

Basic Game Design

Alan Chen, Woorin Jang

Summary First summarize the game type, placing it into a genre. What is a well-known game that most closely resembles your game? And what are the major differences between yours and that game?

Our game can be classified as a role-playing game, one that closely resembles any role-playing game with a linear story progression (e.g. Assassin's Creed). Our game is similar to Assassin's Creed in that both games follow a linear storyline, with different levels (in our case, cities) becoming unlocked as the player progresses through storyline quests. Both games also allow players to revisit unlocked cities as often as they'd like. Some major differences between our game and Assassin's Creed are that Assassin's Creed offers an open world (where players can interact with anything and everything outside the main storyline), whereas our game restricts the player to a linear world (where players are restricted to certain areas within the game).

Description Describe your game. Take care to describe the different elements such as premise, rules, etc.

The premise of the game revolves around the exploration of a fictional country, Financia, with individual cities that start off locked, and become unlocked as the player progresses through the game. The story begins with the player taking on the role of a fictional character, who is a personal finance coach backpacking through Financia, with an initial bank account value of \$500. The goal of the game is to see every city in Financia without running out of money.

As the player goes through different cities, they are greeted by the city mayor, who gives the player a quick learning module on a specific area in personal finance (e.g. saving money, investing money, or insuring personal property). After completing the initial learning module with the mayor, the players are free to explore the city by interacting with different NPCs. Players can also receive different "quests" from NPCs that involve taking from or putting money into their bank account (e.g. the player needs to save up money for a birthday gift, decide what to do with their paycheck, or budget money to pay bills).

In order to earn more money, the player can take on additional quests in which the player "tutors" NPCs in personal finance. Upon accepting the quest, the player will be given a financial scenario that the NPC is in, and the player must analyze the situation using previously learned skills and give a recommendation to the NPC. Depending on difficulty, the NPCs may always reward the player with money, or only when the player makes the correct recommendation. We hope this will be an effective mechanism to engage the player in spiral learning, all the while contributing to the player's progression through the storyline.

If the player ends up with no money in their bank account, and all of their available quests require taking money out of their bank account, they can either receive some “gift” money or lose the game and start over (depending on the difficulty level). There are no rules regarding where a player spends their money, as long as they have a balance in their bank account (just like in the real world).

Players will be able to gauge their performance in various ways. Each task completed will give a badge, such as a “bank account created” badge that they can collect. Furthermore, users in-game levels will rise with each task completed. The levels increase with experience (higher levels of expertise reached) and play (number of tasks completed, even if it’s repetitive). There will be a live leaderboard where the levels of all the players in the game and the number of badges they have will be displayed. This will allow players to see where they are in respect to the rest of the players, and add a competitive element for those who wish to compete against other players.

Successful Game Design Describe how your choices of elements will result in the keys to successful game design. This includes increasing difficulty, engaging players' attention, as well as resulting in learning.

Our game keep players consistently engaged in a constant state of flow through: i) keeping the player challenged, ii) providing clear goals & feedback, iii) promoting a loss of self consciousness, and iv) prioritizing the journey (rather than the destination).

We aim to keep the player constantly challenged by making quest completion the main mechanism of game progression. The player cannot move on to the next city in Financia without completing all of the quests in the current city. We can also change the difficulty level according to how long it takes players to complete quests. For example, if we anticipate a certain quest to take an average of ten minutes to complete, and a player has already spent twenty minutes on the quest, we may display some in-game hints to nudge the player in the right direction. Similarly, if a player is completing quests at a much faster rate than we anticipate, we can create more of a challenge for them by increasing quest difficulty (e.g. giving larger numbers or introducing more complexity into the financial scenario). This way, we have a basic mechanism to ensure the player is making good progress through the game, while not having too easy of a time as well.

By making sure that the player is progressing through the game, we are also ensuring that gameplay results in learning. This is because each of the tasks in the game, even free-play where the user can decide to buy or save certain items, involve using personal finance skills they learn in the city. The free-play and interaction with each NPC increases in complexity as the user’s level rises to take into account the new material learned. This ensures constant learning and reinforcement of the material learned previously.

