Financial Literacy Competitive Game - GDD

1. Overview

This will be an interactive, (possibly) competitive, educational 2 dimensional (2D) single player game to help the player improve their financial literacy. It falls into an adventure/simulator/educational hybrid genre.

The game takes the player through critical moments of one's financial life, from the day you get your first credit card to buying a house. This will be done in a series of "chapters," which gives

the game a narrative/adventure feel. The goal of the game is to successfully pay off your house mortgage while holding down a job.

The game will be targeted towards teenagers ages 14-16, or around the high school level. Since many American students lack basic financial literacy, the inspiration for this game is to teach young students about finance in a fun, interactive way that will get them thinking about financial decision-making and the common pitfalls people run into when managing finances (and life).

The player will go through each chapter of life, and decisions they make will lead to consequences in future chapters. Players must balance various mechanics like happiness, money, work, family, and more to ensure they survive the financial journey. Will you successfully live a great life and buy your dream home? Or will you end up on the streets with nothing and die starving?

Duration Time: TBD. Possibly 1 to 3 hours, similar to Kindergarten or Undertale duration.

1.1 Game Core/Statement

Statement: Your financial life is an adventure.

Core: What does it mean to be financially responsible? When you fail or run into pitfalls, how do you recover?

Goal: Successfully hold down a job, minimize or eliminate debt, and ultimately by a home. *Possibly* save up money to send kids to college or retire (we'll see).

2. Targeted Platforms

This game will be for the Esports Pod platform. The gaming engine of choice is Unity since it is free, powerful, and can export to both iOS and Android. For this, we will need to take into consideration the control scheme and screen resolution.

Resolutions for mobile platforms:
- ☐ Apple Iphone 11 - 1792 x 828
- ☐ Apple Iphone 12 - 2532 x 1170
- ☐ Apple Iphone 13 - 2532 x 1170
- ☐ Android Galaxy S3 - 1280 x 720
- ☐ Android Galaxy S4 - 1920 x 1080
- ☐ Kindle Fire HDX - 2560 x 1200

Common resolutions for PC:
- ☐ 1920 x 1080
- ☐ 2560 x 1440
- ☐ 3440 x 1440
- ☐ 3840 x 2160

Common arcade cabinet resolutions:
- ☐ 1280x768
- ☐ 1360x768

Possible control schemes:
- ☐ WASD + interact key/ mouse input
- ☐ Screen touchpad
- ☐ Joystick input tied to keyboard keys
- ☐ Controller input

3. Gameplay Mechanic Reference

Reference Games of Inspiration: Earthbound, Legend of Zelda, Papers Please, Kindergarten. Open world idea, but when you complete something or the main goal, you can move on to the next phase, or next stage. Or you might be dragged along by force. Good check vs bad check – e.g. Kindergarten mechanics.

The game Kindergarten has several themes we are looking to use in the development of the game. One being a sort of stamina system where the player has a set number of actions to use before they are forced to continue on into the next area. Kindergarten also has a branching path style story where certain actions or inactions can change the course of the story. We potentially seek to do so with financial choices affecting the remainder of the game.

Base Mechanics:
- Stats – money, happiness, health, actions. Game Economy is based around balancing each.
- Chapters (perhaps 6 to 10), each with a different level design, open world exploration, items, NPC sprites to talk to, etc.
- Random number generator to generate one of 20 or 30 different events each chapter.
- Random number generator to generate what businesses are currently making the most money, hence determining the economy.
- Background can either be chosen by the player or randomized (option for both). Background could include 1) innate talents (e.g. affinity to art, affinity to numbers, affinity to socializing) that affect what you're good at, 2) socio-economic status (what is your family income and situation), and location (where in country are you born). Possible option for skins (maybe 2 or 3).

Advanced Mechanics:
- Increasing stats as chapters progress, e.g. credit score and different bills for water, electricity, etc.
- (Possibly) a working stock market inside the game.
- (Possibly) a separate screen where you can view logistics/information about yourself (akin to Paper's Please or Not Tonight games).

4. Visual References

One idea is to create sketches and UI designs and place them here, then give to graphics team to create. Matthew has also created a visual reference document where you can put down reference images that you like.

