

Game Design Document - $\Pi\Lambda H418$

Γεώργιος Ραμιώτης 2018030091 gramiotis@isc.tuc.gr

Διδάσκων Καθηγητής: Α. Μανιά

ΠΟΛΥΤΕΧΝΕΙΟ ΚΡΗΤΗΣ ΤΜΗΜΑ ΗΛΕΚΤΡΟΛΟΓΩΝ ΜΗΧΑΝΙΚΩΝ ΚΑΙ ΜΗΧΑΝΙΚΩΝ ΥΠΟΛΟΓΙΣΤΩΝ Ιούνιος 2022

Game's Title: Eden

- Player: The player commands a village in a human kingdom.
- Setting: Medieval age in a dark fantasy world.
- Goal: There are different goals for each level. The player wins the game when he kills the final boss.

Resource: Wood	Gathered by interacting with trees. Used to
	build buildings.
Resource: Stone	Gathered by interacting with rocks. Used to
	build buildings and soldiers.
Resource: Population	Gathered by building Houses. Used to build
-	soldiers.
Resource: Gold	Gathered over time when there is a
	Mausoleum in the scene. Used to power up
	soldiers.
Unit: Villager	The villager can be used to gather Wood and
	Stone and cannot take damage.
Unit: Human Builder	The Human Builder is used to build buildings.
	There is only one for each level and cannot
	take damage.
Unit: Story Teller	The Story Teller is just a unit that acts as the
	narrator of the story. This unit cannot move
	cannot interact with anything and cannot
	take damage.
Unit: Skull Soldier	The Skull Soldier is a malee combat unit that
	attacks enemies.
Unit: Plague Doctor	The Plague Doctor is a ranged combat unit
	that attacks a single enemy within a radius.
Building: House	Requires wood to build and raises the
	population.
Building: Barrack	Requires wood and stone to build and is used
	to build soldiers.
Building: Mausoleum	Requires stone to build and powers up all
	soldiers for exchange of gold.
Building: Healing Statue	The healing Statue is instatiated free of cost
	at the start of the level and the player cannot
	build more. Is used to heal combat units over
	time.
Enemy Unit(AI): Orc Wolfrider	Moves towards and attacks nearest enemy if
	they come within a certain radius around it.
Enemy Unit(AI): Boss	Same with the orc wolfrider but bigger and
	stronger.
Doodad: Tree	A villager can gather wood by interacting
	with a tree. The tree is then destroyed.
Doodad: Rock	A villager can gather stone by interacting
	with a rock. The rock is then destroyed.

Script Description

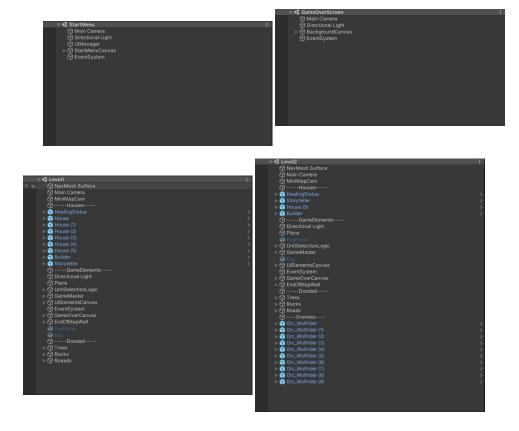
- BarracksLogic: Controls barracks behavior/builds units.
- BuildingSoldiersLogic: Keeps track of how many units are to be built and from which barrack.
- BossLogic: Controls boss behavior.
- BuildingLineRenderer: Draws the outline of buildings the user wants to build.
- CameraLogic: Controls camera movement.
- DoodadBehav: Controls doodad behavior.
- EndOfMapWallScript: Stops the player if he wants to go outside the map.
- EnemyLogic: Controls orc wolfrider's behavior.
- FogOfWarLogic: Implements fog of war behavior but it doesn't work in game.
- GameMaster: Controls the game's behavior. Keeps track of resources, game's progress, buildings ui coordination and checks if the level's requiremnets are met.
- GameOverScreen: Game over screen control.
- HealingStatueLogic: Controls healing Statue's behavior.
- HouseLogic: Controls house's behavior.
- HumanBuilderLogic: Controls human builder's behavior.
- LookAtCamera: Script that makes health bars always look at the camera.
- MausoleumLogic: Controls mausoleum's behavior.
- PlagueDoctorLogic: Controls plague doctor's behavior.
- **PlayMusic**: Plays the music of the start menu, the game's and final boss fight's music.
- SoldierLogic: Controls skull soldier's behavior.
- StoryTellerLogic: Implements a narration monologue of the story teller.
- UIManager: Controls start menu's ui.
- UnitClick: Implements the selecting behavior of units and buildings' ui by clicking on the objects.

- UnitLogic: Adds the movable units in an array stored UnitSelections.
- UnitSelections: Keeps track of which unit is selected or not.
- UnitMovement: Implements the movement of movable units.
- VillagerLogic: Controls villager's behavior.

Images, Models, Audio and Prefabs

All images, models and audio are taken from the Unity Asset Store. Only the buildings' panels, buttons, and text elements are made with Unity's built in packages.

Unity Hierarchy



```
NavMesh Surface
                Main Camera
Mausoleum
House
   ► → House (1)
 House (2)
House (3)
House (4)
 House (5)
Barracks
 Barracks (1)
Barracks (2)
Builder
Storyteller
               Directional Light
                Plane
→ UnitSelectionLogic
→ 分 GameMaster
→ 分 UIElementsCanvas
                ▶ ☼ GameOverCanvas
 Fog

IndofMapWall

One of the control of the contro
   ► 🗑 Trees
   ► 🗑 Roads
 → ----Enemies----
→ Boss
→ Orc_Wolfrider (1)
→ Orc_Wolfrider (2)
    Orc_Wolfrider (3)
```