MOBILE AND WEB GAME PROGRAMMING

Made by: Ayam

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Adhiwira Lokacarya	2101636362	LB04	Member
Gilbert Chandra	2101648753	LB04	Member
William Sebastian	2101637762	LB04	Member
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AYAM CYCLE

Made by: Ayam

Name	NIM	Class	Role
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CREDITS

1. Alec Markarian – Giving GDD template
2. Benjamin Stanley – Giving GDD template
3. Yogi Udjaja, S.Kom., M.Kom. – Lecturer of Mobile and Web Game Programming

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CHAPTER I

OVERVIEW

1.1. Theme / Setting / Genre

The theme of "Ayam Cycle" is chicken. The genre of "Ayam Cycle" is sliding puzzle game where the player needs to swipe on their mobile phone screen to move the tiles to complete the objective. The basic concept of "Ayam Cycle" is similar to the hugely popular game, "2048", but with a twist. The player needs to complete certain objectives in order to progress to the next level. This feature is not present in the "2048" game. As for the tiles, we don't use the basic numbered tiles, instead we use pictures of chicken growth stage starting from the most basic one, the egg, and then the chick, juvenile chicken, and etc. The last chicken growth tiles will be divided into two types, which are the rooster and hen.

1.2. Core Gameplay Mechanics Brief

1.2.1. Swiping

"Ayam Cycle" main mechanic is the swiping motion made by the player on their device's screen. The swiping mechanism can be triggered simply by swiping a finger in the four basic directions, which are up, down, left, and right. Swiping up will move the tiles to the up direction, swiping down will move the tiles to the down direction, swiping left will move the tiles to the left direction, and swiping right will move the tiles to the right direction. This swiping mechanic is essential to combine tiles.

1.2.2. Levels

"Ayam Cycle" has a distinct feature that differentiates it from the "2048" game where in "Ayam Cycle", we implemented level systems. Each level will present a different objective which the player has to accomplish in order to finish the level and progress to the next level. Failure in completing the objective will result in the inability of unlocking the next level.

1.2.3. Tiles Combination

Another important mechanic essential to "Ayam Cycle" is tiles combination. These tiles combination occurs when the player collides a tile with another tile that have the same picture. The two tiles will then merge to create a new tile with a different picture. For example, the player manages to collide two egg tiles, these two tiles will then

merge to create a chick tile. The player needs to keep combining tiles to complete the level's objectives.

1.2.4. Health Bar

Health bar will appear on every start of a level and it symbolizes the health (or in this case the time remaining) of the player. The health will keep on decreasing in a constant speed and acts as a timer to indicate the time left for the player to finish the level.

1.3. Targeted Platforms

"Ayam Cycle" will be released on the Google Play Store for Android. We decided to release it for mobile only to fulfill the requirements of the Mobile and Web Game Programming project.

1.4. Monetization Model (Brief / Document)

The monetization model used for "Ayam Cycle" is by using video ads. The video ads will appear on 2 different occasions. First, it will appear when the player loses a level. If the player chooses to watch the ads, the player will get a new fully-recharged health bar and the player can continue playing the level he / she failed on. The second type of video ads will appear after the player have been spending some time playing the game. This video ads will appear automatically and it has a 5 second timer before it can be skipped by the player.

1.5. Project Scope

1.5.1. Game Time Scale

For "Ayam Cycle", we don't need any costs to build this game as we don't hire any extra members like programmers, artists, and etc. We also don't need any costs because this project is intended to fulfill the final project of our Mobile and Web Game Programming class. The duration of this project is around 12 weeks.

1.5.2. Team Size

1.5.2.1. Core Team

Project Manager   : Rio Wibawa
Programming   : Felix Kurniawan, Kevin Trisnadi
Art   : Rio Wibawa, Adhiwira Lokacarya
Design   : Gilbert Chandra, William Sebastian

1.5.2.2. Marketing Team

We didn't have any marketing team because we made this game to fulfill the final project of Mobile and Web Game Programming.

1.5.3. Licenses / Hardware / Other Costs

We use free software such as Unity to create "Ayam Cycle" thus we don't need any extra costs. Besides that, we create our own assets so, we don't need to pay any license.

1.5.4. Total Costs with Breakdown

The total costs for this project is zero because we create "Ayam Cycle" to fulfill the final project of Mobile and Web Game Programming.

1.6. Influences (Brief)

The main influence for our game is the hugely popular "2048" game. The basic mechanics are similar but "Ayam Cycle" adds a twist to the game with the addition of health bar, objectives, and level system.

1.7. The Elevator Pitch

Cute design, popular style, easy to understand, and fun to play? It is "Ayam Cycle"

1.8. Project Description (Brief)

"Ayam Cycle" is a game made by 7 Universitas Bina Nusantara students to fulfill the project for Mobile and Web Game Programming subject. "Ayam Cycle" is a mobile game that holds the sliding puzzle genre. "Ayam Cycle" will be created using Unity and its' targeted platform is mobile especially for Android. This project will take approximately 12 weeks to complete.

