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| Project Design Document | |  | | --- | | *mm/dd/yyyy*  Student Name | |

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| Project Concept | | | |
| 1 **Player Control** |  | You control a   |  | | --- | | Space Rover or Ship | | in this   |  |  | | --- | --- | | First Person | game | |
|  | where   |  | | --- | | WASD and Mouse Control | | makes the player   |  | | --- | | Drive in a direction or fly in a direction | |

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| 2 **Basic**  **Gameplay** |  | During the game,   |  |  | | --- | --- | | SPACE ORES | appear | | from   |  | | --- | | The Planet(Moon) | |
|  | and the goal of the game is to   |  | | --- | | Extract the precious ores from the planet and fly out with them | | |

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| 3 **Sound**  **& Effects** |  | There will be sound effects   |  | | --- | | Driving the space rover, ores being mined, mission completed sound. | | and particle effects   |  | | --- | | particles will fly off the ores when being mined. | |
|  | [optional] There will also be   |  | | --- | | A possibility of space take off sounds | | |

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| 4 **Gameplay**  **Mechanics** |  | As the game progresses,   |  | | --- | | Player collects ores | | making it   |  | | --- | | Increase their score | |
|  | [optional] There will also be   |  | | --- | | Ores that give no score when mined and subtract a few points | | |

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| 5 **User**  **Interface** |  | The   |  | | --- | | Score | | will   |  | | --- | | Increase | | whenever   |  | | --- | | An ore is collected | |
|  | At the start of the game, the title   |  |  | | --- | --- | | MOONLANDER | will appear | | | and the game will end when   |  | | --- | | You leave the planet | |

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| 6 **Other Features** |  | |  | | --- | | *There will be 2 vehicles you can drive: the main mothership and the mining rover. sound effects will also be Implemented for extra bizazz.* | |

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# Project Timeline

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| --- | --- | --- |
| Milestone | Description | Due |
| **#1** | |  | | --- | | **• Project - Creation and implementation of Moon Scene, Player Vehicle & Visual Particles**  **• Choosing an appropriate background and sky**  **• Creating default objects for crystals that the user will have to collect**  **• Creating obstacles (E.g. Spikes) that will act as obstacles that the user has to avoid** | | |  | | --- | | **10/30** | |
| **#2** | |  | | --- | | **• Scripts - Addition of Scripts & Rigidbody’s to the necessary elements that the player will control & to the obstacles**  **• Obstacles will have to randomly spawn around the map as prefabs of the original object**  **• The default object should be deleted as it is no longer needed**  **• The spikes should have a box colider so that we can add functionality to them when they are hit** | | |  | | --- | | **11/05** | |
| **#3** | |  | | --- | | **• Obstacles will have to randomly spawn around the moon surface**  **• The player should be able to control the moon vehicle through the ‘W’, ‘A’, ’S’ & ‘D’ keys**  **• The player should be able to shoot lasers at the obstacles using either a trackpad or external peripheral (E.g. Mouse)**  **• Visual effects should be generated whenever the user hits an object**  **• Smoke for when the user hits a spike, and celebratory particles for hitting a crystal** | | |  | | --- | | **11/14** | |
| **#4** | |  | | --- | | **• Shot lasers should be able to destroy the obstacles in the way of the player**  **• A counter at the top left or right section of the screen will update every time a crystal has been hit• The total user score should decrease by 1, every time that the user hits a spike** | | |  | | --- | | **11/30** | |
| **#5** | |  | | --- | | **• Test the project for bugs and potential issues with the program. Make sure that the scripts are correctly assigned to the right prefabs.**  **• Make sure that the Project Name does not have any commas in it** | | |  | | --- | | **12/06** | |
| **Backlog** | |  | | --- | | **• When Alpha Test phase is successful implement sound effects, for when the user hits a crystal or a spike obstacle** | | |  | | --- | | **12/14** | |

# Project Sketch

