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ESSAY TOPIC: Micro Project 3: Level design of a Turn Based Combat Game

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Signed: Tenisha Moodley

Date: 7 April 2021

Intent

This prototype is going to be used to explore the subject of Level design in game development. Level design is the concept of designing a game to progressively introduce difficulty or challenges, also known as scenes, to the players slowly to allow them to recognise patterns, engage with those patterns and then overcome those patterns in order to promote a balanced game flow.

Game flow or the flow zone, also known as the most intermediate mindset of engagement between the player and the game system, needs to have near perfect balance between skill and challenge elements of the game. If the skill is too low, but the challenge is too hard or the challenge is too low and the skill is too great then the players will be out of the flow zone and will therefore become frustration and anxious around the unbalanced units.

With this in mind, this prototype will establish flow through the level design and data design within the prototype. Flow however, has two recognisable parts that need to be distinguished within the game in order to develop level design as perfectly with the zone as flow as possible. Therefore, the micro and macro parts of flow will also be explored with this prototype.

The Micro difficulty of level design is an individual level and everything internal in a single system in the game. This promotes what we want the players to interact with by emphasising how we introduce the player to all our mechanics, systematically. By slowly introducing the player to each mechanic and level element simultaneously, they start to emphasise each other, as to bypass challenges in the game, the player will need to engage and understand the mechanics and vice versa.

The Macro difficulty of level design refers to the order of levels in the game. This allows the developers to show how the difficulty of the game progresses through the macro level design and therefore brings depth to the game. Slowly introducing levels allows the player to understand and engage with all the mechanics of the game unlike if all the mechanics were given to the player at one time, which would lead them to not realising what they have or haven't engaged with. Although this concept sounds like micro level design, the grouping of specific mechanics is the macro level design part that needs to be understood while using micro level design.

This prototype explores the difference between complex systems and complicated systems. Complex systems are what developers aim to achieve, because they are systems that are simply but offer the player a lot of depth to interact with the game. Complicated systems provide a lot of depth to the game, but are not simple enough for the player to properly engage with.

Process

Ideas for the prototype 3 that were implemented

- Level number rises with every battle to prevent over Scoping for this prototype
- Stats rise in value with each battle

- Actions can change, give player choice of actions was over Scoping so decided to just give the player the choice to evolve and with the evolution comes another action and greater stats
- New enemies every battle, just stronger for now to avoid over Scoping of enemy and player character details
- Give action descriptions in the dialogue box
- Give stats in HUD, only with accuracy and speed to show the player why dodging is possible
- Give the player a max level for the moment, 3 with each battle
- Give the player the choice to continue battling or restart the game. Save game? Maybe with PlayerPrefs? Removed for over Scoping, however the goal of the game at current is to allow the player to get through the whole level before they can beat boss level like how it's done in pokemon
- Give the player an goal as to why they want to proceed to the next game, such as that a new area of pokémon will be released or something so make a pseudo map of the world and highlight where they are and details about where they are and details about the other (let's say 4) areas as well... Let the 4th area be like a master of pokémon battle area. Just doing 1 area for now. Was over Scoping so now rewards for finishing maps as well as the urge to finish game system prototype will be goal.
- Give the player a description of the next battle, kind of like how bakugan did with their tournament
- If remove the attack and Def stats, then the player won't have to see the attack stats of their avatar lowering when enemy defense rises
- Script out a level before you start to prototype it, like a script writer.

Level Design Script: With added plot although most of it was not yet implemented use to over scoping

Scene 1 start:
- Map showing where player is and where they are trying to go

Scene 1:
- enemy has appeared
- player introduced to the idea of **attacking** and healing while facing an enemy
- the idea of having to survive and destroy enemy
- the idea of how winning affects the players status in the game: so their exp rises, which rises their levels, which rises the players stats, which allows the player to acquire a new move and become better
- the idea that if the player loses then they don’t get to move on or receive any of the rewards for winning but can replay the game

Scene 1 end:
- Rewards given: Exp, new action
- new place unlocked
- What to expect in next battle

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Scene 2 start:
- Map showing where player is and where they are trying to go

Scene 2:
- the idea of the new area
- the idea of what new moves can do
- the new enemies arrive with different stats, levels and types

Scene 2 end:
- Rewards given: Exp, new action
- new place unlocked
- new avatar unlocked, or in this case evolved but allow the player to choose whether to evolve or not
- What to expect in next battle, area type

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Scene 3 start:
- Map showing where player is and where they are trying to go

Scene 3:
- the idea of the new area
- the idea of what new moves can do
- the new enemies arrive with different stats, levels and types

Scene 3 end:
- Well Done! You've won!!

Reflection

A Table Showing the Play Testing Results of Level Design Elements that Worked or Didn't Work and Why

	What level element was tested	**How the level element was implemented**	**Why was the level element implemented and why in this way**	**Whether the level element worked or not and was therefore used or not (Y/N)**	**Why it did or didn't work**
Test 1	Blocking out actions to introduce them slowly after each successful battle	A new Action was introduced with each scene/battle that was successfully won	The slow progression of introducing different actions allows the player to engage with each mechanic individually but also simultaneously with the game system/level design	Yes	It was an easy and efficient way to promote complexity difficulty micro level design

	What level element was tested	How the level element was implemented	Why was the level element implemented and why in this way	Whether the level element worked or not and was therefore used or not (Y/N)	Why it did or didn't work
Test 2	Level EXP rising after each successful battle	The characters in the game are given a level which rises after each successful scene, or after evolution	Mentioned in last column	Sort of	Over scoping for this prototype as the project did not need exact details of level EXP so the levels rise after each scene
Test 3	Maintaining the players health from the previous battle	Was not implemented but could have been implemented using PlayerPrefs to save what health was recorded in the previous scene and the using that health as the start up health in the current scene	Mentioned in last column	No	Over scoping for this prototype as the project did not need the players health to be manipulated over the scenes, although it was something I would like to implement when more time is granted for developing this game
Test 4	New enemies every battle	The enemy's stats increase with each scene	It provides depth to the progression of the micro difficulty of the game,	Yes	Mentioned in third column
Test 5	New player characters as a reward after the first successful battle	Through evolution	Giving the player choices through the game, and also making them feel special or individual throughout the game promotes player interaction so the idea of giving the player multiple avatars to play with interested me	Yes	It did but minimalist at the moment, does not have as great a risk and reward factor as I would like yet but because it's a prototype details will be disregarded for now

	What level element was tested	How the level element was implemented	Why was the level element implemented and why in this way	Whether the level element worked or not and was therefore used or not (Y/N)	Why it did or didn't work
Test 6	A Skip Battle Button	A button that allows player to skip the battle	The idea to allow the player to skip a scene when a scene gets too difficult and game flow is disturbed, encourages the player to keep playing	Yes	Not refined, right now it just allows the player to pass to the next battle with the rewards so there is no loss. Would like to add more balanced design on this level element in future work

This prototype focused on functionality of the game system in order to focus on the development of the level design. So numbers and values are still a work in progress and although some of the feedback and data handling has improved from the previous prototypes on feedback (Moodley, 2021), the functionality of the feedback and data design are necessary for the successfulness of the level design.