Game Design Document

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Name of the Game: TRPG Project (Working Title)
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Tutorial: Tutorial 3
Link to the game repository: https://github.com/horkrux/ec2021-gameproj

Contents

1 Overview

1.1 Game abstract

The game is a round-based Tactical RPG with a fantasy setting for one player.

1.2 Objectives to be achieved by the game

The game should have a battle system with a rewarding learning-curve, not too simple but also not too complex to learn.

Battles should feature interesting enemy compositions of various unit types. The character progression should be relatively simple, but still leave enough options for players to experiment to achieve different results on multiple playthroughs.

The visuals should be low-poly throughout to keep the workload low. The game world should offer opportunities for exploration, and finding and doing quests should be rewarding. Engaging in these quests should provide additional information about the world, and the main story should be present enough through main events as to not fall to the wayside.

1.3 Core gameplay

The main activity is to engage in turn-based battles against the AI, using a customized set of characters. Players can use a variety of different strategies and unit abilities to approach these battles, and it should be fun to see a well thought-out plan result in a victory with minimal losses. Outside of battle, players explore the game world to find engaging quests, learning more about the world and its inhabitants, as well as building up their party of characters and seeing them get stronger by levelling up or through aquiring better equipment.

1.4 Game features

1.4.1 Genre

The game is a Tactical RPG with turn-based battles, which combines typical character progression of a set of characters through level-ups and stat distribution with slow-paced battles that require thinking and strategy to overcome the opponent.

1.4.2 Number of players

The game is designed for one player to be played against the AI.

1.4.3 Game theme

The game is set in a medieval world, with additional fantasy elements like magic, monsters and other races. There are no handguns or cannons.

1.4.4 Story summary

The story of the game takes place in a country that has recently lost a war and was in turn occupied by another nation. The main character is living with their father and sister on a farm in a small village. Their father was once a nobleman many years ago, but - due to reason he never disclosed to his family - had fallen from grace, stripped of all his titles and land, and decided to buy a farm with the money he had left. Throughout the years, the father has taught his children how to wield a weapon and cast magic. At the beginning of the game, the village is attacked and the main character and their family need to defend themselves. A group of resistance fighters joins them and helps them to fend the attackers off. Their father has disappeared among the chaos. The main character and their sister then join the rebels in their cause to free the land from its invaders. In the rebel camp, they meet more people and eventually get sent on missions and travel from village to village, doing quests for the others as well as engaging in a guerilla war against the occupants. They also look for their father, whose whereabouts are unknown.

2 Mechanics

2.1 Game elements categories

Quest, PC, NPC -Vendor, Misc, Questgiver, Hero-, Enemy -Swordsman, Spearman, Archer, Crossbowman, Mage, Monster, Hero-, Weapon -One-Handed, Two-Handed-, Staff, Spell, Music -Battle, Freeroam-, Sound Effect, Equipment, Item, WorldObject, Loot, Key Item, Consumable

2.2 Rules

2.2.1 Interaction rules

Freeroam:
-Click on the game world with the character selected. This will make the character move to that position.
-Click on interactable object in the game world (NPC, door, Loot). This will make the character move within range to interact and then trigger the interaction (conversation etc.)
Battle:

-Click on a party member: Open context menu, show movement range (player turn)
-Click on enemy unit: Open menu with status info, offer option to attack on player turn
→ initiate attack on unit
-Party member selected, click on spot on the battle area: Unit will move as close to spot as movement range allows (player turn)
-Archer attacks: Spawn projectile flying towards target
-Mage casts magic: Spawn magic effect at/towards target
Shared:
-Click on dialogue option to advance dialogue
-Accept quest from dialogue → goes into quest log
-Click "Use Item" in inventory for consumable item. This will use the item and decrease its quantity by one.
-Click "Throw Away" in inventory on non-key item. This will decrease its quantity by one and remove the item from the inventory if its quantity has reached 0.
-Press W to put companion dog into wander mode
-Press D to put companion dog into hunt mode
-Press S to put companion dog into seek mode
-Hover over enemy to view their stats

2.2.2 Artificial Intelligence

-Unit attacks unit: Determine hit, damage and balance effect
-Unit is ordered to walk: Calculate path and move the unit along said path
-Determine enemy unit actions on enemy turn
-Play correct animation for unit according to their action
-Play appropriate music for battle and freeroam
-Play appropriate sound effect for events
-Swarm behavior for geese
-Wander-, Hunt- and Seek-behavior for a companion
-Randomized enemy encounters with differing number of enemies and stats

2.3 Game world elements

Map: The map shows a simplified view of the game world from the top with explored regions unveiled. The current position of the player is indicated, as well as the next point of interest for the currently selected quest and locations of found vendors.

2.4 Game log elements

A quest log keeps track of open and completed quests. Each character has a stat page showing their level and stats.
The entire game progress can be saved.

2.5 Other elements

Items only exist in inventories and menus. Using it will cause its prescribed effect, then the item will be removed. Equipment set on characters will change their visuals accordingly, but equipment models are only unique between different types. Equipment will passively affect calculations in battle.

