Black Dragon

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Overview

The goal of *Black Dragon* is to provide a short, turn-based RPG experience with dynamic enemies and a plethora of player approaches. The game features 4 increasingly challenging but fun combat encounters. Players will be encouraged to utilise resource tactically to emerge victorious in each fight. Imagine *Black Dragon* as a series of turn-based combat encounters (like from *Pokemon*), but with the atmosphere and challenge of *Dark Souls.*

Inspirations

Pokémon

Pokémon inspired our thinking through its engaging combat system. It primarily influenced our decision to develop a turn-based combat system. Further, the mechanic of AP (Action Points) was a point of interest to us, as it grants an extra challenge by limiting the players options in a fun and engaging way, allowing them to only use a finite number of actions per round. We are utilizing a variant of this in the form of **Stamina** which will limit the players actions, without strangling their creativity.

Dungeons and Dragons

We looked at *D&D* for its creative mechanical design and rigorous systems that focus on balance and overall fun for the player. For instance, mechanics such as the action system allow for uniquely balanced combat encounters whilst also allowing for creativity on the battlefield. We are incorporating a variation of this rule where we allow the player to utilize however many items or buffs before the attack to allow for maximal creativity whilst also having limited capability in the game itself.

Dark Souls

We looked at *Dark Souls* for its unmistakeable aesthetics. Primarily we will be drawing inspiration from it's UI and enemy visuals. This is because the medieval aesthetic has proven to be an engaging style. For instance, the dragons found in the game's world gave us the pivotal idea for the final enemy in our game, and subsequently the title. We have also utilised the specific design of *Dark Souls'* weaponry and item UI, which displays an isometric view of a selected item. Employing these influences will give our game experience a little more aesthetic flare for the player.

Player Experience Goals

Aimed Overall Experience

The game aims to deliver a strategic, slow-paced experience that gradually intensifies as the player progresses through each level. Every victory brings the player closer to success but also raises the stakes—death results in a complete game over, with no option to restart from the current level.

Players should feel encouraged to think carefully about each move, taking into account both the immediate and longer-term consequences. The experience should put the player in a constant state of tactical decision-making, always anticipating how their opponent might respond and what the player must do to survive each turn so they won't lose their progress.

Should the player fail one of the levels, they should experience some contemplation on what they did throughout the battle, what they did, and what they could have done differently to achieve victory.

Completing the game should give the player a sense of elation for having overcome the challenge. There should also be a sense of completion and finality associated with the victory. After victory, there should be no feeling of relief from finishing; the game is supposed to be fun and calming. Any relief felt by the player suggests that the player was struggling to beat the game, meaning the game has not achieved its objective.

Audience And Platform

Target Audience

Our target demographic are primarily players of ages 12+. It is also people who have a preference towards the fantasy RPG genre and have an interest in the turn-based style of game.

Audience Size

The potential growth of an audience through this game is very promising, as the turn-based RPG genre is widely popular, however this also leads to a significant amount of competition in the market, so to make a conservative estimate we will likely grow a small cult following due to the inspirations stated before in this document but we will be hard pressed to build much more than that.

Target Platforms

The platform we want to push this towards is preferably the PC market as the mechanics and the dynamics of the game aren't conducive to the console market as it would be too time consuming at this stage to port over. The hardware requirements are simple as shown in this table:

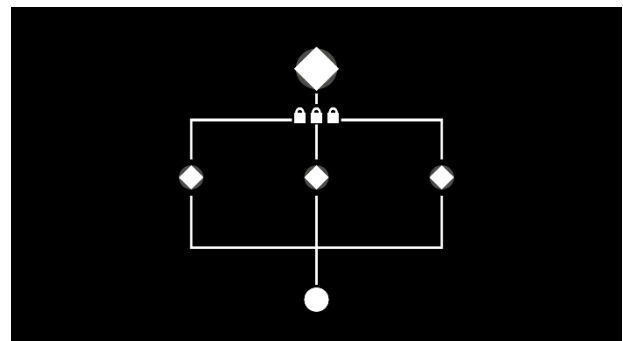| Specification	Minimum Requirement
OS	Windows 10 or later
CPU	Intel i5 6500 or any CPU capable of running windows 10
Disk Space	Approximately 1GB
GPU	System integrated Graphics or GPU capable of operation on windows 10
RAM	At least 2.5GB

Potential Competitors

There are several games in this market that are behemoths of the genre and surely hold the loyalty of their dedicated fanbases these games include but aren't limited to: Pokémon, Yu-Gi-Oh (in a sense), Final Fantasy, and Magic the Gathering, to name a few. These competitors are immense in their cultural impacts and sheer market share however what they lack is the ability to branch out and experiment as their fanbase likes their gimmicks and it would be too risky to depart from those.