Sprite examples:
https://th.bing.com/th/id/OIP.QmTlQWi29BAPuM7bIw2UsgHaS1?w=137&h=349&c=7&r=0&o=5&pid=1.7
https://th.bing.com/th/id/OIP.fdNtqDFmVk66io8xrdv9_AHaF4?w=204&h=180&c=7&r=0&o=5&pid=1.7

Sprite Maker:
https://www.piskelapp.com/

Cut out anything you don't want in reference images. Use Krita (free software for graphic editing), and Gimp (free software for graphic editing) as a substitute for Photoshop.

4.1 Reference Images:
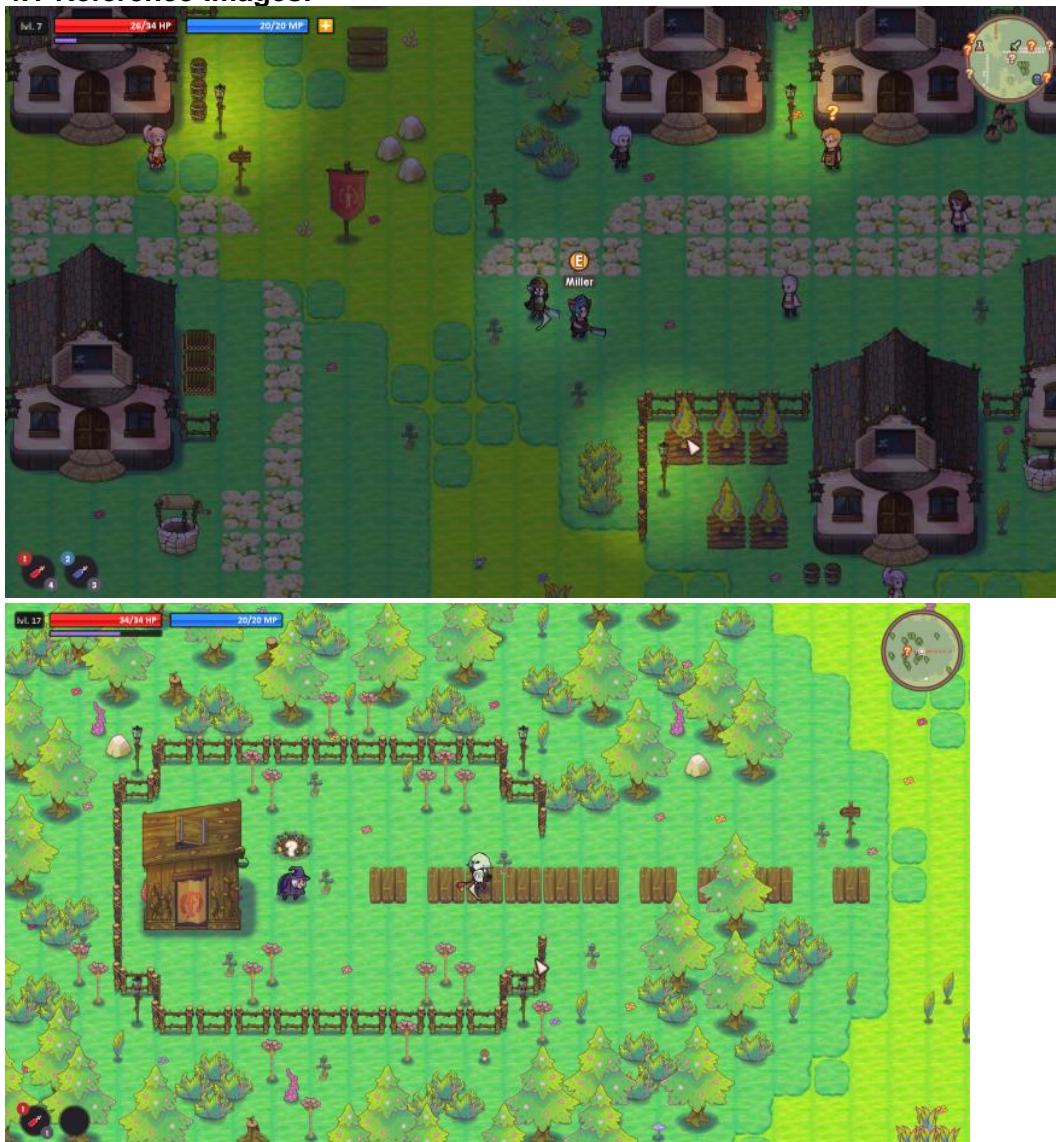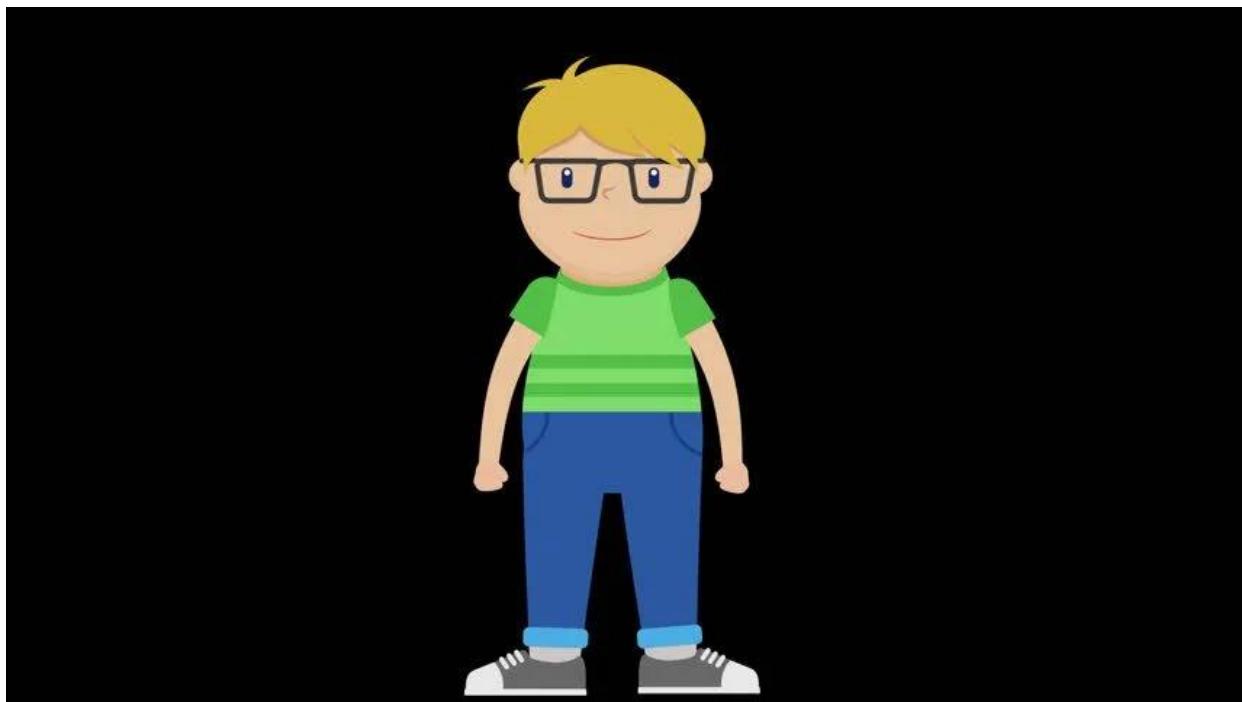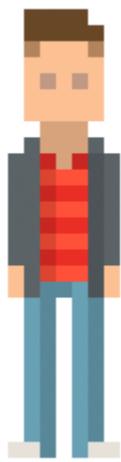
Cartoon