2.6 Assets list

Models:
-Rigged placeholder model for PC[1]
-NPC male/female
-Farm buildings
-Trees
-Bushes
-Terrain
-PC, Enemy, Monster

Music:
-one track for battle and freeroam each

Sounds:
-Attack hit and whiff
-Death moan
-Walking sound
-Birds
-Water

Animations:
Implemented:
-PC idle, run, attack animation + animation for loot pickup[1]
-Cutscene1 camera animation (Cutscene1 unity scene)
-Fire and smoke animation (Cutscene1 unity scene)
-Damage animation on test target cube, triggered by animation event on attack animation (click on cube to initiate attack)

-UI animations:
-Loot Popup, fade-in and -out (Tween)[2]
-Stats Menu, slide-in and -out (Tween)[2]
-Inventory Menu, fade-in and -out (Tween)[2] + item list sliding on open (accidental and unreliable)
-Talk Window, color-change on mouse-over for response buttons (Tween)[2]

Not implemented:
-Idle, walk, attack and death anim for NPC, Enemy and Monster
-Death anim for PC

Icons:
-Items
-Weapons
-Armor
-Unit portraits

3 Dynamics

3.1 Game World

3.1.1 Game theme details

The first levels take place in forest areas, small villages and on fields. The villages are small with just a few inhabitants living in simple housing.
Most people are rather poor, there is lots of rain and the entire land is ravaged by Orcs and other enemies. The forests are vast and daunting and you don't know what you might encounter in them. Their quietness is only disturbed by the creaking of wood and bird chatter.

3.2 Missions/levels/chapters Flow

The game is chopped up into chapters which each feature a few levels. The levels can be freely explored, but will be left behind when the next chapter is triggered.
Then the game will move on to the next set of levels. Some levels might be locked off and the player needs to fulfill certain requirements before they can enter.

3.2.1 Objectives

Finding quests and finishing them according to the quest description. Winning battles.

3.2.2 Rewards

Finishing a quest will give the player experience points for their characters and items and money. Winning a battle will net the player money and items, and defeating enemies will give the defeating unit experience points.

3.2.3 Challenges

Battles will offer varying amounts of challenge. Quests will task the player to fetch items or talk to people that they might have to search for.

3.3 Special Areas

Some buildings like shops have to be entered. Levels also contain sidequests that don't have to be done in order to progress to the next level.
Through exploration, secret areas can be found that hold loot like armor, weapons or gold.

3.4 Game interface

Title Screen:
- New game: Start a new game
- Load game: Continue a previously saved game
- Options: Access graphics and game options
- Quit: Exits the game

Ingame screen:
Filled out mostly by a view on the game world. Characters and interactable objects can be clicked on.
At the bottom are portraits of the current party members with HP and MP bars. They can be clicked on to change equipment, inventory and see more detailed stats (not yet implemented).
There is a menu button to change options, save, load and return to main menu (not yet implemented). There are buttons to access inventory and character stats (implemented), and a button to change party members (not yet implemented).
During battle, an "End Turn" button is added. At the top is an indication whose turn it is currently.
During dialogue, dialogue window is in the center of the screen. Shows dialogue text and answer prompts. When the inventory is brought up, a window will show the available items, together will their description and current quantity.
Load-Screen:
Shows a list of saves and a load button.

Save-Screen:
Shows a list of saves and a save button.

3.5 Controls interface

The title screen is manipulated by the mouse by clicking on the available options.
In the load screen, a save needs to be selected for the load button to light up. Clicking the load button takes the player to the ingame screen.
In the save screen, a save needs to be either selected for overwrite or a new name typed in for the save button to light up. Clicking it gives confirmation and takes the player back to the ingame screen.
In the ingame screen, the camera can be rotated and zoomed to change the game world view (not yet implemented). During battle, camera can be moved freely. Clicking end turn or exhausting unit actions changes the turn indicator to "Enemy Turn" and locks various manipulating options until it's the player's turn again.
During dialogue, clicking a response will advance the dialogue to another state, which will either provide new dialogue and answers to pick from or it will outright end it.
When items are added to the inventory, a popup will show these items and prompt the player to confirm via an OK button. In the inventory window, items can be clicked on and then either used or thrown away via dedicated buttons.

3.6 Game Balance

Damage and defense values can be easily tweaked to make fights easier or harder. Enemy composition can be changed so fights feature more or less enemies.
The Balance stat can also have a pronounced or lessened impact on hits.

4 Visuals and Sounds

4.1 Game visuals

Selected characters are highlighted by a circle (and showing HP bar, movement and attack range above their head in battle). Movement- and attack range are displayed by obvious colored overlays on the terrain.
When a character is hit, they flinch and are colored red for a short while.

4.2 Game sounds

There will be seperate music for battle and freeroam. Battles are dangerous, so the music should change to reflect this.

5 Document information

5.1 Definition, acronyms and abbreviations

Term or abbreviation	Definition and acronyms
HP	Health points
MP	Magic points
NPC	Non-Player Character
PC	Player Character

5.2 Document references

References

[1]   Adobe Systems Incorporated, 2021: Sword and Shield Pack on XBOT, Mixamo, URL: https://www.mixamo.com/

[2]   Digital Ruby (Jeff Johnson), 2019: Tween, Unity Asset Store, URL: https://assetstore.unity.com/packages/tools/animation/tween-55983