Gameplay

Overview

The player will navigate through a map, facing 3 enemies in turn-based combat encounter environment. Besting these enemies allows the player to face the final Black Dragon fight. Besting this foe will grant the player victory over the game.
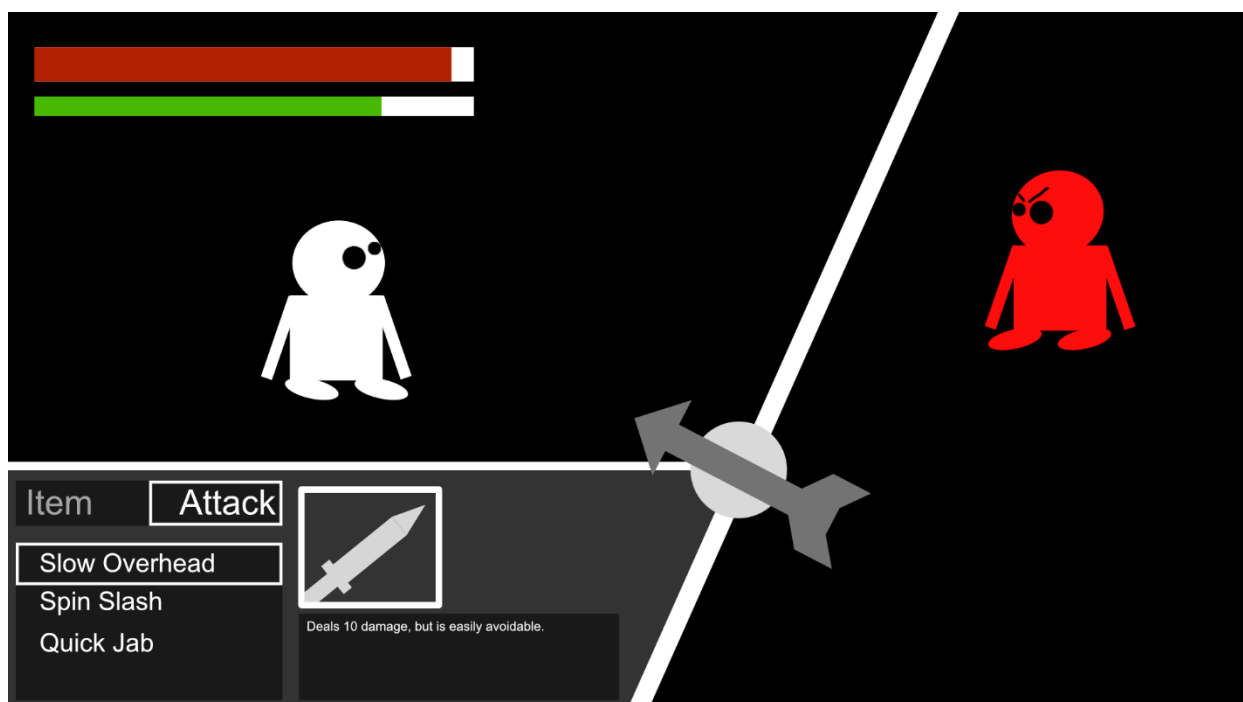
Screen Mock-up

Shown above is the Main Menu concept (left). Upon pressing any key, the map scene (right) will load. The bottom circle represents the player, who can face any of the 3 enemies (squares) in any order. If each enemy is bested, the player may then face the final fight (big square). Victory in this fight will result in the player beating the game.

Above is a snapshot concept of how each combat exchange will appear. It is currently the players turn, as signalled by the arrow, located bottom right of centre. The visual style is expected to change dramatically, as these mock-ups are purely demonstrating functionality.

Formal Elements

Players: *Black Dragon* features a solely single player VS game interaction pattern, with no multiplayer capabilities.

Objectives: The player's goal is to defeat the Black Dragon. Before they can face this foe, there are 3

enemies that stand in their way.

Procedures:

The player interacts with the game in 2 ways. They navigate through the simple map, selecting which opponent to face next. The player then engages in turn-based combat with the selected foe. The player takes the first move, consisting of the consumption of items, and a single attack, ending their turn. The enemy then performs an attack on the player. This repeats until the player wins or is defeated. Defeat resets the game.

Rules:
- Consuming items on a turn uses stamina points. If stamina reaches 0, no more items can be consumed on this turn.
- The player may only perform one attack per turn.
- Stamina replenishes each turn.
- If stamina reaches 0, the player will deal half damage in their next attack.
- If health reaches 0, the player is defeated and loses the game.
- The 3 initial enemies can be faced in any order.

- Upon defeat, each of the 3 initial enemies give additional items and an additional attack option as rewards. These rewards sequentially become more valuable, and do not depend on the enemy faced.