1.9. Project Description (Detailed)

"Ayam Cycle" is a game made by 7 Universitas Bina Nusantara students to fulfill the project for Mobile and Web Game Programming subject. "Ayam Cycle" is a mobile game that holds the sliding puzzle genre. Our inspiration for this game is the hugely popular sliding puzzle game which is the "2048" game. Besides having the basic mechanics of 2048, we add some twists to "Ayam Cycle" such as the addition of levels, health bar, and we change the numbered tiles into tiles with drawing in it. As the game title suggests, the

tiles will contain pictures of chicken growth stage starting from the egg until it become a rooster or a hen.

"Ayam Cycle" will be created using Unity and its' targeted platform is mobile especially for Android. This project will take approximately 12 weeks to complete with the addition of a prototype being created at the sixth week. The monetization model that we used for "Ayam Cycle" is by using video ads that will appear when the player loses a level or after the player has been playing the game for some time.

CHAPTER II

WHAT SETS THIS PROJECT APART?

"Ayam Cycle" adds multiple twists to its' gameplay that sets it apart from other similar sliding puzzle game. The addition of the level system along with a health bar for the player will surely add a new dimension to the game. Another reason that sets this project apart from the rest is that this game is created by students, not professionals. We also use a cute design to make it stand put among other similar games with the change of the numbered tiles to tiles with pictures of chicken growth in it.

2.1. Core Gameplay Mechanics (Detailed)

2.1.1. Swiping

<Details>

The swiping mechanism can be done by the players then they do the swipe action on their devices screen. This swiping mechanism is essential to move the tiles into 4 different directions depending on the swiping direction. Swiping up will move the tiles into the upper direction, swiping down will move the tiles into the down direction, swiping left will move the tiles into the left direction, and swiping right will move the tiles into the right direction. This swiping action is essential to combine tiles with the same pictures on it to create a new tile.

2.1.2. Levels

<Details>

Levels here means that "Ayam Cycle" is played in many levels. This is what differentiates it from other similar sliding puzzle game. The levels here will make the game unrepetitive and the player will not easily get bored playing. Failure in completing the objective of a level will result in the level failure and inability to unlock new levels.

2.1.3. Tiles Combination

<Details>

Tiles Combination is the basic of "Ayam Cycle". The tiles combination mechanism allows players to merge same tiles to create new ones. The tiles combination mechanism can be triggered by colliding same tiles with the swiping mechanism done by the players. For example, the player manages to collide two egg tiles, these two tiles will then merge to create a chick tile. The player needs to keep combining tiles to complete the level's objectives.

2.1.4. Health Bar

<Details>

The health bar is another important game mechanic that limits the players' thinking and action time. The health bar is present on each level and it acts as a timer for the player to show how much time is left for the player to finish the objective of that level. The health bar will keep on decreasing from time to time and it can't be replenished except by watching ads.

CHAPTER III
ASSETS NEEDED

CHAPTER IV

SCHEDULE

1. 26th September 2019
   - Planning the basic concept and idea of the game

CHICKEN FLOCK

Made by: Ayam

Name	NIM	Class	Role
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OVERVIEW

1.1. Theme / Setting / Genre

The theme of "Chicken Flock" is chicken. The genre of "Chicken Flock" is endless runner game. "Chicken Flock" is an endless runner game with a focus on its graphic. The graphic in this game is all about making the players feel relaxed when playing the game. "Chicken Flock" will uses chicken as the player's main character. As an endless runner game, there is no end to the game and the player's objective is to get the highest score possible.

1.2. Core Gameplay Mechanics Brief

1.2.1. Jumping

The jumping mechanism can be done simply by tapping the screen once. This will result in the character to jump for a certain height and certain time. This jumping action is useful to jump over holes or ledge.

1.2.2. Movement

The movement in "Chicken Flock" is automatically done by the game itself as this is an endless runner game. The speed of the player's movement will slowly increase to make the game more and more difficult as time goes by. This is common in endless runner games.

1.2.3. Extra Lives

At the start of the game, the player has only one live. But, as the game progresses, the player can collect chickens along the way by colliding with it. The chicken here is a symbol of extra lives. If the player falls off during the way while having chickens behind, the player will continue the game in exchange for one chicken to be released or separated from the flock.

1.2.4. Shop

The shop here provides the players with skins that can be equipped to change the chicken's default skin. The player needs to collect coins along the way to be able to buy items in the shop.

1.2.5. Skins

Skins can be purchased through the store using coins that the players have collected. These skins will not only change the appearance of the chicken the player is using, but it will also provide unique effects / boost to the player such as double coins, double score, and etc.

