

WAH!-Gyu Farm

This project is a simple text-based game.

Game premise:

You are a new hire at a farm whereby you are in charge to care for a number of special genetically engineered, low-carbon footprint, ultra-sustainable cows. These cows consume very little food, have minimal biological waste and produce extremely desirable high-grade marbled beef. These cows are called WAH!-Gyu, and are true a marvel for sustainable meat production!

The only drawback is that WAH!-Gyu's have a very special low calorie diet of only a bucket of craft trappist beer a day, and have fickle moods. These special cows would only produce their superior marbling when they have enough calories and are kept sufficiently happy. While WAH!-Gyu's benefit from a good diet of beer, they have a 50% chance of getting emotionally depressed if they have more than 2 beers, and need constant massaging and new indie folk tunes to keep them happy.

Here are the proposed rules for the game*:

** All rules and metrics are subjected to change during play-testing and balancing.*

1. Depending on difficulty selected the number of cows would range from 3 to 5 cows
2. Each game starts with cows at a calorie rating of 2 and a mood rating of 2, and marbling of 0
3. Each cow loses one calorie (-1) and one mood point (-1) at the start of each successive turn
4. As long as a cow's calorie and mood are both above 0, the cow gains a marbling point (+1); if either calorie or mood rating is less than zero, the cow loses a marbling point (-1).
5. If a cow's calorie rating is 3 or more, the cow has a 50% chance to be depressed (mood -2)
6. Cows are starving at calorie rating of -2 and are suicidal at a rating of -2, and will die
7. There are 10 turns in a game and the player can do only 1 action per turn:
 - a. Feed a cow a bucket of beer (+2 calorie), -1 beer stock
 - b. Massage a cow (+2 mood)
 - c. Play music (+1 mood to all cows), -1 tunes stock
 - d. Go to the abbey and get some trappist beer (+5 buckets)
 - e. Go to iTunes and buy a bunch of indie songs (+5 songs)
8. At the end of 10 turns, your dear WAH!-Gyu cows will be sent for slaughter and you will get scored by the owner of the farm, based on the sum of the marbling rating of all the cows under your charge.
9. If all cows die before the end of 10 turns, game over.

Classes:

No.	Class	Attributes	Methods
1	Gameplay	<ul style="list-style-type: none"> ▪ Menu options <ul style="list-style-type: none"> ○ Change difficulty ○ Start new game ○ Quit ▪ Difficulty setting <ul style="list-style-type: none"> ○ Easy, medium, or rare ▪ Total number of cows ▪ No. of alive cows ▪ Turns counter ▪ Final score 	<ul style="list-style-type: none"> ▪ Start up <ul style="list-style-type: none"> ○ Prints game premise ▪ Launch menu <ul style="list-style-type: none"> ○ Shows choices for player input ▪ Set difficulty <ul style="list-style-type: none"> ○ Sets difficulty and no. of cows ▪ Start new game <ul style="list-style-type: none"> ○ Creates a new farm and cows ▪ New turn <ul style="list-style-type: none"> ○ Prints farm and cow status ○ Prints Beer Warehouse and iPod status ○ Prompts player action ▪ End turn <ul style="list-style-type: none"> ○ Calls for all other class instances to process the player action ▪ End game <ul style="list-style-type: none"> ○ Calculates the final score ○ Prints each cow marbling, total score and congratulation message ○ Prompt for menu re-launch or quit ▪ Quit
2	Player	<ul style="list-style-type: none"> ▪ Player's action in a turn 	<ul style="list-style-type: none"> ▪ Show options and prompt for action ▪ Error checking <ul style="list-style-type: none"> ○ Error checking if action is affecting a cow instance which is dead ○ Error checking if action is feeding beer when beer stocks are zero, prompt for alternate choice ○ Error checking if action is playing music when there are no new songs in iPod, prompt for alternate choice
3	WAH!-Gyu cow	<ul style="list-style-type: none"> ▪ Calories ▪ Mood ▪ Alcoholic depression ▪ Expression ▪ Marbling 	<ul style="list-style-type: none"> ▪ Player action processing <ul style="list-style-type: none"> ○ If specific instance cow is fed a beer, launch drink beer ○ If specific instance cow is massaged, launch receive massage ○ If music is played, launch listen to music (all cows) ○ Launch marbling update ▪ Drink beer <ul style="list-style-type: none"> ○ +2 calories ○ Launch become depressed ○ Print status ▪ Become depressed <ul style="list-style-type: none"> ○ Check if calories are ≥ 3, -2 mood ○ Print status ▪ Receive massage <ul style="list-style-type: none"> ○ +2 mood

No.	Class	Attributes	Methods
			<ul style="list-style-type: none"> ▪ Listen to music <ul style="list-style-type: none"> ○ +1 mood ▪ Marbling update <ul style="list-style-type: none"> ○ If calorie and mood > 0, +1 marbling and show smiley face on cow ○ If calorie and mood = 0, show straight face on cow ○ If calorie and mood < 0, -1 marbling and show sad face on cow ▪ Print cow status <ul style="list-style-type: none"> ○ Calorie rating ○ Mood rating ○ Depression
4	Beer Warehouse	<ul style="list-style-type: none"> ▪ Beer stocks 	<ul style="list-style-type: none"> ▪ Player action processing <ul style="list-style-type: none"> ○ If visit the abbey, launch restock ○ If a cow instance is fed, launch decrease stocks ▪ Restock <ul style="list-style-type: none"> ○ Increase stocks by 5 more beers ▪ Decrease beer stock <ul style="list-style-type: none"> ○ Decrease stocks by 1 beer
5	iPod	<ul style="list-style-type: none"> ▪ Tunes stocks ▪ Now playing 	<ul style="list-style-type: none"> ▪ Player action processing <ul style="list-style-type: none"> ○ If visit iTunes, launch restock ○ If music is played, launch decrease stocks and change now playing attribute ▪ Restock <ul style="list-style-type: none"> ○ Increase new tracks by 5 songs ▪ Decrease songs <ul style="list-style-type: none"> ○ Decrease tracks by 1 song

Game balancing and expected changes

There may be some changes in attributes, classes as the program is coded. The game will also be play-tested and game parameter metrics may be adjusted for game balancing for entertainment value.