Resources:
- Health
- Stamina
- Items (Healing potions, buffs, debuffs)
- Attacks

Conflict:
There are 4 opponents:
- The 3 initial enemies, which can be faced in any order.
- The 4th and final Black Dragon fight.
- The player chooses what order to face the initial 3 enemies. Enemies gain more health and abilities with each opponent you best before them.

Boundaries:
All the game experience takes place within the application window.
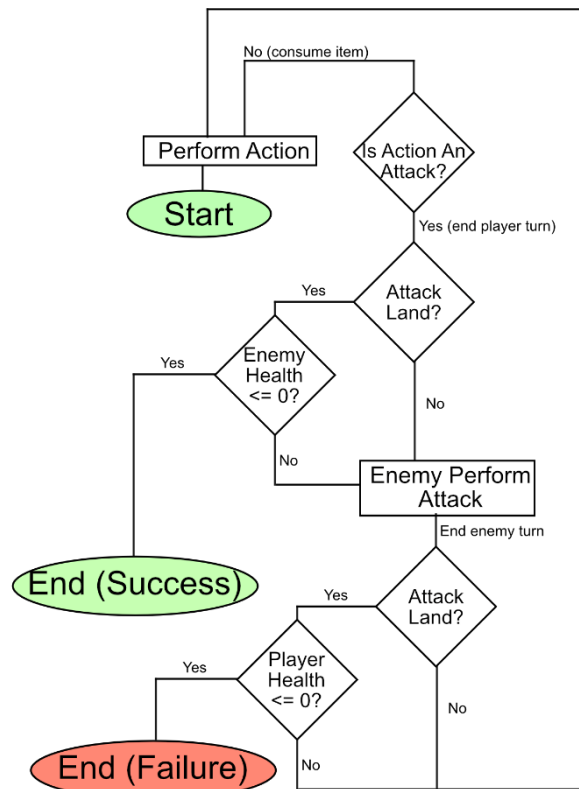
Outcome:
Fun progression resulting in a tricky and earned victory.

Level Example

Shown is an example of the gameplay loop that occurs during each fight encounter. **Start**, resembles the scene/encounter beginning, with **Success** and **Failure** resembling the player besting the enemy, and vice versa respectively.

Shown also, is how the player may consume as many items as they wish during their turn, but may only perform one attack, and their turn is concluded. This diagram is expected to change, as there may be special items that allow for unique behaviour. For example, multiple attacks on a single turn.

Constraints such as turn timers, and item consumption limits may also be added, but playtesting the prototype is required before this will be altered.

Controls

As the gameflow is relatively simple regarding inputs, these key bindings will not be customisable.

Action	Key(s)
Select UI Button	[Enter], [Space], [Mouse Left Click]
Navigate UI	Arrow Keys
Pause Menu	[Esc]

Media List

Sprites:

UI:

Listed are the sprites to be sourced for visualising the pause menu, main menu, and combat UI.
- ButtonHighlightArrow
- Map_Line
- Map_Padlock
- Map_Player
- Map_Enemy_Small_Alive
- Map_Enemy_Small_Selected
- Map_Enemy_Small_Defeated
- Map_Enemy_Large_Alive

- Map_Enemy_Large_Selected
- Map_Enemy_Large_Defeated
- Map_Enemy_Small_Alive
- Map_Enemy_Small_Selected
- Combat_Healthbar_Fill
- Combat_Healthbar_Background

Sprites:

These are the expected required gameplay sprites. We will aim for each enemy to also have unique frames for damage taken, attacking etc. This will bring the game more to life, making it more a engaging experience for the player.

Combat:
- Combat_Player
- Combat_Enemy1
- Combat_Enemy2
- Combat_Enemy3
- Combat_BlackDragon
- Items

Sounds

UI:
When navigating through the main menu, pause menu, and combat item selection UI, there will be 2 main audio clips required:
- Button_Highlight
- Button_Select

There will also be unique sounds for consumables, when selected (potions will have a special drink sound).

Music:
- Music_MainMenu
- Music_Combat x4 (one track for each combat encounter)

Gameplay:
Listed are the sounds expected required sounds that assist the combat portions of the game.
- Player_Attack
- Player_UseItem
- Player_TakeDamage
- Player_Death
- Player_AttackSuccess (Quick victory jingle)
- Player_AttackFailure (Quick failure jingle)

Each enemy will have unique sounds.
- Enemy_Attack
- Enemy_takeDamage
- Enemy_Death
- Victory
- Defeat

Technical Specification

Development Platforms & Tools

This project will be developed in C++ via Visual Studio 2022, with the aid of the SFML library.

Technical Challenges

As there is no game engine being utilised, for this project an engine must be developed. This will be an issue as there will be no access to standardised tools, such as Unity components, without developing them ourselves. This also includes the creation of helper classes, such as a *SceneManager*, and *SoundManager*. Further, as there is no visual interface to streamline workflow, code must be written concisely, consistently, and with sufficient comments.