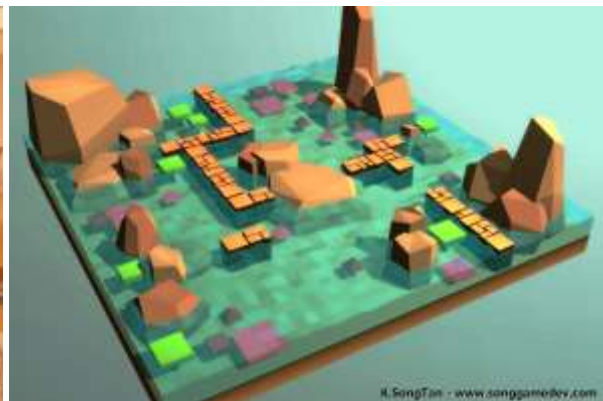


GAMES LEVEL DESIGN – MINI PROJECT LEVEL DESIGN REPORT

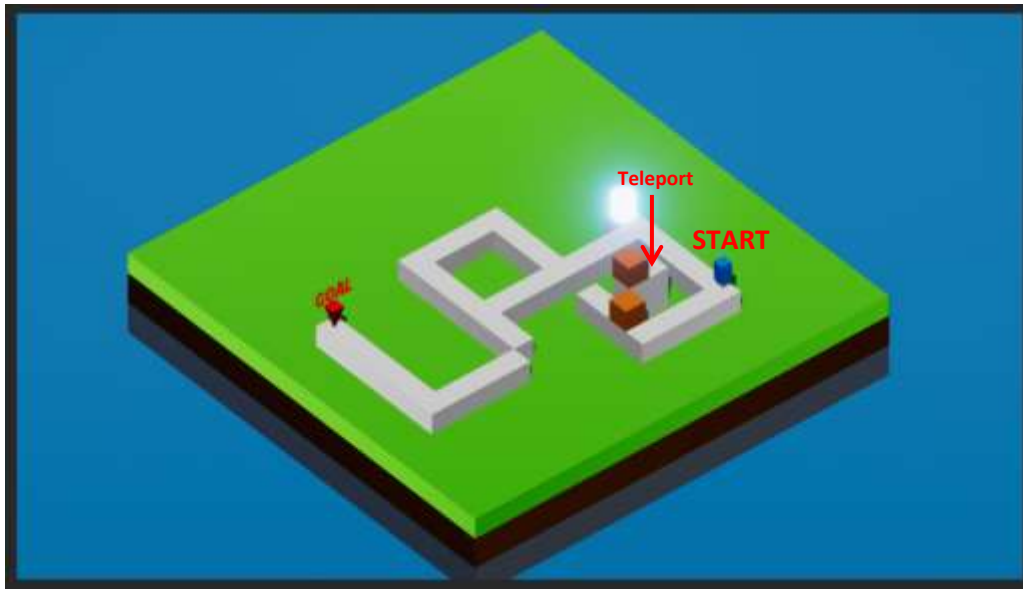
Game Concept	3D orthographic puzzle game
Theme	Fantasy, Abstract with low poly design
Environment	Maze
Goal/ Objective	Guide the player to the Goal.
Challenge	Player has to avoid traps, toggle switches and solve puzzles by pushing boxes to get access to the goal.
Reward/ Motivation	If the player completes a level within a specific number of moves, the player will earn a coin. The player can use the coin to unlock different costumes for the character.
Way of handling failure	The game over condition will be triggered if the player falls off the platform. At any point of time if the, the player can press R to restart the level.

Concept (Images for reference, theme and design)

