

Game Engines - Task 1

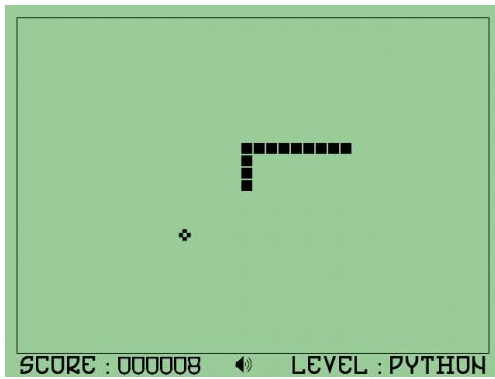
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Description

The game we will be creating will be called Present Rush. Present Rush will be a Christmas themed game where the player, playing as Santa, will be going around the map collecting presents and giving them to children, which in turn increases your score each time. The more presents you collect, the longer your sack gets. If a child disappears from the board, you will lose the game.

Visual References





Production Timeline

Waterfall model -

	19/11/20	23/11/20	30/11/20	07/12/20	14/12/20
Research					
Ideation					
Design					
Implementation					
	21/12/20	28/12/20	04/01/21	11/01/21	
Implementation (cont..)					
Testing					
Balancing / Tuning					
Deployment					

CRC Cards

<h3>Player</h3> <hr/> <p>Moving player sprite</p> <p>Collecting presents</p> <p>Gives presents to children</p> <p>Loses on FateMeter depletion</p> <hr/> <p>Game Manager PlayerSack Presents Children</p>	<h3>Presents</h3> <hr/> <p>Picked up by player</p> <p>Added to PlayerSack</p> <p>Given to children by the player</p> <p>Is removed on collision</p> <hr/> <p>Player PlayerSack</p>	<h3>Children</h3> <hr/> <p>Are given presents by the player - score and FateMeter increase</p> <p>3 states:</p> <ul style="list-style-type: none">- happy- neutral- angry <p>Destroy child sprite if present is given or child gets angry</p> <hr/> <p>Player PlayerSack Score FateMeter</p>
<h3>PlayerSack</h3> <hr/> <p>As player picks up present, it is added to PlayerSack</p> <p>As player gives present to children, present is removed from PlayerSack</p> <p>Everytime a new present is added to PlayerSack, the player sack sprite grows longer</p> <hr/> <p>Player Presents Children</p>	<h3>FateMeter</h3> <hr/> <p>Decreases per second</p> <p>Longer the game goes on, the faster it depletes</p> <p>If child is given present, FateMeter increases</p> <p>If child despawns because of anger, FateMeter decreases</p> <hr/> <p>Children GameManager</p>	<h3>Score</h3> <hr/> <p>Shows current score on screen</p> <p>Tracks highscore</p> <p>Everytime the present is given to a child, the score increases</p> <hr/>

GameManager

Manages game state:

- Start
- Game Over

Instantiates

- Children sprite
- Presents sprite

Saves highscore once
game is over

Player	Children
Presents	FateMeter
Score	