2048
Coffee Shop

Grow Your Own Coffee Shop!

"2048 That is Aesthetically Pleasant to the Eyes and Ears"

1. Title Page

    1.1. Game Name
    The name of the game is "Coffee Shop 2048": Grow Your Very Own Coffee Shop! to reflect the theme of Coffee Shop with the concept sentence of "2048 that is aesthetically pleasant to the eyes and ears."

2. Game Overview
    2.1. Game Concept
    The game takes the concept of "running a coffee shop" with " endless puzzle game" and mix it together to make a unique casual gameplay experience that can be enjoyable, have good looks, and be played for as long as the player wants. This endless puzzle game also considered addictive because it is challenging in a way that trigger people to continue playing over and over again. Because people always perceived the goal closer than it actually is, they will continuously try to finish it. For example, when people reach '1024' they immediately thought of winning the game. But the truth is, the player is only halfway through the game. The game looks simple and easy at first but as they progress through the game. It gets harder and harder.

    2.2. Genre
    The genre of the game would be hyper casual and puzzle. This game is considered to be hyper casual because there's not much of a repercussion if the player gets a game over. Another reason is that this game can be played whenever the player wants to play it, it will automatically continue where the player left it off. The puzzle aspect is coming from the "2048" game mode where the player must not make the board of the game filled with un-combinable pieces.

    2.3. Target Audience
    The target audience of this game are teenagers to adults, so the game will be a balance of pleasing aesthetic and cartoony images, sounds, and gameplay. This type of endless puzzle usually attracts very big niche market making it popular for all ages in general.

    2.4. Game Flow Summary
    The player will start at the Starting Screen that consists of visual art and the title, the player has to tap on the screen to start the new game or continue where they left off. The system will always instantiate two tiles at the beginning of the game. Then the player can swipe the screen to make the tiles to move. That means if the player swipes to the left, all of the tiles will move to the left and whenever there are two tiles with the same value colliding with each other as the result of the swipe; they will merge and multiply the value of that tile by 2. They can look at their progress by visual representation at the top of the screen, the coffee shop decoration will slowly appear as the player gain more score. Instead of only using high score like similar game, this game using exquisite coffee shop component to save the progress of the player. The coffee shop component will slowly appear and constructing beautiful ambient. This feature can increase user engagement with the application because they will try to get higher score every time because the coffee shop at the top of the puzzle encourage them to finish them (work as 'goal').

2.5. Look and Feel – What is the basic look and feel of the game? What is the visual style?

The look of the game will be a mix of cartoon and unique aesthetically pleasing art style. It will have the feel of warm coffee that will make the player feel at peace when playing the game. It will not be too cartoony like candy crush to maintain the feeling of maturity. The sound will be a calm music sound as well though options to change music style might be employed.

3. Gameplay and Mechanism

3.1. Gameplay

Players will be able to swipe the screen to move the tiles. When two tiles with same value collide with each other. It will be merged into a single tile with double the value of tile before. The higher the value of the tile, the higher the score will the player get. Because the system spawning a tile every turn, the player needs to merge the tiles, so the place didn't fill up completely. The game will be over when there is no move left and the board is fill up completely.

3.2. Mechanism

- 2048: The playing board/grid will contain two tiles initially with a value of 2 each. When the player swipes the screen, the tiles will move. If there is a tile colliding with another tile of the same value, the tiles will merge and combine the value of both tiles. 2+2: 4 -> 4+4 -> 8 and so forth. Combining the tiles will increase the score which in turn upgrades the coffee shop looks, bringing in more customers.
- Coffee shop: The score will affect how the coffee shop will grow, more and more people (NPC) will show up and give comments on how the coffee shop looks, giving words of encouragement.

3.3. Setting

The setting will take place in modern time in a city space.

3.4. Character

The mascot of the game will be the player's friend and master barista in the game who will help the player walk through the game tutorial and giving updates occassionaly (particularly during Coffee Shop upgrade).

