Jack Storm

Spencer Martin

**TANK STORM**

Game Design Doc

Tank Storm is the name of our game. It is an arena combat game for 1 to 2 players. The players will Progress through a series of stages by defeating enemy tanks.

The Players

* Controls:
  + Forward and backwards movements
  + Tank body turning
  + Barrel turning
  + Fire button
* They can only take one hit
* When a Player shoots they fire in the direction of the barrel.

Enemies

* Enemies will spawn at set locations on each level
* The will wander aimlessly, until players come into view.
* Types of Enemies:
  + Standard – only fire bullets //required
  + Mine – drops mines that explode after a few seconds //bonus
  + Rocket – fires a really fast bullet //bonus
  + Boss – fires normal bullets, takes multiple hits //required

Levels

* Destroying all enemies progress to the next level
* Each Level has a certain layout obtained from a file
* Each level contains a certain number of enemies

Bullets

* Normal Bullets can bounce once off of walls
* Rocket Bullets fire fast and don't bounce
* Mines explode after set time
* If bullets collide, both explode

Points

* Standard Tank – 100 points
* Mine Tank – 75 points
* Rocket Tank – 150 points
* Boss Tank – 500 points
* Mines – 25 points
* Life – 2000 points

Other

* Players have 3 lives, separately
* Players gain life every 2000 points

Technical Design Doc

Level System – Low Risk

Assets Manager – Low Risk

Bullet Manager – Low Risk

Menu System – Low Risk

Input System – Medium Risk

Save/Load System – Medium Risk

Updating architecture to support SDL 2.0 – Medium Risk

Difficulty/Speed Levels – Medium Risk

Enemy Tanks – Medium Risk

Collision System – Medium Risk

AI System – High Risk

Milestone Schedule

Week 11 – Milestone 0

* Game Design Document – Storm
* Technical Design Document – Storm
* Milestone Schedule – Storm
* Division of Responsibilities – Storm
* Tech Demo
  + Base Architecture – Martin
  + Convert Allegro to SDL 2.0 – Martin/Storm
  + Event System that encapsulates SDL Events

Week 12 – Milestone 1

* Basic Tank movements – Storm
* Standard Enemy Tank – Martin
* AI system started – Storm
* Test Level – Martin/Storm
* Level load from text – Storm

Week 13 – Milestone 2 – Alpha

* Bullet Manager – Storm
* Difficulty Levels – Martin
* Points – Storm
* Multiple Levels – Martin
* Boss Tank – Storm

Week 14 – Milestone 3 – Beta

* Sound system – Martin
* Menu system – Martin
* Other Tanks – Storm

Week 15 – Final Milestone

* Final Deliverable
  + …
* Post-mortem – Storm/Martin
* Presentation – Storm/Martin