Pixel

Cartoon

Pixel

Cartoon Sprite:

Map Design

LETTER 1/1

RESIDENT 112,
BLOCK 13,
FLAT 7

BRITAIN ALONE

DEPARTMENT OF EURO ALIENS

Person of Euro Heritage.

Welcome to relocation block B. Your residence request has been REJECTED.

Find enclosed your transitional residence visa.
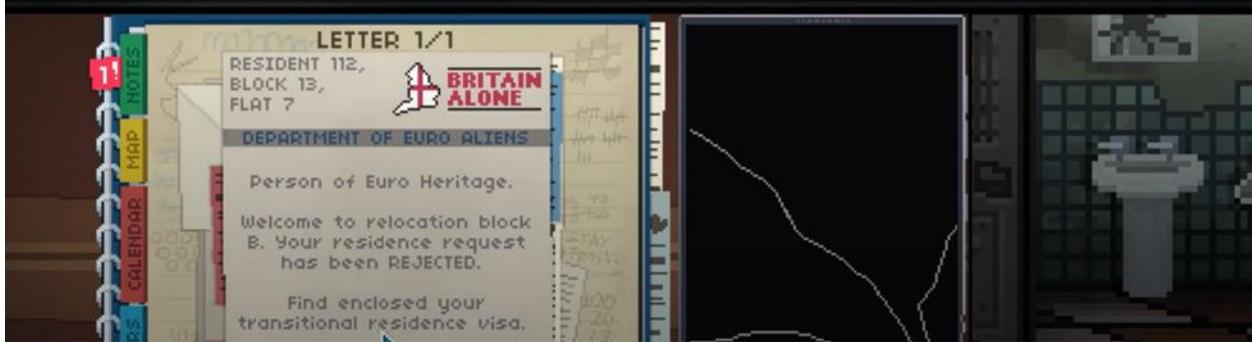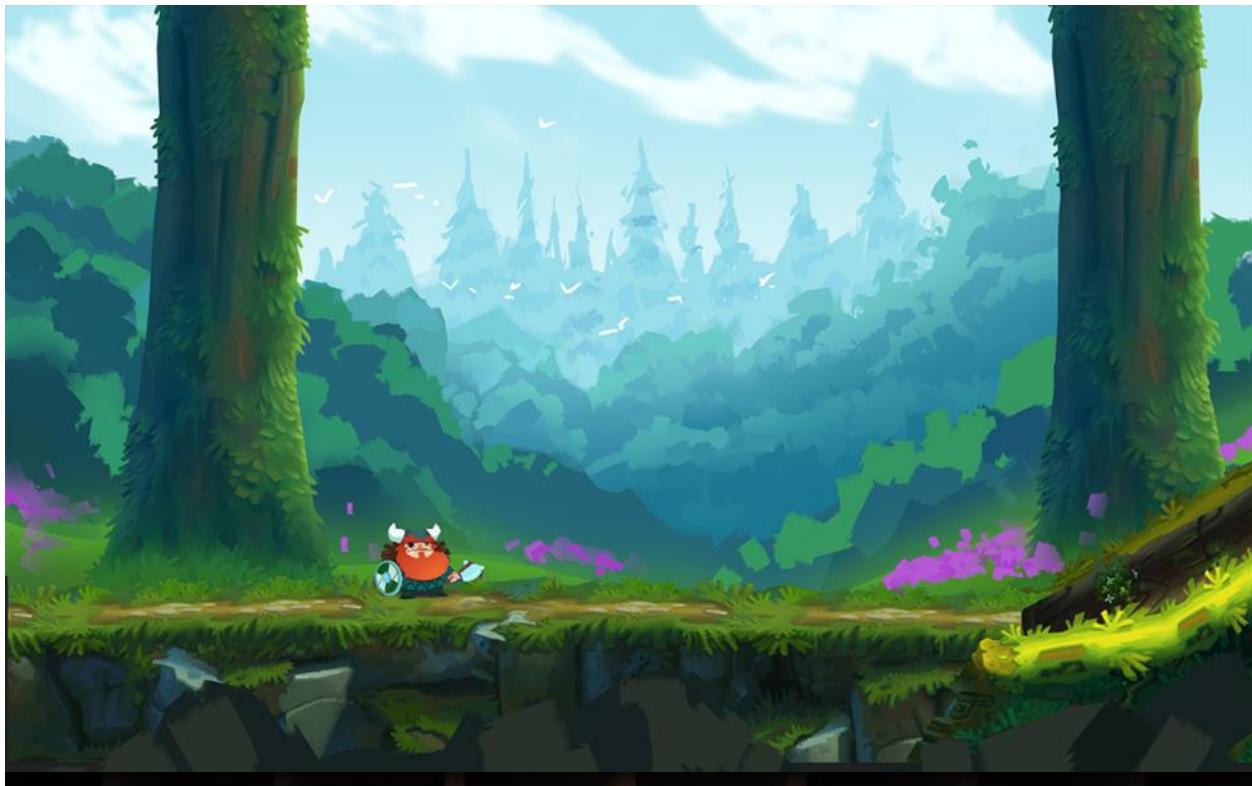
5. Gameplay Overview

Everything from a technical standpoint. Will fill out later.

6. Controls

TBD.

7. Scoring

Keeping track of money. Competitively have the least amount of debt. There can be a leaderboard, and you can compare your stats to people on your local network.