4. Game Art – Key assets, how they are being developed. Intended style

The key assets for the game will be:

- Coffee Shop (and their subsequent upgrades)
- Coffee beans, coffee, mochaccino, etc (to visualize the value of the tile, with numbers at the bottom of each tile too)
- Fonts and UI such as main menu
- Upgrade icons
- NPCs
- Mascot
- Backgrounds
- Visual cover
- Start menu/Title menu

And they will be developed digitally from Photoshop with the intended style of cartoony and heart-warming, taking notes from Japanese and Chinese art style.
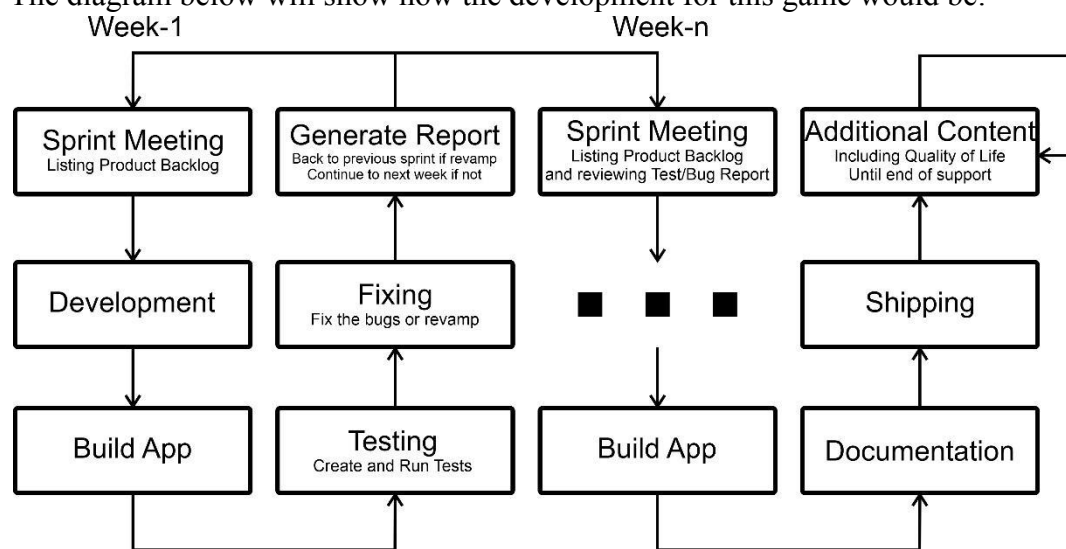
Prototype of assets that want to be used:
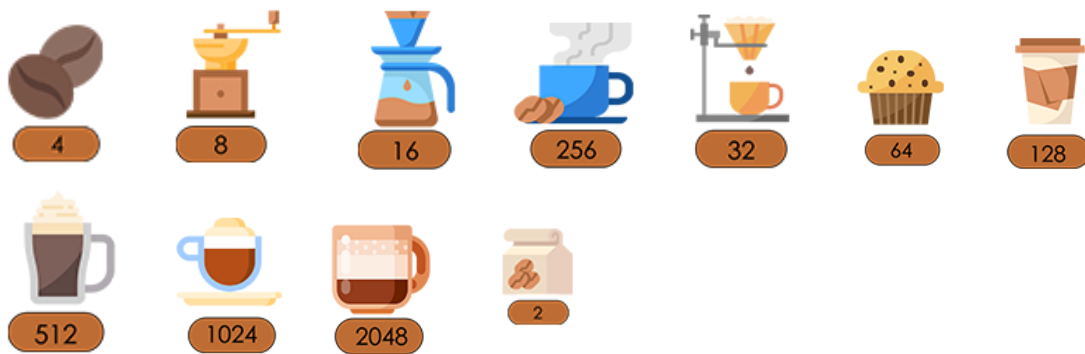
The colour scheme used is European vintage because earthy theme brings heart-warming feeling.

