| **Project Design Document** | | *08/23/2021*  Tyler D Clark | | --- | |
| --- | --- | --- |

| **Project Concept** | | | |
| --- | --- | --- | --- |
| **1** **Player Control** |  | You control a   | *Spaceship* | | --- | | in this   | *Third person (from behind view)* | game | | --- | --- | |
|  | where   | *arrow keys and spacebar* | | --- | | makes the player   | *Spaceship strafe and fire rockets* | | --- | |

| **2** **Basic**  **Gameplay** |  | During the game,   | *asteroids* | appear | | --- | --- | | from   | *Ahead on the z axis* | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | and the goal of the game is to   | *Stay alive and collect materials dropped from exploded asteroids* | | --- | | |

| **3** **Sound**  **& Effects** |  | There will be sound effects   | *When the spaceship moves, when the rockets fire, when asteroids explode and when the user collides with asteroid* | | | --- | --- | | and particle effects   | *Exhaust particles from behind ship and from asteroid explosions* | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | [*optional*] There will also be   | *Scrolling space animation for background simulating moving through space* | | | --- | --- | | |

| **4** **Gameplay**  **Mechanics** |  | As the game progresses,   | *The number of asteroids and speed of ship will increase.* | | | --- | --- | | making it   | *More difficult to avoid/explode asteroids* | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | [*optional*] There will also be   | *Random buffs dropped from asteroids intermittently (temp. Shield, speed slow down)* | | | --- | --- | | |

| **5** **User**  **Interface** |  | The   | *score* | | --- | | will   | *increase* | | --- | | whenever   | *The user picks up resources from exploded asteroids* | | | --- | --- | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | At the start of the game, the title   | *3D asteroids* | will appear | | --- | --- | | | and the game will end when   | *The ship collides with an asteroid w/ no shield* | | | --- | --- | |

| **6** **Other Features** |  | | *Any other notes about the project that you don’t feel were addressed in the above.* | | | --- | --- | | |
| --- | --- | --- | --- | --- | --- |

# **Project Timeline**

| **Milestone** | **Description** | **Due** |
| --- | --- | --- |
| **#1** | | * *Camera and scene set with stand in objects for asteroids and ship* | | --- | | | *09/05* | | --- | |
| **#2** | | * *Spaceship movement and wraps to other screen edge when exiting area (at max x or y value, it returns to 0, at going lower than 0, goes to max)* | | --- | | | *09/15* | | --- | |
| **#3** | | * *Asteroids spawn from far down the z axis and move towards ship* * *Collisions cause game to end* | | --- | | | *09/25* | | --- | |
| **#4** | | * *Spaceship can fire* * *When asteroids are fired on, they explode* * *Scrolling background effect* | | --- | | | *09/30* | | --- | |
| **#5** | | * *Sounds and particle effects added* * *Asteroids drop resource and contribute to a counter* | | --- | | | *10/05* | | --- | |
| **Backlog** | | * *Power ups are dropped randomly* | | --- | | | *10/12* | | --- | |

# **Project Sketch**