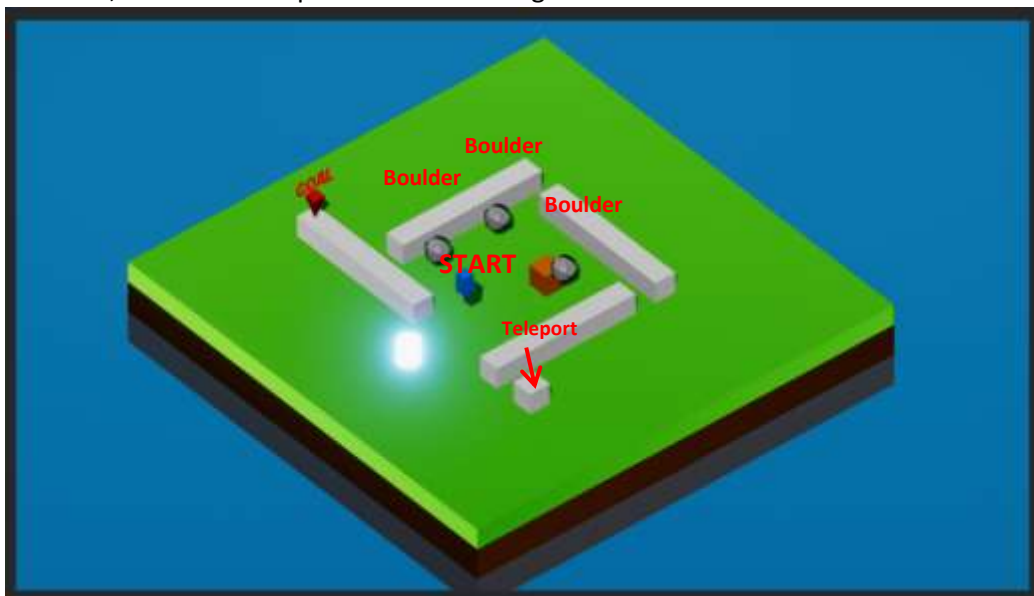


Map/Level Design (Drawn or Screen shot captured from your game)

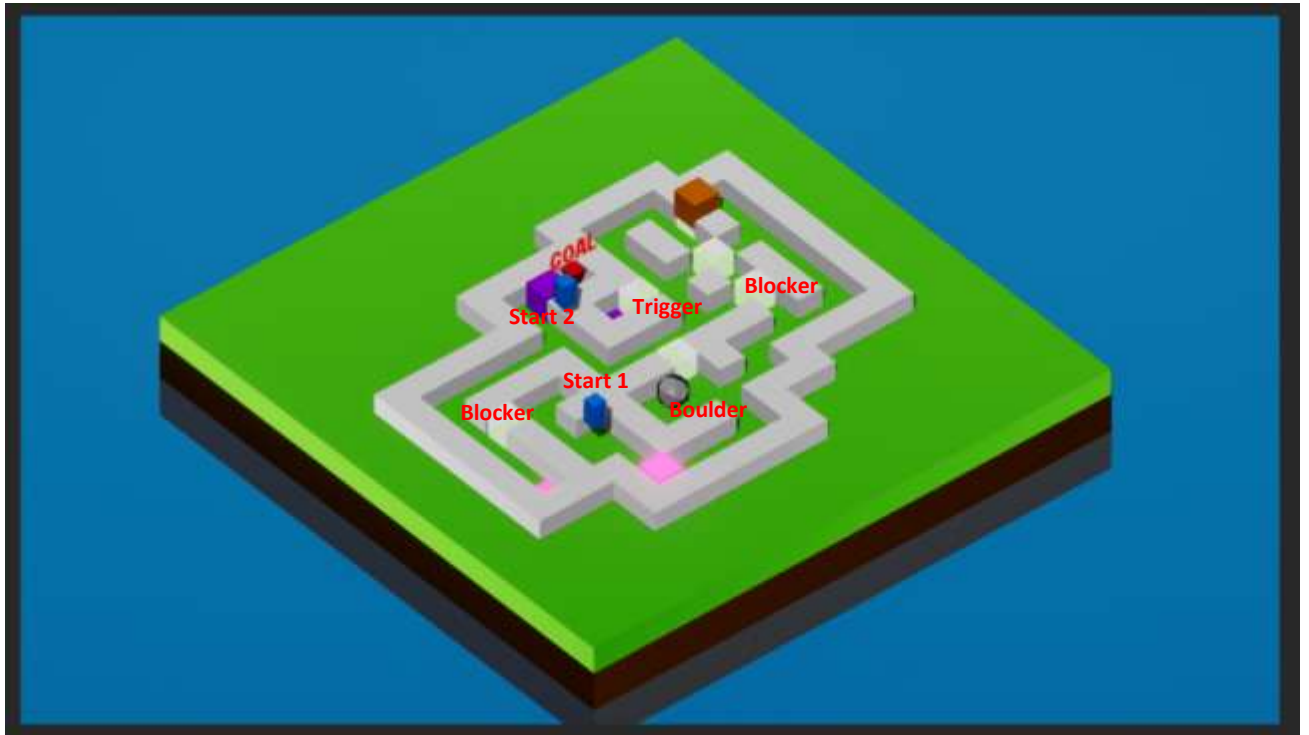
Level 1: The blue block is the player character, brown cubes are boxes that can be push, white blocks are static structures. If the player falls off the playing field (green platform), the game will be over. The glowing cylinder is a teleporter, if the player enters the teleporter, the player will be teleported to the Red Arrow.



Level 2: The 2nd level introduces a new mechanic, boulders. When a boulder is pushed, it will continue to roll in the direction of the push until it hits an object. The player has to use the 3 boulders, cubes and teleporter to reach the goal.

