Technical Specification Document

Project 2 MPS

Type Attack

1. **Project Goals**

This project’s goal is to develop a single player game in which the player has to type the word displayed into a text box.

1. **System Architecture/Infrastructure**

The chosen technology for developing the game is Unity, a cross-platform game engine, which provides many useful APIs in order to implement scalable gaming and networking features easily and quickly.

A Unity project is composed of multiple predefined file groups. The one which was fully created by our developers is ‘Assets’. In this folder, we have Art, Prefabs, Scenes and Scripts. The one mainly developed was a file inside the Scripts folder – Chat.cs.

1. **Implementation**

The game is written in C# and it consists of one main script:

1. Chat.cs
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This class consists of the game logic, meaning the time span in which the player has to type the given word, the remaining lives, the difficulty of the game, as it gets harder when the player gains points, and the leaderboard.

The first part of this script is to check the current game difficulty. As the game progresses, the text starts to change color, to modify its size, to rotate and eventually the word’s letters start to modify independently.

The second part is where the leaderboard and the start menu are implemented. The start menu consists of three buttons: Start Game, Show Leaderboard and Exit. The leaderboard displays the top 10 scores (not the top 10 players).

In the last part of this class, there are implemented the methods which check the current amount of points in order to increase the game difficulty, rotate/translate for the words/letters, the start method which sets the camera, difficulty, etc.., the Update method which updates the lives left for the player and the reset method which sets the initial values for score, lives, difficulty and time.