Big thanks for amazing creator at flaticon.com to give me the chance to use their assets as sample to define the art style.
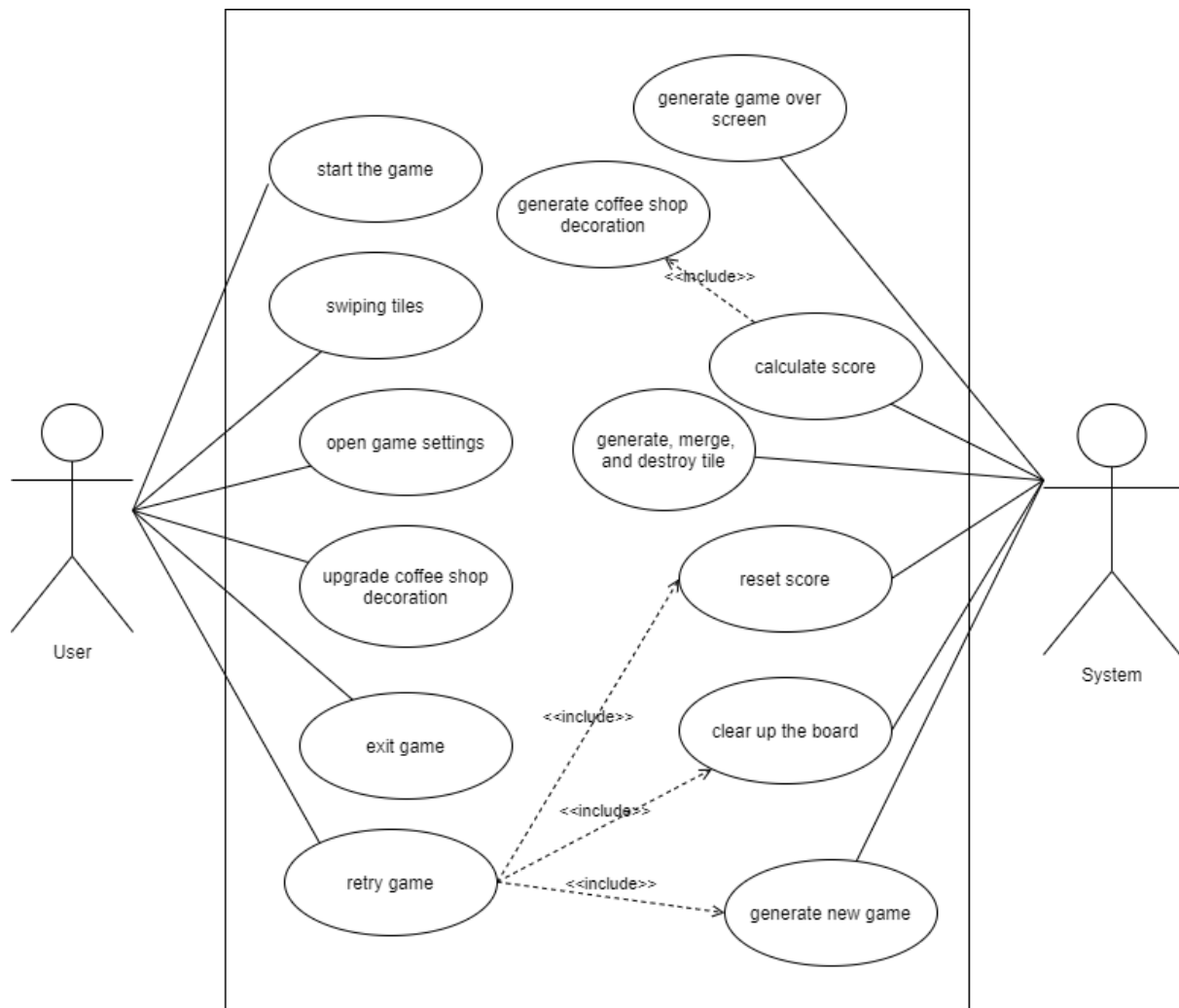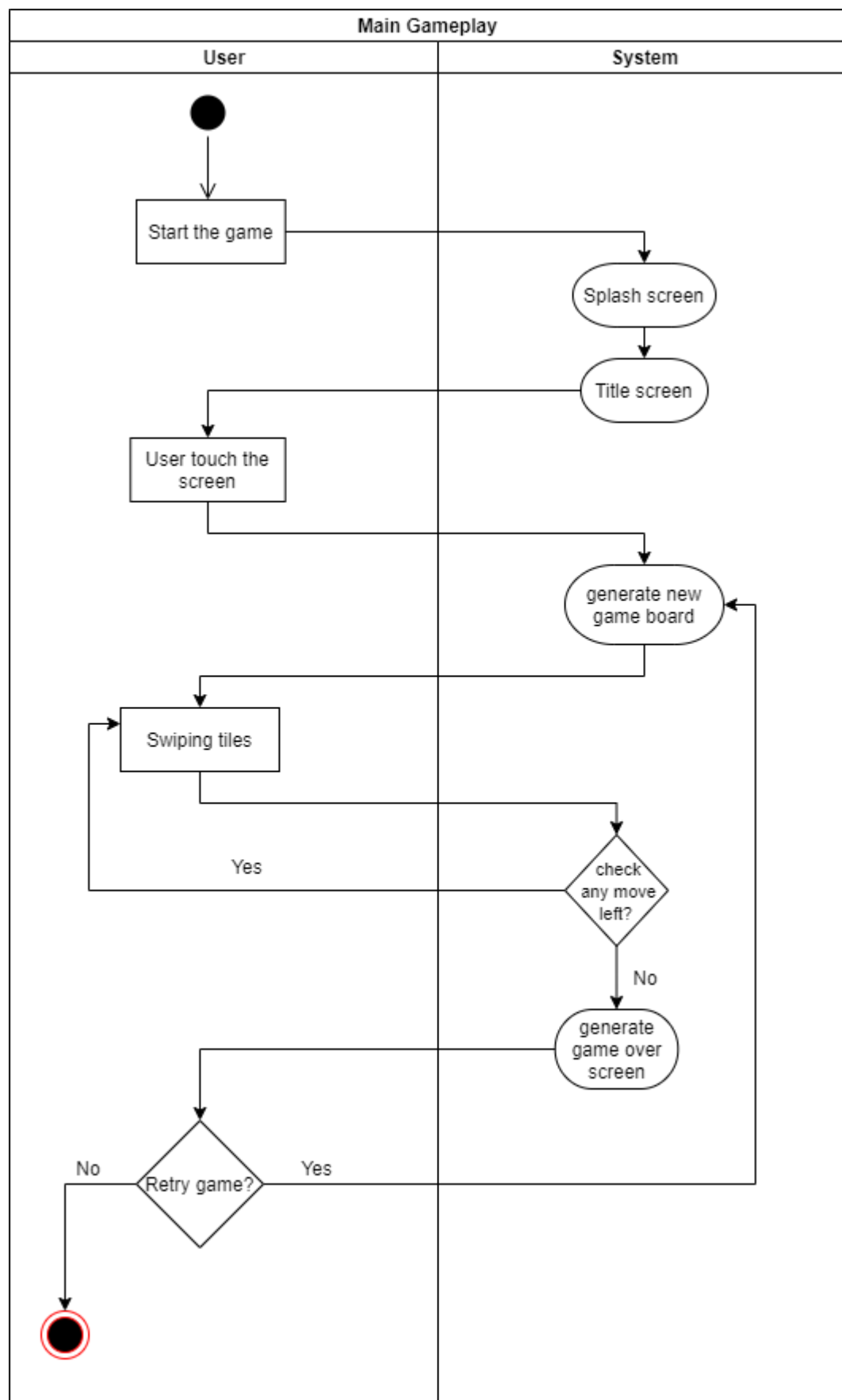
5. Software Process Model (15%)

