WSOA3004A - Game Design SM2 A2

Group Documentation

Game Name: Evasive Maneuvers

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Documentation:

For Prototype 2 we started with an idea to create a 2D game that is unique for its play on time manipulation that the player can control as they traverse a space full of action. The initial idea was to implement this time-manipulation mechanic in a game that plunges the player into a space of attacking enemies that continuously fires deadly projectiles at the player who must evade them entirely in order to collect all the coins in the level's space to successfully complete the level. Instead of creating a vast environment for the player to move around freely in, the game challenges the player by placing them in an enclosed space full of threatening enemies that must be avoided in order to collect all the coins. The game is level based where the evasion of enemy projectiles while attempting to collect all coins becomes increasingly challenging as each level progresses.

The game begins with a short and simple tutorial that gets the player accustomed to the premise of the game, the challenges, the goal, and most importantly the movement which involves a point-hold-and click to manipulate time (initiate slow motion) and move to desired locations while evading the enemy's attacks. After this the player is plunged into the action-packed levels that increase in difficulty until the final level is completed and the game won.

In unition with the time manipulation we sought to create an actively evasive-based 2D game that challenge's quick reaction and strategic paths. Especially as the difficulty of the levels increase, players cannot simply target and move directly to the coins in order to complete the level, instead they must use dexterity, quick thinking, and quick reactions in order to strategically find paths in between continuously fired projectiles in order to make their way quickly to collect all coins before the battlefield becomes an overhaul of unavoidable attacks. An important aspect of the time manipulation mechanic in the game is that each time it is used there is a timer that prevents players from remaining in slow motion forever – meaning they must use their control of the time manipulation wisely as they traverse the space otherwise their paths will end in defeat.

We set out to create a unique dexterous time manipulation game with a space theme. The players are faced with fast-paced gameplay that requires them to have quick reflexes. This was the desired outcome for this prototype.

All of this combines in a fun space-evasion aesthetic that makes the acts of dodging projectiles in timed slow motion an exciting experience that gets the player's blood pumping

with each progression of the levels to the very accomplished end. Creating this unique time manipulation, evasive-based 2D game full of active non-stop action is the spark of what we intended to create and provide for our players.

Reflection

Player Controller

In terms of challenges the initial design of the player controller was based on a 2D slingshot. The problem with this implementation was that the slingshot aiming-UI was not constrained to the screen size. This resulted in the player not knowing where they are aiming. This was fixed by calculating the screen size and by clamping the magnitude of the aiming-UI.

Time-Manipulation:

The initial implementation of slowing down the gameplay resulted in a 'stutter' effect. This was not a desired result. In order to make the slow-motion aesthetically pleasing with a smooth feel, *time.fixed.delta* time was implemented. This created a seamless experience between normal time and slow motion which ensured players could control the time-manipulation without any conflicts.

Level Design

In order to make sure the progression of levels was well balanced yet introduced increasing difficulty we had to change the placement of enemies and how fast the projectiles were released (i.e., the time in between each release of a projectile that would trace the player). This immensely impacted the feel of each level and meant the player had to be quick with their evasive maneuvers to collect all the coins. Balance was achieved through multiple playtests that resulted in a optimised placement and challenge for the player.

All in all, the challenges were combated through playtesting and improving all aspects to ensure the best player feel and experience was made. In the end we created an evasive-based 2D time manipulation game that we are proud to say is successful in achieving what we intended for our players.