

# Don't Eat Me V2

## Team Members

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## **Summary:**

The purpose of this game, is to create a fun and educational game that teaches players the food web in World of Balance. The player will learn the food web hierarchy by learning which animals are above and below other animals on the food web. The game will still play as a tower defense game, similar to the original Don't Eat Me, however the strategy will be changed to be more of a chess/checkers type game combined with matching predators to prey.

## **Goal of the Game:**

The primary goal of Don't Eat Me will be to defend the leftmost boundary of the screen against incoming predators from the right side of the screen. The mechanics will run as follows:

The player has a grid which the player can place lower level animals. Each grid spot can accommodate one single animal or plant. Predators will spawn on the right side of the screen and move along one single row towards the players left base. The overall goal is to feed the predator with the correct prey so that they get full and turn around to leave. Predators will not react or stop for incorrect prey. The predators will move by turns. Each turn the predators will move left by one tile.

As the game starts, the player will have one single row to defend. Each player will start off with a given amount of lives. Anytime an enemy predator makes it all the way to the left of the gaming field, the player will lose a life. When the player is completely out of lives, the game will terminate and the player will be informed that he/she has lost.

To prevent loss of lives, the player must successfully feed an incoming enemy predator. The player must correctly choose and place a prey in the path of an incoming enemy predator to feed it. Once an enemy predator's hunger is satisfied, it will leave. However, as stated before, if the incorrect prey has been placed in the path of an enemy predator, it will have no effect and the predator will continue its course towards the left of the lane.

To be able to get the desired prey to feed the enemy predator, we must create a food chain. Everything that can be placed in the gaming grid will be time base and can be placed anywhere on the grid. The player will have to start from the lowest item on the food chain which are plants. Once a certain plant has been placed, the player can then place down a small prey that eats said plant within close proximity of the plant. To get a larger prey, the player can place it within close proximity of the small prey only if the larger prey eats the small prey.

If the player accidentally places the wrong prey, that spot on the grid is taken up until another predator that will eat that specific prey spawns. This means that the spot occupied might break up other food chains.

To do well and gain Lobby Credits, the player must create successful food chains to feed incoming predators. The longer the food chain, the more potential credits a player can obtain when the enemy predator eats the player's prey.

The actual positions where prey can be placed, timer speed, and spawn rates are still to be determined and will be adjusted to make the game run at a moderate pace.

## Game Components

- **Game Board**
  - 5 rows
  - 9 columns
  - Tiles light up to show player where animal can be placed
- **Game UI**
  - Animal Shop to show available animals
  - Timer
  - Available Lobby Credits
  - Game Lives
  - Menu Button to return
- **Animals**
  - Loaded from animal database

## Server

The server will keep track of the client's in game credits. Credits will be awarded for completing waves of predators. The client will also download the animals from the database to use in game. For this version of Don't Eat Me, the graphics will also be the same as the rest of the minigames for the animals. If time allows, possibly have better lobby ecosystem scores impact which animals are available for use in the game.

