Technical Design Document (TDD)

**Rail Shooter Final**

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Executive Summary

**Project**

Players can play offline solo, or online with a second player in co-op. the player will be on rails and all movement will be controlled by the rail engine. The point of the game is to shoot enemies to gain points.

### Technical

Programs

The following programs will be required for the creation of Around the World:

|  |  |  |
| --- | --- | --- |
| Program | Purpose | Cost |
| Unity3d | Game Development Environment | $1500 |
| Audition | Sound Creation | 1000 for suite |
| Microsoft Visual Studio | Debugging Environment | Free |
| Photoshop | 2D Image Manipulation | 1000 for suite |
| Maya Lt | 3D Graphics and Animation | 800 |

Market Release

none

Time to Completion

The total estimated completion time is around 8 weeks. That includes time for coding, graphics creation, audio editing and bug testing.

estimated Cost of Completion

|  |  |
| --- | --- |
| Software | $3300 |
| 120 Hours Salary | $3500 |
| **Total** | **$6800.00** |

## Hardware and Software

### 2D Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Photoshop | Used to create and edit 2D images and animations. | 1000 for adobe master suite |

### 3D Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Maya lt | Used to create and edit 3D models and animations. | 800 |

### Sound Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Audition | Used to edit sound effects. | Part of adobe suite |

### Programming Software

|  |  |  |
| --- | --- | --- |
| Software Name | Description | Cost |
| Microsoft Visual Studio | Used to debug and create code | Free |
| Unity3D | Development Environ-ment. Used to release to multiple platforms. | $1500 |

## Development Plan

### Milestones

|  |  |
| --- | --- |
| Date | Milestone |
| 10/26/2015 | TDD initial |
| 11/03/15 | Base engine and weapon and enemy classes done |
| 11/17/15 | High score table and all scenes. Multilevel support |
| 11/24/15 | External and internal tools |
| 12/01/2015 | Networking done |
| 12/11/2015 | All bugs squashed and ready for presentation |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

### Project Goals

Features

Online play

Precision shooting

Multiple enemy ai

Custom level support

Tool suite for modding and content creation

## File Formats

### 2D

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| Filename.png | A spritesheet | .png |
| Filename.Prefab | A finished sprite object prefab | .prefab |

### 3D

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| Filename.Prefab | A finished geometric object prefab | .prefab |

Audio

### 

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| FilenameEffect | A finished sound effect | .wav |
| FilenameMusic | A finished background sound | .mp3 |

### Scripts

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| Filename | A script for an object | .cs |

### Scenes

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| SceneFilename | A scene in Unity3D | .scene |

### Other

|  |  |  |
| --- | --- | --- |
| Naming Convention | Description | Format |
| TDD\_Finished | The completed Technical Design Document | .pdf |

## Asset List

Audio

Sprites

Scenes

Models

Scripts