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| Project Design Document | |  | | --- | | *11/11/2022*  Patrick Hou Froberg | |

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| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | Player Sphere | | in this   |  |  | | --- | --- | | *Third person* | game | |
|  | where   |  | | --- | | W, A, S, D or arrows (Player one, Player Two) | | makes the player   |  | | --- | | Move and interact with other objects in the game | |

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| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | Temporary powerups | appear | | from   |  | | --- | | The floor | |
|  | and the goal of the game is to   |  | | --- | | Push the other player of the floor, making that player fall and lose the game | | |

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| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | Players collide, player move/roll and powerups Is picked up | | and particle effects   |  | | --- | | Players collide and powerups is picked up | |
|  | [*optional*] There will also be   |  | | --- | | Background music | | |

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| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | Parts of the floor will start to fall off every 30 sec | | making it   |  | | --- | | More likely someone will fall off and lose | |
|  | [*optional*] There will also be   |  | | --- | |  | | |

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| 5 **User**  **Interface** |  | The   |  | | --- | | Floors Left | | will   |  | | --- | | Decrease | | whenever   |  | | --- | | A Part of the floor falls off | |
|  | At the start of the game, the title   |  |  | | --- | --- | |  | will appear | | | and the game will end when   |  | | --- | | There is only one player left | |

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| 6 **Other Features** |  | |  | | --- | | The game will be a split screen local multiplayer horizontal view with player one on the top and player two on the bottom. | |

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# Project Timeline

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| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | |  | | --- | | *Camera and Basic Player Setup* | | |  | | --- | |  | |
| **#2** | |  | | --- | | Floor "fall off" logic and UI counter showing how many there are left | | |  | | --- | |  | |
| **#3** | |  | | --- | | Temporary Powerups:  - #1 Mass Power: Making you heavier (more resistant to push offs).  - #2 Speed Power: Making you faster and able to build up more momentum and push players off. | | |  | | --- | |  | |
| **#4** | |  | | --- | | Effects and Sounds:  - Sparks when players collide  - Pickup effect when power ups Is picked up  - Roll sound when player move  - Background music | | |  | | --- | |  | |
| **#5** | |  | | --- | | Game logic:  - Kill player when the player falls off  - Game will end when there is only one player left | | |  | | --- | |  | |
| **#6** | |  | | --- | | Game (Scene) Setup:  - Setup a level for the game | | |  | | --- | |  | |
| **Backlog** | |  | | --- | | - A timer telling the players in the UI when the next floor will fall counting down from 30.  - Online multiplayer (more than 2 players)  - Procedural level generation | | |  | | --- | |  | |

# Project Sketch

