|  |  |  |
| --- | --- | --- |
| Project Design Document | |  | | --- | | *11/01/2025*  Anna McMillan | |

|  |  |  |  |
| --- | --- | --- | --- |
| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | *Collie* | | in this   |  |  | | --- | --- | | *3D* | game | |
|  | where   |  | | --- | | *WASD or arrow keys* | | makes the player   |  | | --- | | *Move the dog in all directions* | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | *Sheep* | appear | | from   |  | | --- | | *Randomly spawned in field* | |
|  | and the goal of the game is to   |  | | --- | | *Herd them into the pen for as many rounds as possible* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | *Sheep baa when approached* | | and particle effects   |  | | --- | | *N/A* | |
|  | [*optional*] There will also be   |  | | --- | | *Background music "baa baa black sheep"* | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | *More sheep spawn each round* | | making it   |  | | --- | | *harder to herd them all within the timeframe* | |
|  | [*optional*] There will also be   |  | | --- | | *A timer that resets each round (120 seconds)* | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5 **User**  **Interface** |  | The   |  | | --- | | *Score* | | will   |  | | --- | | *increases* | | whenever   |  | | --- | | *A sheep is herded* | |
|  | At the start of the game, the title   |  |  | | --- | --- | | *Counting Sheep!* | will appear | | | and the game will end when   |  | | --- | | *Player fails to round up all the sheep on the round* | |

|  |  |  |  |
| --- | --- | --- | --- |
| 6 **Other Features** |  | |  | | --- | | *Different types of sheep for variety*  *Animations - idle animations* | |

# 

# Project Timeline

|  |  |  |
| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | |  | | --- | | Player movement - WASD | | |  | | --- | | *06/02* | |
| **#2** | |  | | --- | | Camera movement - attached to player, can move view Independently with camera | | |  | | --- | | *06/02* | |
| **#3** | |  | | --- | | Add assets - border collie, sheep, vegetation, | | |  | | --- | | *06/02* | |
| **#4** | |  | | --- | | Sheep spawner - spawn randomly on screen from an array of 3 types of sheep | | |  | | --- | | *06/02* | |
| **#5** | |  | | --- | | Rounds - when all sheep In pen delete them and respawn with one more sheep | | |  | | --- | | *06/02* | |
| **#6** | |  | | --- | | Add a timer 120 secs, restarts with each round | | |  | | --- | | *06/02* | |
| **#7** | |  | | --- | | Endgame with UI, restart button, score of total sheep herded | | |  | | --- | | *07/02* | |
| **#8** | |  | | --- | | Add title screen with start button | | |  | | --- | | *07/02* | |
| **#9** | |  | | --- | | Animations - dog sits at start, walks and runs. Sheep Idle and eat grass, walk and run | | |  | | --- | | *07/02* | |
| **#10** | |  | | --- | | Sound effects - sheep bleat when dog too close | | |  | | --- | | *07/02* | |
| **#11** | |  | | --- | | Background music | | |  | | --- | | *07/02* | |
| **#12** | |  | | --- | | Added background skybox and surrounding fields and vegetation | | |  | | --- | | *07/02* | |

# Project Sketch