We use Agile-Scrum as a process model for making this game. The reasoning behind the conclusion is that with this being an individual project or a small team project, there will be changes to be made during the development. If we are using the conventional Waterfall process or others GDLC, it would make the cost of each month growing bigger and bigger. With Agile, we can deliver the product on time or even less and have more time on working out the game mechanics and ironing out the kinks. It will consist of multiple sprints that is in interval with testing, so it will be like: Sprint Week 1 (from Day 1 to Day 5) then Testing/Fixing Week 1 (Day 6 to Day 7) and so forth, expanding upon the product backlog that we get from the sprint and either rework the week or moving on to the next portion of the development.

The diagram below will show how the development for this game would be:

Week-1   Week-n

Sprint Meeting Listing Product Backlog	Generate Report Back to previous sprint if revamp Continue to next week if not	Sprint Meeting Listing Product Backlog and reviewing Test/Bug Report	Additional Content Including Quality of Life Until end of support
Development	Fixing Fix the bugs or revamp	■ ■ ■	Shipping
Build App	Testing Create and Run Tests	Build App	Documentation

6. Requirement Modelling (15%)

Main Gameplay

User	System
●	
Start the game	
	Splash screen
	Title screen
User touch the screen	
	generate new game board
Swiping tiles	
	check any move left?
Yes	
	generate game over screen
Retry game?	
No	Yes
◉	

Core mechanic

User	System

generate new game board

Instantiate tiles

swiping tiles

do any colliding tile have the same value ?