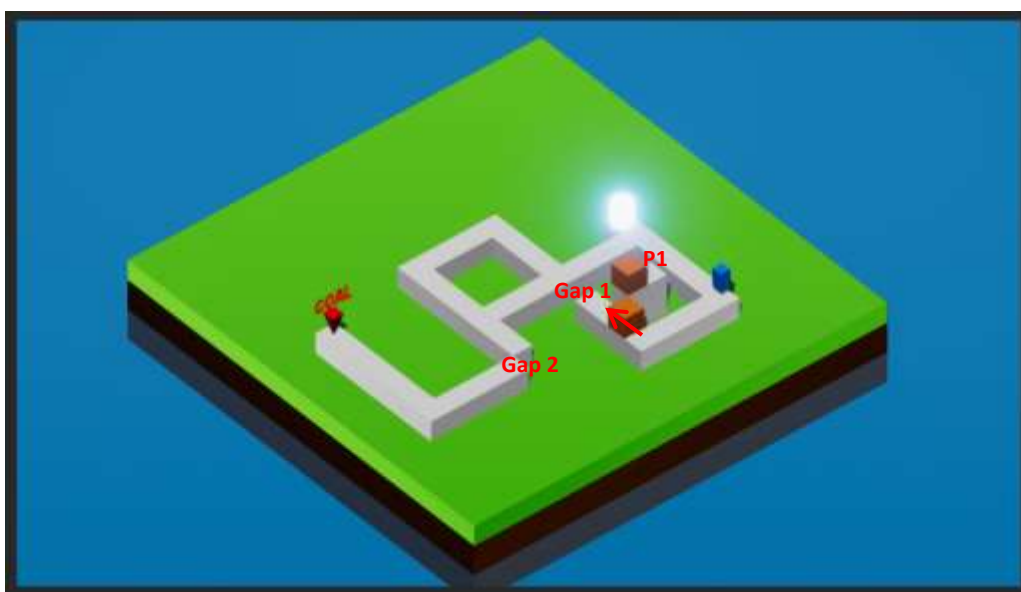


Level 3: Level 3 introduces another new mechanic; the player controls 2 characters. The player has to unlock the purple door by pushing the boulder onto the purple trigger. The 2 players are confined within their own areas and the transparent blocks prevent the 2 character from moving into each other areas.