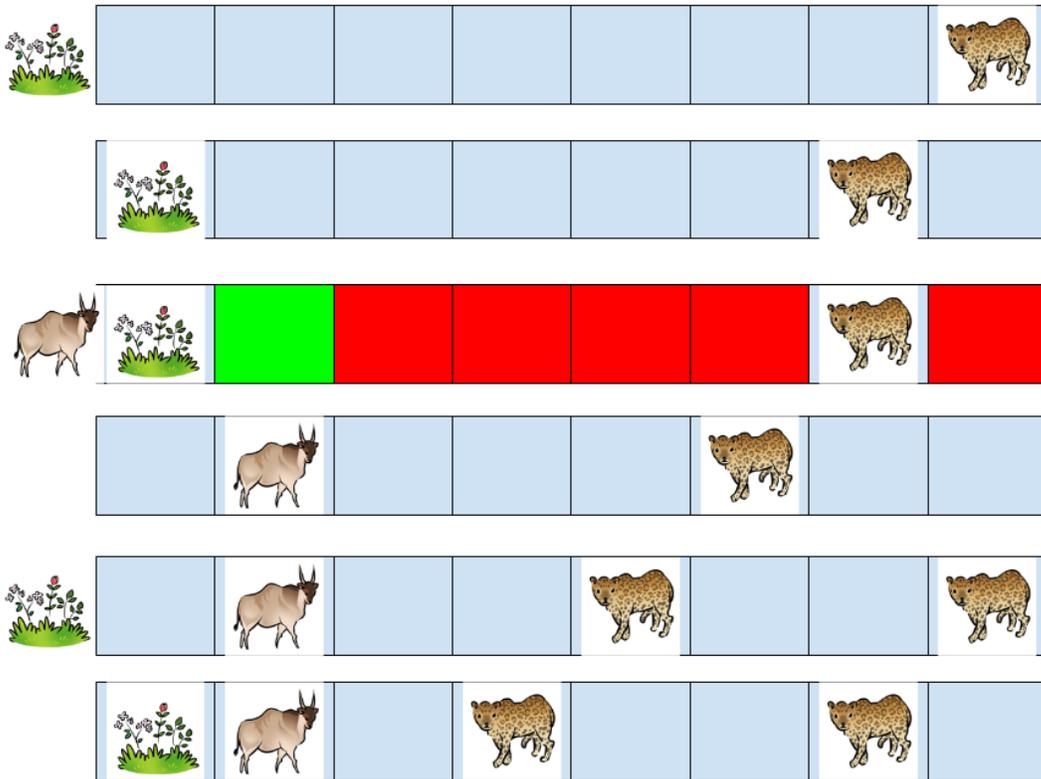
## Client

The client will run most of the game mechanics, including the timer and positions of all game piece positions. It will handle level management, and tutorial hints to help the player learn the game.

## Database

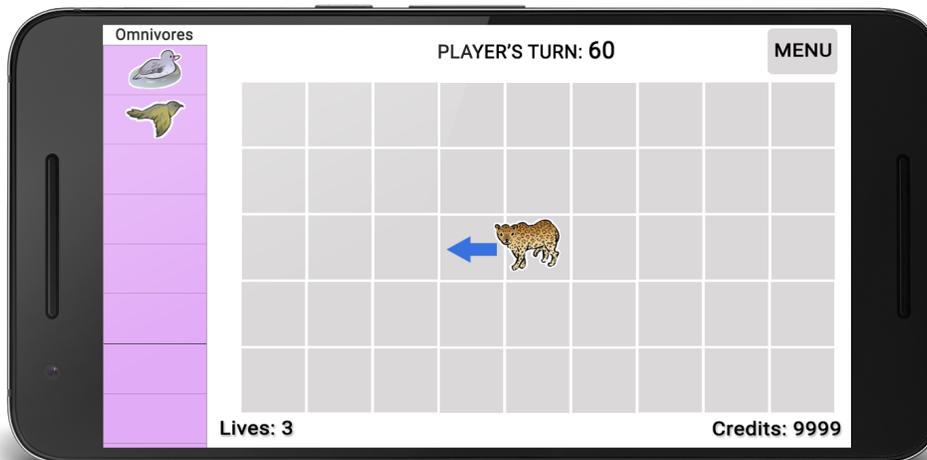
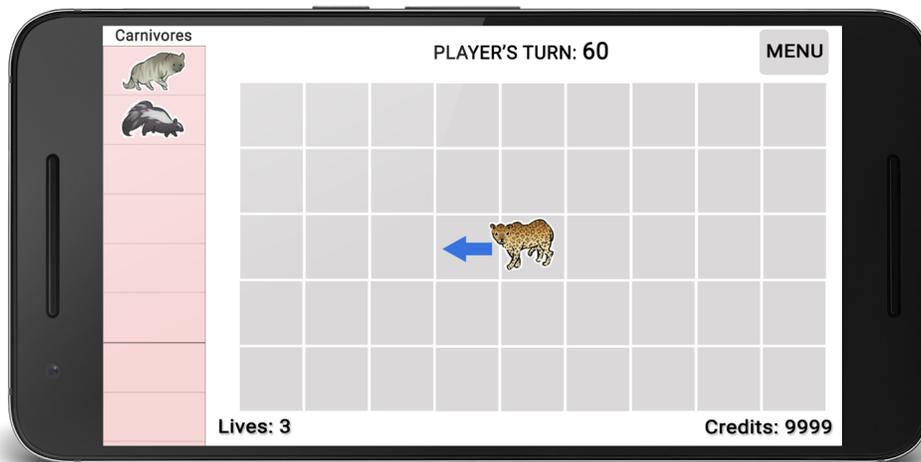
The database will hold the animal information which the client will load to start the game. It will store the client's credits after the round is over, and remember if the player has seen the tutorial or not.

