, it was limited to the present narrative of the pandemic. It was also restricted to provide information about the COVID-19 pandemic in Mabalacat City, Pampanga only. The study includes the situational state regarding the pandemic in the local area, and the implications of it. The general purpose of the study was to increase insight regarding the social and biological problems that the COVID-19 pandemic has fostered in the chosen local area.

The study was conducted by the students of Mabalacat City College. The target sample of the study were people living or staying in Mabalacat City who are ages 15 and above. The researchers conducted a survey that queries about the interviewees’ experiences during the pandemic. This survey was created to facilitate the narrative of the game.

* 1. **Significance of the Study**

The significance of awareness during the COVID-19 is important in minimizing the spread of COVID-19. Public awareness must be improved to be prepared for epidemic and pandemic situations (Alahdal, Basingab, & Alotaibi, 2020). One of the most critical aspects of COVID-19 awareness is the various modes of virus’ transmission from an infected person. Demonstrating good understanding of preventive measures, particularly social distancing, and seeking medical help if symptoms persist will help Mabalacat City in its combat to the pandemic.

Beneficiary of the study are as follows:

**The Students**

The output of this study is beneficial to the students, especially to those who are having face-to-face classes. Through this study, students will understand the importance of the COVID-19 guidelines in school and in their houses.

**The Community**

The results will help the community combat the COVID-19 pandemic. This study serves as their reference which will give them a background about the challenges and the preventive measures on the pandemic.

**Future Researchers**

The ideas presented may be used as reference data in conducting new research or related findings about the COVID-19 pandemic. It can also serve those that aims to develop a visual novel game as its focus of the study.

* 1. **Definition of Terms**

**COVID-19**

An infectious disease caused by a coronavirus discovered from Wuhan, People’s Republic of China.

**Visual Novel**

An interactive fiction video game genre that features a text-based story with a literary narrative style.

**CHAPTER 2**

**REVIEWS OF RELATED LITERATURE AND STUDIES**

**Related Literature**

**History of Video Games**

**Video Games**

A video game is an interactive game that can be played in different platforms via personal computers, game consoles, mobile phones, tablets, or arcade machines.

Video games are a form of digital entertainment that displays multiple multimedia elements such as text, images, audios, videos, and animations. The main input devices used in video games are known as controllers. The controller can be a keyboard, mouse, gamepad, joystick, paddles, or any other device designed for gaming that can receive input. (www.igi-global.com)

The term ‘video games’ or ‘computer games’ is a game form that often requires problem solving, teamwork, oppositions, and resource management. They are liked by children and adults as they also teach players to think clearly and make rapid decisions, offering the pleasure of mastery, both visual and intellectual. (www.streetdirectory.com)

**Video Games Genres**

**What are Visual Novels?**

Visual novels are genre of games that feature text-based stories with a narrative style of literature and interactivity aided by static or sprite-based visuals, most often using anime-style art or occasionally live-action stills. They are often shown in the first-person perspective, putting you in the body and soul of the main character. https://medium.com/@danielmayfair/are-visual-novels-legitimate-games-22a72c9c9ad9. “What are Visual Novels?”

**History of Visual Novels**

**What is Covid-19?**

**How does Covid-19 spread?**

**Coronavirus Prevention**

**Android**

**iOS**

**Synthesis of the Study**

**Conceptual Framework**