Requirements Document

1 Introduction

ZIG.ZAG. The rules of the game are very simple. Stay on the wall and do as many zigzags as you can! Just tap the screen to change the direction of the ball. Try not to fall off the edges and avoid obstacles! Get as far as you can and challenge your friends in VS mode.

2 User Requirements

2.1 Software Interfaces

The application will be created using Unity3D engine. Target platform is Android devices.

2.2 User Interfaces

The idea of the game is simple. Player's character constantly moves forward and to avoid obstacles and falls player can change movement direction by tapping the. The goal is to get as high score as possible by surviving longer and picking up bonuses. The player can check high score and other statistics in corresponding menu. The game also has a local multiplayer mode – VS, that gives you an opportunity to challenge other players. Help menu explains the game idea and controls. See mockups for details.

2.3 User Characteristics

The game is being developed as a typical "Time Killer" for Android users. The rules and controls are very simple but the further you advance in the game, the more challenging it gets. The application does not have any age restrictions.

2.4 Assumptions and Dependencies

The application requires Bluetooth access to play multiplayer mode.

3 System Requirements

3.1 Functional Requirements

Application has several stages:

1. Main menu shows at application start. User can perform several actions:
    1.1. Start the game.
    1.2. Start VS game.
    1.3. Turn on/off application sounds.
    1.4. Open Statistics.
    1.5. Open Help
2. Gameplay. This stage shows when user starts a new game. The beginning of the level is generated and player's character is placed at the start point and starts moving forward. Gameplay description:

    2.1. Players' character constantly moves forward.

    2.2. Character's speed increases the further player progresses.

    2.3. Player can change the direction of movement by tapping the screen.

    2.4. Player can pick up bonuses to increase final score.

    2.5. When player loses by falling off the wall or running into obstacle, the total score shows up and player can choose between going to main menu and playing again from the beginning.

3. How to play. Slide show of pictures with game tips.
4. Statistics. Displays player's current high score as well as some other details. For example, average score, how many games were, total pickups, time spent, etc.
5. VS mode lobby. After starting VS mode, the game shows a list of available opponents. When you challenge someone, he can either agree or decline. If the other player declines your challenge, you will be returned back to the list. If the other player agrees, the VS mode will start.
6. VS mode gameplay. The multiplayer gameplay is in general identical the regular version. The VS game plays in landscape orientation and the smartphone screen is split in two parts. One shows your game, another – your opponent. The game generates identical levels for both players with same layout and obstacles. After both players stated they are ready, the game starts. When either of players loses the VS, results screen shows up. From here player can go to main menu or play again. VS will start again only if both players agree.

3.2 Non-Functional Requirements

1. Android OS support.
2. Simple and stylized 3D graphics.
3. Incidental music

3.2.1 SOFTWARE QUALITY ATTRIBUTES

Application size should not exceed 50 MB to attract more users to the project. Application should have various colorful yet not distracting backgrounds and FX.