Software Prototype Requirements Document

Project Overview

- **Project Title:** Prospective Memory Training
- **Objective:** Develop a virtual reality experience prototype that helps the user train prospective memory.

Stakeholders

- **Primary Stakeholder(s):** The end users (adults) that want to test their prospective memory.

Functional Requirements

1. **Feature 1:** The experience will take place in a virtual reality house. The play space will be in the living room of the house.
2. **Feature 2:** At the beginning of the experience, the user will be in the bedroom of the house, and he/she will be able to see a list of the tasks that need to be completed in the living room.
3. **Feature 3:** Once the user has finished studying the list, the user can press a button to start the experience.
4. **Feature 4:** The user has to do the tasks that were given at the beginning, they can be done in the order the user wants.
5. **Feature 5:** The tasks to do will be random each time the experience is played.
6. **Feature 6:** The number of tasks to do can be changed in an interface before the experience starts with an UI. The maximum number of tasks that the user can do is the number of defined tasks.
7. **Feature 7:** The tasks to do include sending an email that is already written, putting a pair of shoes inside a washing machine, storing some plates in a cupboard, placing a painting on the wall, drinking a coffee and eating a lemon, an apple or a watermelon.
8. **Feature 8:** All tasks can be done by the user, even if they were not in the list.
9. **Feature 9:** To check if the user did all the tasks that were asked to do (and also if the user did more tasks that were asked to do), a csv file with all the information of the session will be given.
10. **Feature 10:** The csv file will contain all the events that happened during the session. The events can be the start or the end of a phase (Modifying Settings, Learning, Doing Tasks, End) or if a task was completed. For all the events, it is also stored at which second the action was made since the experience started.
11. **Feature 11:** The task completion event also stores the task ID, its description, if it was finished or not and if the task was in the list.
12. **Feature 12:** Once the user thinks he/she has completed all the tasks, the user can go back to the room of the beginning and press the button "Finish" from an UI that can be found on the room.

13. **Feature 13:** Once the "Finish" button has been pressed, the user will be able to see the tasks that have completed from the list and the ones that didn't complete.

Non-Functional Requirements

1. **Performance:** The experience needs to work without any performance issues.
2. **Usability:** The experience needs to be easy to play and accessible for adults. Also, the UI needs to be intuitive.
3. **Compatibility:** The experience needs to be played with a virtual reality headset and controls.
4. **Software:** The experience is developed on Unity engine.

Timeline

- **Start Date:** 30/04/2024
- **End Date:** 06/04/2024

Sign-off

- **Name:** Óscar Delgado Rueda
- **Date:** 30/04/2024