1.3. Targeted Platforms

"Chicken Flock" will be released on the Google Play Store for Android. We decided to release it for mobile only to fulfill the requirements of the Mobile and Web Game Programming project.

1.4. Monetization Model (Brief / Document)

The monetization model that we used for "Chicken Flock" is by using video ads. These video ads appear when the player loses. The player can choose to watch the video to "revive" and continue their game or start over by not watching the ads.

1.5. Project Scope
1.5.1. Game Time Scale

For "Chicken Flock", we don't need any costs to build this game as we don't hire any extra members like programmers, artists, and etc. We also don't need any costs because this project is intended to fulfill the final project of our Mobile and Web Game Programming class. The duration of this project is around 12 weeks.

1.5.2. Team Size

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Project Manager   : Rio Wibawa
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                             Kevin Trisnadi
Art   : Rio Wibawa, Eric Thomas
Design   : Adhiwira Lokacarya, Gilbert
                             Chandra, William Sebastian

1.5.2.2. Marketing Team

We didn't have any marketing team because we made this game to fulfill the final project of Mobile and Web Game Programming.

1.5.3. Licenses / Hardware / Other Costs

We use free software such as Unity to create "Chicken Flock" thus we don't need any extra costs. Besides that, we create our own assets so, we don't need to pay any license.

1.5.4. Total Costs with Breakdown

The total costs for this project is zero because we create "Chicken Flock" to fulfill the final project of Mobile and Web Game Programming.

1.6. Influences (Brief)

The main influence of "Chicken Flock" is "Alto's Odyssey". We design "Chicken Flock" within the focus of creating a similar feel to the game like what "Alto's Odyssey" did. We want to create an endless runner game where the players feel relaxed while playing and enjoy the graphics of the game.

1.7. The Elevator Pitch

Enjoy the beautiful graphics as you progress towards the unknown.

1.8. Project Description (Brief)

"Chicken Flock" is a game made by 7 Universitas Bina Nusantara students to fulfill the project for Mobile and Web Game Programming subject. "Chicken Flock" is a mobile game that holds the endless runner genre. "Chicken Flock" will be created using Unity and its' targeted platform is mobile especially for Android. This project will take approximately 12 weeks to complete.

1.9. Project Description (Detailed)

"Chicken Flock" is a game made by 7 Universitas Bina Nusantara students to fulfill the project for Mobile and Web Game Programming subject. "Chicken Flock" is a mobile game that holds the endless runner genre. "Chicken Flock" will be created using Unity and its' targeted platform is mobile especially for Android. This project will take approximately 12 weeks to complete.

"Chicken Flock" is inspired by "Alto's Odyssey". The main focus in creating "Chicken Flock" is to create a relaxing and beautiful graphics so that the players feel relaxed when playing. Players can also buy skins from the shop to customize the appearance of the character.

CHAPTER II

WHAT SETS THIS PROJECT APART?

"Chicken Flock" focuses on the visual aspect of a game. Its' purpose is to make the players feel relaxed with its beautiful graphics. It is inspired from the game "Alto's Odyssey" that also focuses on the graphics of the game. This sets "Chicken Flock" apart from endless runner games where most of them tend to focus on creating challenges for the player.

2.1. Core Gameplay Mechanics (Detailed)

2.1.1. Jumping

<Details>

The jumping mechanism in "Chicken Flock" can be done by simply tapping the screen of the device once. The character will automatically jump for a certain time and certain height. By jumping, the character can jump over obstacles founded in the game. The player can only jump once before landing on the ground again, no double jump is available.

2.1.2. Movement

<Details>

The movement action in "Chicken Flock" is automatically done by the game. As this is an endless runner game, the player will keep on moving forward until the player loses. The speed of the movement will increase as time goes by. This will increase the difficulty level of the game as time goes by.

2.1.3. Extra Lives

<Details>

At the start of the game, the player only has 1 live. But, the player can gain more lives along the way to increase their lives. These lives are meant to give the players multiple chances to progress further in the game. These extra lives can be obtained by colliding with chicks along the way. After colliding, the chicks will follow the player. When the player loses a live, one chick will stop following the player.

2.1.4. Shop

<Details>

The shop in "Chicken Flock" is a place where you can buy skins to customize your chicken avatar in the game. To buy items in the shop, players need to spend a certain amount of coins. These coins can be

collected by the players by colliding with the coins. The shop can only be accessed from the main menu.

2.1.5. Skins

<Details>

Skins in "Chicken Flock" are used to change the appearance of the character. These skins need to be bought first by the player before it can be equipped. These skins are permanent, so once the player has bought it, it can be equipped anytime. These skins will grant bonus effects for the players such as double coins, double score, and etc.

CHAPTER III
ASSETS NEEDED

CHAPTER IV
SCHEDULE

1. 26th September 2019
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