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| **Roll-A-Ball Design Document** | |  | | --- | | *02/06/2025*  Owen Johnston | |

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| --- | --- | --- | --- |
| **Project Concept** | | | |
| **1** **Player Control** |  | You control a   |  | | --- | | Ball | | in this   |  |  | | --- | --- | | Isometric | game | |
|  | where   |  | | --- | | WASD keys | | makes the player   |  | | --- | | move | |

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| --- | --- | --- | --- | --- | --- | --- |
| **2** **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | Collectible cubes | appear | | |  | | --- | | Around the level | |
|  | and the goal of the game is to   |  | | --- | | Collect all the cubes | | |

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| --- | --- | --- | --- | --- | --- |
| **3** **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | For collecting cubes and getting hit | | and particle effects   |  | | --- | | For collecting cubes and getting hit | |
|  | [optional] There will also be   |  | | --- | | description of any other expected special effects or animation in the project. | | |

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| --- | --- | --- | --- | --- | --- |
| **4** **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | An AI enemy will chase the player | | making it   |  | | --- | | More difficult to collect all the cubes | |
|  | [optional] There will also be   |  | | --- | | Platforming challenges, with a death trigger under the map for if the player falls | | |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **5** **User**  **Interface** |  | The   |  | | --- | | score | | will   |  | | --- | | increase | | whenever   |  | | --- | | The player collects a cube | |
|  | At the start of the game, the title   |  |  | | --- | --- | | “Roll-A-Ball” | will appear | | | and the game will end when   |  | | --- | | The player is hit and loses, or collects all cubes and wins | |

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| **6** **Other Features** |  | |  | | --- | | Player will be able to jump and have a dash ability.  A basic menu to select levels  A boss fight level | |

# **Project Timeline**

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| --- | --- | --- |
| **Milestone** | **Description** | **Due** |
| **#1** | |  | | --- | | * *Core functionality finished (everything in tutorial)* | | |  | | --- | | *2/4* | |
| **#2** | |  | | --- | | * *Player jump and dash, custom level, and menu* | | |  | | --- | | *2/6* | |
| **#3** | |  | | --- | | * *Boss fight Level Complete, SFX added* | | |  | | --- | | *2/11* | |
| **#4** | |  | | --- | | * *All levels Tested and working as intended* | | |  | | --- | | *2/11* | |
| **#5** | |  | | --- | | * *Builds created for Web and Windows* | | |  | | --- | | *2/11* | |
| **Backlog** | |  | | --- | | * *Improve dash ability to go any direction instead of just following current momentum* * *Improve grounded check for when player can jump* * *Additional SFX* * *Improve camera on boss level to rotate around player and always face the boss* * *Refactor for organization and make more prefabs for common objects between levels* | | |  | | --- | | *No date* | |

