# Depression treatment friend Oprea Olivia Maria-Magdalena

#### **ABSTRACT**

Recently, depression has become one of the most common mental illnesses among young people. It affects the way we think, feel and behave with the people around us. Fortunately, depression can be treated, and one of the methods recently used by doctors is video game therapy.

The "Let Me Treat You 2" project aims to combine several methods of treating depression in one game. The user will be able to talk with a virtual pall, and after collecting data about him and his problems, different activities will be provided.

### 1. INTRODUCTION

#### 1.1 Context

In the early 1970s, a new industry was emerging in the entertainment market, that of video games. At that time, video games could only be played in specially designed venues alongside mechanical games, with one game being encased in a very large, purpose-built 'computer'. The first video game brought to market was "Computer Space" made by Nutting Associates in 1971, followed by the famous "Pong" game brought to market by Atari in 1972.

Nowadays, video games are no longer just a way for people to relax in their free time or connect and have fun with people far away from them, but have become a way for people to learn new things, simulate different dangerous real-life activities or be treated for different mental illnesses. These games include war simulators, where soldiers can train in a virtual environment without risking their lives, educational games that stimulate faster learning among young people and, last but not least, therapeutic games, used by doctors to treat mental illnesses, including depression.

Unfortunately, depression affects about 5% of adults today, and a large proportion of them cannot afford treatment. But with video games this can change. They can be treated with different mechanisms in games, from virtual friends with whom they can talk and socialise in

a friendly environment to interactive games that help them regain a sense of responsibility, a desire to explore and get out of their comfort zone and so on.

This project focuses on treating people who suffer from depression or have frequent bouts of sadness and aims to combine several methods of treating depression into one interactive game. The virtual friend will collect data about the patient and then suggest different activities based on his state of mind.

#### 1.2 Problem

Most people today cannot afford a visit to a therapist or prefer to treat themselves from the comfort of their own home. As the pandemic has made visiting a therapist more difficult, treating patients with video games offers an alternative method of combating depression.

Treating depression can be done with the help of these games specially designed for the patient's needs, but unfortunately these games are not so sought after by the big developers, as they are not designed for a wide audience and therefore do not bring a satisfactory profit to them.

Consequently, making these games can be a challenge not only because of insufficient funding, but also because depression manifests itself differently from person to person and there is a possibility that a game that has been created for some people suffering from depression may not be able to help others, even if they suffer from the same condition, resulting in the need to create more games. However, all this would bring a great addition to the daily lives of people suffering from depression and would greatly help therapists in their struggle to treat patients.

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## What will the game contain:

- a virtual friend with whom the patient will be able to communicate, in writing.

At the first interaction with the game, the virtual friend will collect data about the patient to figure out his condition and how advanced the sadness is in him. Afterwards, the patient will be able to talk freely with his virtual friend, who will continue to collect data to improve the activities that he will later suggest to him.

- different activities and games that will be suggested by the virtual friend in order to cheer up the patient and help him.

Some of the games that the app can suggest could be action games, strategy games or games that can keep the patient busy enough to forget about daily problems. This games will be integrated in the original app.

- collect data from a smartwatch to see the patient's daily activities, such as how he sleeps, how much he walks in a day, the heart rate and so on. This data will also help the game to suggest more activities that are suitable for the patient.

For example, if the patient doesn't sleep well, the app can suggest some activities that tire them out or maybe some songs that can lull them to sleep or help them into a relaxed state. Another example would be that if the patient is not moving enough, the virtual friend can ask them to go for a walk.