**Improving the Game**

During testing of the game, a number of issues arose, one of which arose from the unusual control system. Despite utilising the keyboard for the purposes of this prototype, the controls were designed to emulate a “twin-stick” system similar to that of modern indie 2D shooters such as *Geometry Wars* (where one stick controls the ship while the other controls the direction of fire). However, possible a result of the second “stick” is being used to control the direction of the player’s gravity instead this has proven somewhat confusing to new players, particularly those who don’t play a lot of games to begin with.

Possible improvements in this respect might include the addition of a “tutorial” level designed to explain the control system in detail, as well as considering an alternative control system, especially for the mobile devices to which this game is targeted, as virtual joysticks and the thumbs that use them can often obscure the on-screen action.

Examples of the pitfalls that virtual joysticks bring can be seen in many a mobile game with a virtual joystick system, particularly first-person shooters. An alternative control system for mobile devices might include a virtual directional pad to control player movement along a surface, which could be either the classic four-directional variety or a context sensitive one that only offers directions based on the direction of the player’s gravity (left and right when walking along horizontal surfaces, up and down on vertical ones). Implementation of a swipe-based system, where the player swipes in the direction they wish to direct their gravity, can serve to keep virtual controls to a minimum and potentially provide a control system that makes more immediate sense to the player.

On player had also complained of the game being “dizzying” and that the changes in the player’s direction threw him off. A possible suggestion, albeit one that may only be implemented in a more suitable programming language, would be to look into rotating the level itself while the player remains – at least to the player – to be right-side up at all times. This may in turn eliminate swipe-based gravity controls in favour of a system that utilises a mobile device’s motion sensors.

Another issue raised was that players that fell from excessive heights direction into an exit tile did not suffer fall damage as they would if landing on another solid tile, introducing some potential for exploitation on levels where there would be a clear and unobstructed large drop between the player and an exit. A simple solution would be to block or divert such drops, which may cause difficulties and excessive limitations for level creation, or somehow prioritise evaluating the player’s fall distance in the game’s code *before* evaluating the tile upon which the player has landed.

The last complaint, that a player was unaware of the number of retries that he had, may be a difficult one to remedy, as it should be noted that the player had willingly neglected to read the instructions provided at the game’s main menu (in spite of numerous request to do so). However, it’s common for players to jump into the game straight away without the need to study these instructions beforehand, which may give additional cause for implementing a tutorial stage to show the player the ropes as they play.