Yes → **merge tile and multiply current value of tile by 2**

No

check any move left
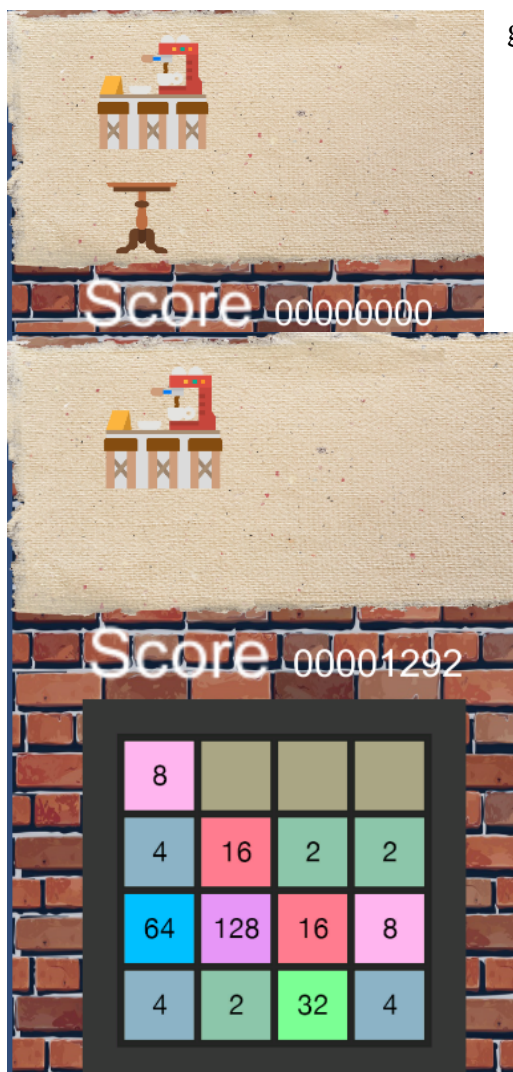
Yes

No → **generate game over screen**

Retry game?

Yes

No

7. A Prototype for this game (25%)

Prototype of this game is zip together with this gdd with the name of '2048' file type application

Appendix:

The start menu of the game

game screen, the system will instantiate 2 tiles at first.

when reach certain score, coffee shop component will start to spawn (work like high score)
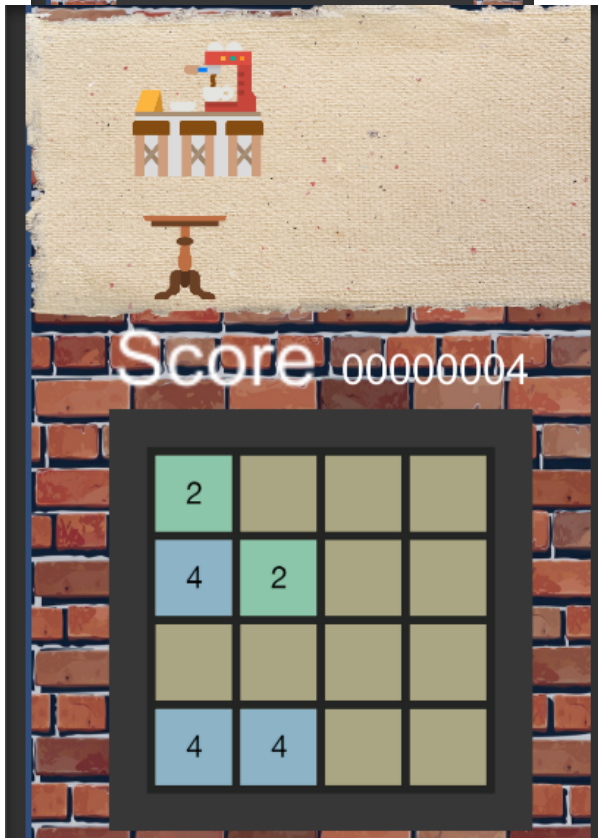
When player don't have any move left, the system will generate game over screen.

The system generates new board, the coffee shop component that the players have unlocked before still there to indicate the progress of the player.

The movement of the tile, before moving

After swiping the screen to the left, all the tiles move to the left except for the new spawing tile, the same tile with the value of 2 is merging into 4 because of the colliding