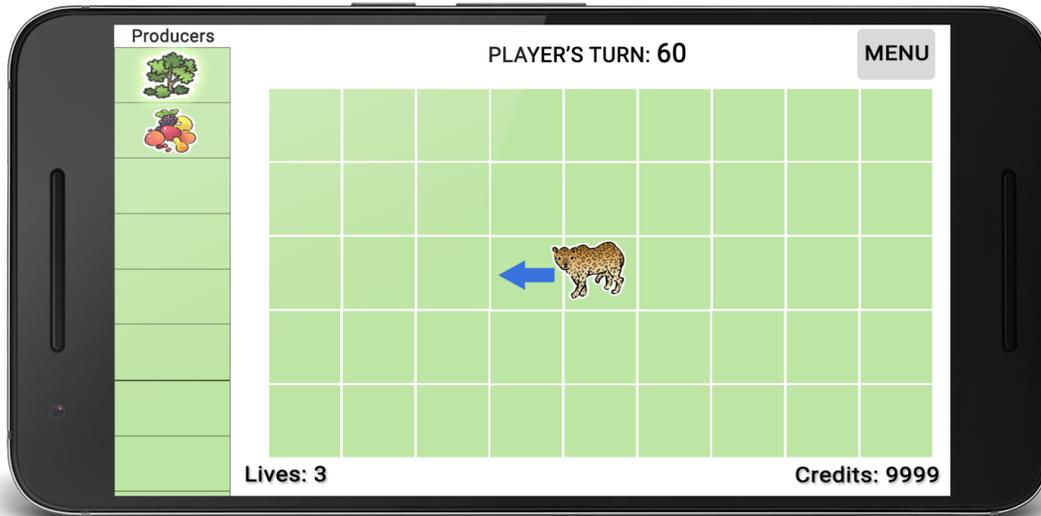
## Game Mechanics Example:



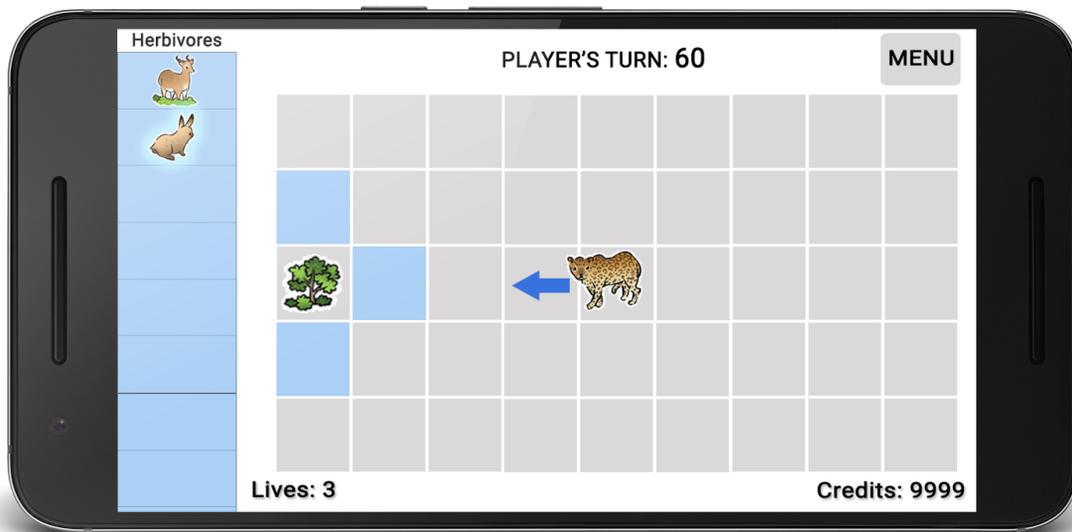
## User Interface

Since Android devices have smaller screens, most of the screen is reserved for the grid. The game layout is heavily inspired by the mobile version of Plants Vs. Zombies where the player's plant selection is located on the leftmost edge of the screen. Since Don't Eat Me will allow players to place any species from the World of Balance database, the species selection will be organized into four main categories: producers, herbivores, carnivores, and omnivores. Players will be able to switch between the categories by tapping on the category name. In order to accommodate the large number of species within each category, players will also be able to vertically scroll the species selection while they play.





When a producer is selected, areas of the grid are highlighted green to indicate a producer can be placed there.



Likewise, when a herbivore (blue), carnivore (red), or omnivore (purple) is selected areas of the grid are highlighted their respective color to indicate a they can be placed there.

## Tentative Milestones

| <b>Date</b> | <b>Task</b>  |
|-------------|--|
| 3/22        | Update UI, update grid system  |
| 3/31        | Implement new game mechanics and load all animals to use                 |
| 4/11        | Add tutorial hints to help player  |
| 4/25        | Add communication with database to handle credit transactions with lobby |
| 5/3         | Beta Release, fix bugs and polish  |