Competitive aspect could be "who has the highest health or happiness or outcome?"

8. Progression Elements

Getting a credit card and bank account. Get some credit accounts. Will go through high school and college, depending on choices. Post education, find a job. If applicable, rent a

place. Ramping up mechanics of what you must keep track of. Successfully buy a house, put a down payment. Now must keep the job while paying off the mortgage. Save enough money to send kids to college and/or retire.

Possible Chapter/Choices breakdown (by Jonah):
Another outline of how choices might play out each chapter:
Chapter 1:
Get the credit card and bank account (prologue) (no choices here).

Chapter 2:
You are at your house. You have 3 actions. 1) Doing chores or a quick job, like helping out a neighbor, is an action. In return, you get money. 2) Apply for a part time job (chance you'll get it or not). In return, you get a bigger sum of money, but risk getting no money if you get rejected. 3) Attempt to get a loan from the bank. Ask parents, they might say yes or no. Go through the process of applying for a loan. In return, you get the biggest money possible, but now you must pay back later.

Chapter 3:
You advance one age, you are now in Junior year. A random event happens that affects the player in some fashion. You have 3 actions. Same three options as before.

Chapter 4:
You advance one age, you are now in Senior year. Another random event happens.
You have 3 actions. Same three options as before. You can spend an action to apply for colleges. If applying for college, a new screen pops up that shows you different colleges to choose from and the prices. Ask parents, they may say yes or no about paying.

Chapter 5:
Go to College. Yet another random event happens. New level and scene. New set of actions (maybe 5 actions) and new choices.

OR

Same scenario as before. No debt, and you can still make money doing simple jobs, but happiness goes considerably down, and you are not advancing your career at all.

Chapter 9:
You'll be asked to move out of the house.
You'll be given the option to choose a rent plan. One of three rent plans.

Chapter 10:
Random event. Get an apartment. New scene and new level. New choices and more actions (maybe 10 actions). Also new stats to pay attention to on top of base stats. Actions could be to apply for jobs.

Chapter 11:

Chapter 12:
You advance 3 years every chapter therein.

Chapter 15:
Option to go get a house (refer to Anthony's doc).

Chapter 20:
Put down a payment and successfully get the house. Now you must not lose the job and pay off the mortgage.

Chapter 25:
You win the game by paying off the mortgage.

Final stats listed.

9. Monetization

TBD.

10. Audio (Sound Effects and Music tracks)

Leave sound implementation to game dev company. Chill background music. Sound effects for things like reading dialogue, walking, picking up items, etc.

Sound effects and music should correspond with the game's art direction and the game's genre. In the case of this game, bitcrushed sounds and retro music can be used as we are using a pixelated artstyle. Music direction should be more relaxing to fit an average life the player may be living. Allow for more negative or positive themes for the music depending on the player's choices.

11. Prototype Scope

This will be a Sneak Peak of the game for interested inverstors/players. This demo could be: Open up checking account, and going through the steps and pitfalls of getting a credit card. This could be called the "Prologue" or "Chapter 1" of the game.

12. User Interface & Information Architecture

12.1 Navigation Overview

(Some picture that shows all the screens of the game)

12.2 Screen Functionality Breakdown

Main Menu

Undefined

<u>Gameplay Screen</u>

Undefined

<u>Game Over Screen</u>

Undefined

<u>Continue Screen</u>

Undefined

<u>Settings</u>

Undefined

<u>Transitions & Effects</u>

Undefined

13. Game Data

(This section will cover the game's states and data. We can cover what data is visible to the player and what the game needs to keep track of for a single level and the whole game)

Ideas could include:

- Chapter
- Level within chapter

- Gamestate
  - o Current level / Current chapter (e.g. stage of life)
  - o Money
  - o Health
  - o Happiness
  - o Number of actions per level
  - o Age
    Percentage value for each main stat, e.g. health, happiness. Money is a number.

- Level Manager
    - o List of levels
    - o Last unlocked level

- Choice Manager?
    - o List of choices the player has made

- Tutorial
    - o Sequence of tutorial steps
    - o Current step

- Score Manager – if we keep score of something
    - o Current score
    - o Highest scores

- Ad Manager?
    - o Ads status (i.e. whether the user has done the ad removal IAP or not)