

Tech Design Document

Nautilus Studios

Technical goals

Juego RPG con vista isometrica de mundo semiabierto y combate por turnos.

Diferentes personajes, todos manejados por un jugador y con una sola camara.

Desarrollado en C++, con la libreria SDL(tema grafico) y el motor de fisicas Box2D(colisiones).

Programas extra: Tiled, Photoshop, Illustrator.

Technical risks

Dificultades al implementar las colisiones de Box2S usando Tiled.

Problemas relacionados con Memory Leaks.

Code style guidelines

Naming rules: Every #define must be in capital letters: #define MAX_HP 300

File Names: Every game-related file must be named using capitals and underscores instead of periods or spaces or slashes: asset_plant

External libraries

- SDL for graphics.
- Box2D for collisions.

Performance budgets: The game runs at 60 frames per second.

Build delivery method: GitHub, done by Team Lead.

Delivery platform and requirements: PC, with mouse and keyboard or gamepad.

Section 1 – List of Features Captured from GDD

- 1.1 List of Features Based on the Game Design Document

Section 2 – Choice of Game Engine

Section 3 – Schedule

Section 4 – High-level Diagrams to Illustrate Software Design

- 4.1 Layout Diagrams
- 4.2 Technology Diagram
- 4.3 Design Diagram
- 4.4 Implementation Diagram
- 4.5 Gameplay Diagram

Section 5 – Art Tools

- 5.1 Photoshop
 - 5.1.1 Version
 - 5.1.2 About Photoshop:
 - 5.1.3 What it will be Used For
- 5.2 3DS Max
 - 5.2.1 Version
 - 5.2.2 About 3DS Max
 - 5.2.3 What it will be Used For
- 5.3 Blender
 - 5.3.1 Version
 - 5.3.2 About Blender
 - 5.3.3 What it will be Used For
- 5.4 Audacity
 - 5.4.1 Version
 - 5.4.2 About Audacity
 - 5.4.3 What it will be Used For

Section 6 – 3D Objects, Terrain, & Scene Management

- 6.1 3D Objects
- 6.2 Terrain
- 6.3 Scene Management

Section 7 – Collision Detection, Physics & Interaction

- 7.1 Collision Detection
- 7.2 Physics
- 7.3 Interaction

Section 8 – Game logic & Artificial Intelligence

- 8.1 Game Logic
- 8.2 Artificial Intelligence

Section 9 – Networking

- 9.1 Multiplayer hosting service

Section 10 – Audio & Visual Effects

- 10.1 Audio Effects
- 10.2 Visual Effects

Section 11 – Delivery Platform & Hardware/Software Requirements

- 11.1 Delivery Platform
- 11.2 Hardware Requirements
- 11.3 Software Requirements