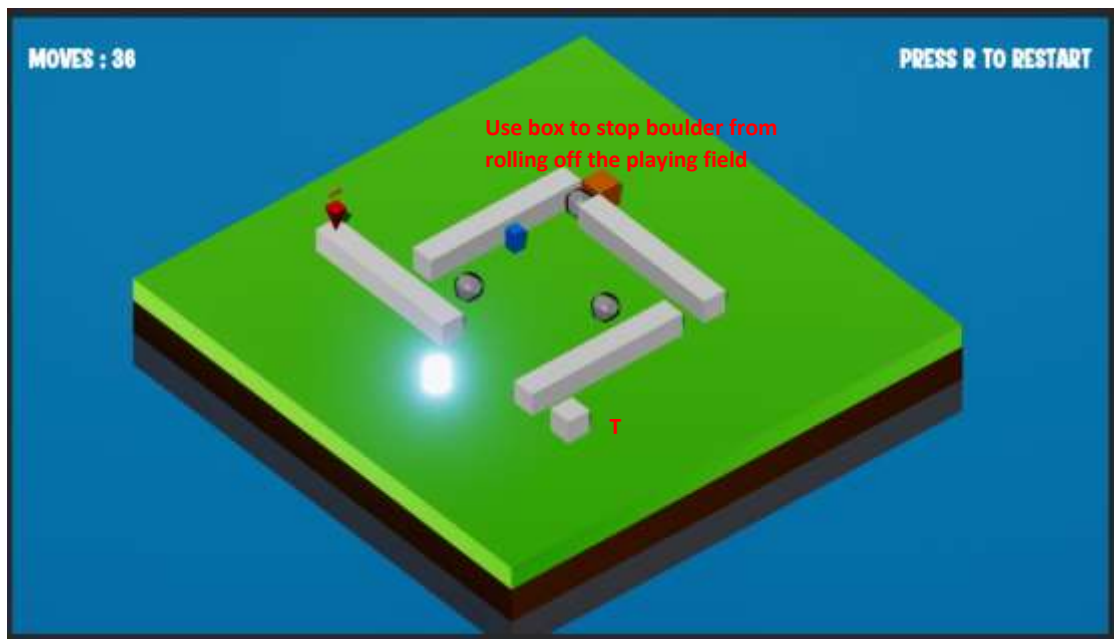


Level Objective/ Solutions

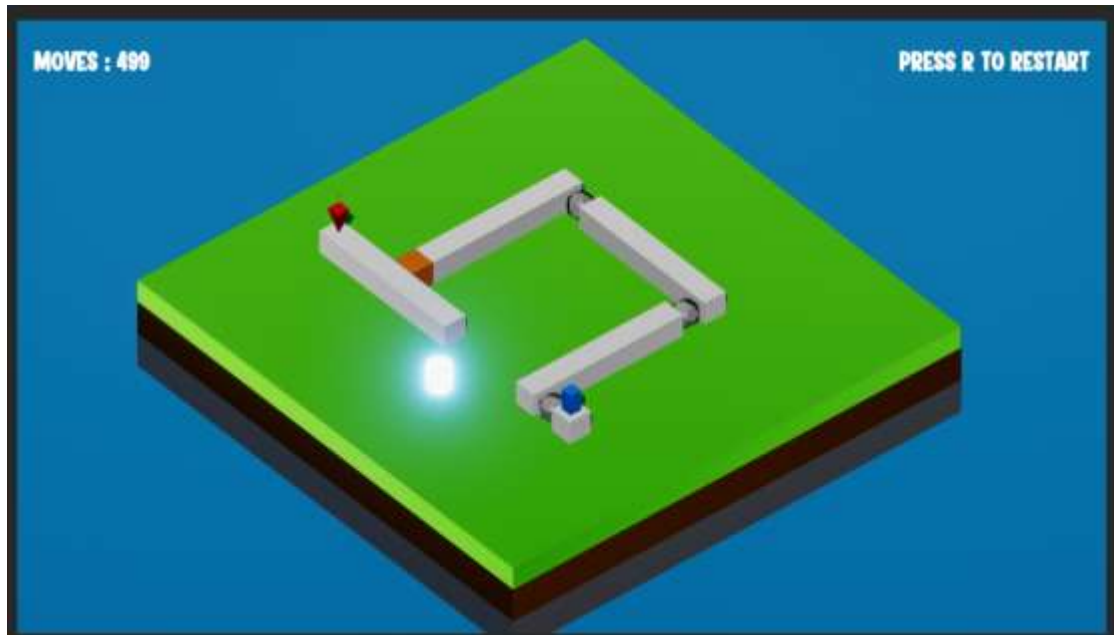
Level 1: The player has to push the first box into the gap 1. After that the player will need to use the teleporter to teleport the character to P1. From P1, the player will be able to push the second box onto the raise platform. The player will need to push second box to Gap 2; the player will need to make several detour to move and push the box.



Level 2: The teleporter will bring the player to T(on the raised block) but unfortunately there are 4 gaps from T to the goal. The player has to use the boulders to fill up the gap but since the boulder will only stop when it hits an object, the player will have to repeatedly move and position the box so that the boulder will stop at the gap.



The box is used to fill the last gap. After filling all the gaps, the player can use the teleporter to teleport the character onto the raised platform.



Questions

1. How do you ensure that the difficulty of the game is appropriate?

To ensure that the difficulty of the puzzles are appropriate, the levels are designed in a manner that introduces a mechanic and subsequently increase the complexity of that mechanic before introducing another new mechanics or combining several mechanics together in a level.

In level 1, the concept of pushing boxes is introduced: the player has to simply push the box to clear the path to the goal. In level 2, there are now 2 boxes and the player has to push the boxes in proper sequence to gain access to the goal. In the subsequent level, the mechanics for teleporter and boulders are introduced.

2. What are the challenges and obstacles introduced to slow down the players, and what are the skills required to overcome them? Note: Refer to notes on chapter 5 and 6 for details on challenges/obstacles

Since this is a puzzle game, the challenge for the levels is logic.

The obstacles in the game are the maze design. Since the player cannot jump, the only way to reach the goal is to navigate the maze by solving the puzzles; by interacting with the boxes, switches, boulders and teleporters.

The skill required to tackle the challenges or obstacles is to analyze the level and devise a solution in how the puzzle could be solved. The game encourages the player to use the trial and error approach to better understand the design for each level; as such a restart functionality is provided.

3. What are the rewards or motivation provided to encourage players in overcoming the challenges?

One of key motivation is the unlocking of new costume for the player through the use of coins. 1 coin is rewarded for completing a level. At this point of time, there is only 1 costume (costing 3 coins).

References

➤ **Indicate the website or references where the assets are downloaded from.**

➤ **Sounds:**

- www.soundeffects.com/PuzzleGame/SoundPackage
- www.soundeffects.com/FantasyTheme/BGM_01

➤ **Assets**

- Boulder and arrows are modelled in 3dsMax.