Technical Design Document (TDD)

**Game**

Team

Version: 1

Created: 10/28/2015

Last Updated: 10/28/2015

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Executive Summary

**Project**

Create a basic Capture the Flag game w/ FPS Elements

**Technical**

Programs

The following programs will be required for the creation of GAME

|  |  |  |
| --- | --- | --- |
| Program | Purpose | Cost |
| Unity3d | Game Development Environment | $1500 |
| Maya LT | Asset Creation | $750 |
| Audacity | Sound Creation | Free |
| Microsoft Visual Studio | Debugging Environment | Free |
| G.I.M.P | 2D Image Manipulation | Free |
| Blender | 3D Graphics and Animation | Free |

Time to Completion

The total estimated completion time for user rails is two weeks.  That includes time for coding and bug testing.

Estimated Cost of Completion

|  |  |
| --- | --- |
| Unity3d | $1500 x 3 |
| Maya LT | $750 |
|  |  |
| Total | **$5250.00** |

Hardware and Software

**Programming Software**

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

Development Plan

**Milestones**

|  |  |
| --- | --- |
| Date | Milestone |
| 11/11/2015 | TDD Initial Draft, Environment objects created |
| 11/13/2015 | Base Objects Created |
| 11/15/2015 | Objective and pickup objects created |
| 11/17/2015 | Terrain Maps Created |
| 11/19/2015 | Levels Built and Playable |
| 11/21/2015 | Level Select complete |
| 11/22/2015 | Complete and Submitted to Professor Fisher |

**Project Goals**

Features

* Capture the flag gameplay
* Stunning 3d graphics
* Intense multiplayer
* Full Motion Capture Animations

File Formats

**Scripts**

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

**Scenes**

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

**Other**

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

Asset List

|  |  |  |
| --- | --- | --- |
| Asset | Type | Format |
| Crate | Cover | .fbx |
| Container | Cover | .fbx |
| Barrel | Cover | .fbx |
| Flag Pole | Objective | .fbx |
| Ammo Box | Pick Up | .fbx |
| Base Type A | Base | .fbx |
| Base Type B | Base | .fbx |
| Map A Terrain | Terrain Map | .fbx |
| Map B Terrain | Terrain Map | .fbx |

Accountability

Matt

* Shaders
* Networking

Nathan

* Networking

Jake

* Level Creation
* Asset Creation
* Level Select
* TDD

**TIME LOGS**

**MATT - no table as I am not adding the log in manually, I am pasting from log files**

**Project log Started : 11/21/2015 10:35:47 – total time: 35min**

**11/21/2015 10:35:54 added logger to repo**

**11/21/2015 10:36:07 starting shader modifcation**

**11/21/2015 11:00:02 shaderlab does not support booleans. how fun.**

**11/21/2015 11:00:09 scratching shader idea**

**11/21/2015 11:00:15 starting pickup logic**

**11/21/2015 11:06:21 base code written, trigger not activating**

**11/21/2015 11:06:24 debug time**

**11/21/2015 11:09:48 restarting pc. shits being weird...**

**Project log Started : 11/21/2015 11:13:06 – total time: 20min**

**11/21/2015 11:13:11 pc rebooted**

**11/21/2015 11:14:38 note: when making a script, dont forget to assign it to your object**

**11/21/2015 11:19:38 added pickup location to player**

**11/21/2015 11:21:21 basic pick up complete.**

**11/21/2015 11:29:50 flag prefab created**

**11/21/2015 11:30:00 flag pickup logic implemented**

**11/21/2015 11:30:18 flag collider modified for better pick up**

**11/21/2015 11:34:57 added frame work for flag drop and score**

**Project log Started : 11/22/2015 11:40:33 – total time: 1 hour**

**11/22/2015 11:40:43 starting additional work on flag logic**

**11/22/2015 11:53:17 debugging trigger volumn that is causing collisions some how...**

**11/22/2015 12:10:41 still cant seem to get it to work**

**11/22/2015 12:39:42 gonna take a break, this is pissing me off**

**11/22/2015 12:52:52 ok got it working. the break was about 5 minutes. forgot to log**

**11/22/2015 12:53:14 sending to repo and adding log to tdd, then taking a break for foods**

**Project log Started : 11/22/2015 18:10:19 – total time: 20 min**

**11/22/2015 18:10:26 getting back in finally**

**11/22/2015 18:15:10 limited flag carry to one flag at a time**

**11/22/2015 18:18:50 level design is not my strong suit**

**11/22/2015 18:25:20 its coming along, but not pretty**

**11/22/2015 18:27:46 im gonna call that level finished, cant polish a turd**

**NATHAN**

|  |  |  |
| --- | --- | --- |
| Time | Task | Date |
|  |  |  |
|  |  |  |
|  |  |  |

**JAKE**

|  |  |  |
| --- | --- | --- |
| Time | Task | Date |
| 18:00 – 18:15 | Created the Crate Asset | 11/11/15 |
| 18:15 – 18:30 | Created the Barrel Asset | 11/11/15 |
| 18:30 – 18:45 | Created the Container Asset | 11/11/15 |
| 11:20 | Imported Barrel, Crate, Container | 11/13/15 |
| 11:20 – 11:30 | Created 3 materials for each object | 11/13/15 |
| 11:30 – 12:00 | Randomize script for environment objects(WIP) | 11/13/15 |
| 12:25 – 12:35 | Base Type A Created and Imported | 11/13/15 |
| 12:35 – 13:40 | CTFMapA Creation | 11/13/15 |
| 13:40 – 13:50 | CTFMapA Testing | 11/13/15 |
| 13:50 – 14:00 | CTFMapA Finished | 11/13/15 |