

Faculty of Computing and Informatics (FCI) Multimedia University Cyberjaya

TGD3451 – Games Production
Assignment 2 – Game Design Document
Trimester 1, 2021/2022

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1. Game Design Definitions

Player play as a bean to jump and stack blocks as high as possible. Endless stack as the blocks moves faster and faster. Game will be over once a player falls down.

2. Game Matrix

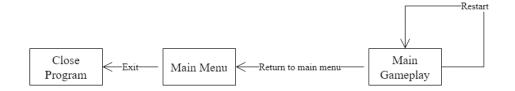
Object Name	Player	
Attributes		
Killed by	Sides of the block, falling down	
	from the block	

Object Name	Moving Block	
Attributes		
Movement	Side to side	

Object Name	Coin Block	
Attributes		
Movement	Side to side	
Gives	Coin	

Object Name	Star Block	
Attributes		
Movement	Side to side	
Gives	Slow to next block that will	
	spawn	
Cost	10 coin to enable	

3. Flowboard



4. Player Elements

4.1 Player Definition

Player is a bean that jump and stack blocks as high as possible. The player can only jump by tapping. Once the player lands on any block, the block will stop and start stacking on the previous block. The player loses by falling down.

4.2 Player Properties

Health: One health

Actions: Jump

4.3 Player Rewards

Coins: Coins to enable power-up blocks

Slows down blocks: Lower down moving blocks

4.4 Heads-Up Display



Heads up display that shows the current score and accumulated coins.

4.5 User Interface



Button for user to pause the game

4.6 Player View



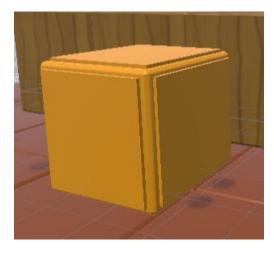
The player's view is from an angled side view overseeing the background, and oncoming blocks

5. Antagonistic Elements

5.1 Antagonistic Definition

The moving blocks that are unstoppable unless something pinned it down. The blocks come with three types: regular, coins and power-up blocks. They move faster when they are stacked.

5.2 Antagonistic Properties



Health: No health since it cannot be destroyed.

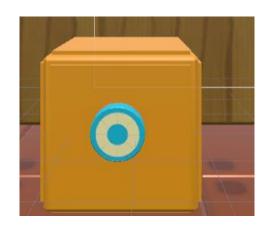
Actions: Move side to side, stopped when player land on it.

Movement: Will go faster depends on the number of stacks.

5.3 Antagonistic List



Power-up blocks



Coin block

5.4 Artificial Intelligence

Normal state: Moving side to side.

Hit state (player lands on it): No movement, gravity activated.

Stack state: Wobbly depends on how they are stacked.

6. Global Game Elements

The gameplay takes place in toy world. The blocks will spawn one by one once the player starts stacking the block.

The camera provides a view of the player and oncoming moving blocks.

7. Concept Art and Level Design





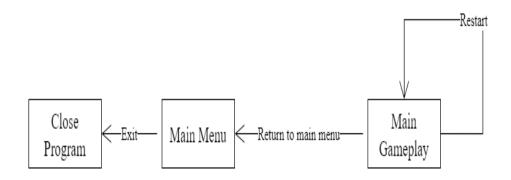
8. Game Audio and Sound FX

Jump: Jump sounds when player jump.

Landing: Landing sounds when player lands on a block.

9. Game Architecture

9.1 Overview



The player will be shown the main menu screen once the player launches the application. The player is given two option which are: Play and Exit. The application will close if the player chooses "Exit".

When choosing "Play", the player will be shown the main gameplay screens. The player will be shown the character with a droop-in camera angle. The moving block will appear getting closer to the player. Once the player starts jumping and landing, the block will stack and another block spawns. It is an endless and infinite level of stacking the blocks with score to keep track the number of stacked blocks.

If the player hit the "Option" button, the game will pause, and all the movement and time in game are stopped. No update will occur. The player can choose whether to resume or return to main menu.

During the gameplay, if the player falls down, the player then will be shown a game over screen. The player can chooses whether to restart the gameplay or return to main menu.

9.2 How to play

Start game:

- 1. Press "Play".
- 2. Main gameplay starts.

Pause game:

- 1. Press "option".
- 2. The game pauses.
- 3. Resume or return to main menu button appears.

Move:

1. Tap the screen to jump

Power Up:

- 1. Player lands on power-up box to slow down the next spawned block.
- 2. Cost 10 coins to enable the power-up, else it will ignore it.

Exit to Main Menu:

- 1. Press "Main Menu" from the pause or game over screen.
- 2. Main menu will be displayed.