We also aim to provide a clear goal for each quest. Each quest will have very specific requirements (e.g. given X amount of money, how would you budget bills, expenses, savings, and investments?) The purpose of having clear goals is to give players a very clear path from the problem to the solution. This way, we can keep players engaged on a straight path to progress through the game, and prevent players from getting lost and losing interest at the same time.

Finally, we aim to promote the loss of self consciousness by attempting to drag the player into the world of Financia. The purpose of role-playing is to give the players an outlet from reality (which is a very common motivation for playing video games). Through this outlet, players can get lost in a fictional world, while time flies in the real world. Prioritizing the journey (i.e. progressing and exploring different cities) takes precedence over the destination (i.e. completing the game) because this pushes players to stay engaged for the sake of enjoyment of the game, rather than for the sake of achieving the end goal of completing the game.

Player Types Describe how different "player types" will find something that engages them.

We will list the main "player types" described in the Game Design Workshop book below and discuss how each will find the game engaging in a different way.

The Competitor - This type of player wants to best the other players, regardless of the game. This player can be engaged by looking at the live leaderboard in the game, and try to have the highest level in comparison to everyone else playing the game.

The Explorer - Our game is very well tailored to this type of player. Because our game revolves around the exploration of a fictional country, and each city presents a different arena that can be explored, and the player will be able to continuously explore. Each of our cities will have slightly different aesthetics and new components, and since each city represents a different area of content, the exploration pushes physical and mental boundaries constantly.

The Collector - This player will be able to "collect" different sets of knowledge as they continue to explore the cities. As the realm of exploration increases, the player can collect badges of achievement as well.

The Achiever - This player will be engaged by the rising level system as more quests and tasks are completed.

The Joker - This player can be engaged by the free-play aspects of our world. They can make their character buy random things that don't take the game seriously (such as buying a toothpick for a birthday present), or go through bankruptcy multiple times just to play around.

The Artist/ The Craftsman - These types of players are engaged by creating, building, and designing. This player will be engaged because tasks will involve solving problems by constructing a plan, and designing little aspects of the game - for example, to save up for a present, what things will the player have to give up? What will the present be and how much will it be worth? Will it be okay to go without another need such as new clothing? The craftsman and artist will be able to engage in creatively constructing plans and designing how their character will act in the fantasy world.

The Director - The director will be engaged because they will be able to direct and take control of the choices of the character they are role-playing.

The Storyteller - This player will be engaged because our world is one of fantasy and imagination. While the financial aspects of the game are definitely based around the real world so the skills translate directly, the graphics and storyline of different cities will be imaginative and different from everyday life.

The Performer - This type of player will be engaged because our game essentially allows the player to take the role of another character and put on a show to develop their new character through different actions. Their performance is also shared with other players through live time updates and leaderboards, putting on a show.

Progression Describe how your game makes the user progress through the different elements in the learning trajectory you produced. How do you teach different elements and how do you gradually increase the difficulty and/or complexity as users progress through the levels?

Our revised learning trajectory is attached to the end of this document below. Our game makes the user progress through the different elements in the trajectory by locking the more advanced topic “cities” until certain tasks are completed that demonstrate the mastery of skills needed to continue. We teach the different elements in a story-like manner since our game is a role-playing game. When each city is entered (in the learning trajectory, the beginning of each city is marked by the bullet point starting off at “a” again), the mayor will teach the basics of the topic such as withdrawing or depositing money. This is intended to be a brief, tutorial-like experience.

More intensive learning takes place when the player continues to explore the city, and meets various characters who require tasks from the player in order of the learning trajectory. For example, in the first city, the player will encounter an NPC who asks the player to set up a checking/savings account to be able to use money within the Financia world. Once the player successfully completes this task, they will be able to meet another NPC who teaches the next task in the learning trajectory, which is to withdraw and deposit cash. For example, the player could travel through a shopping plaza where they can choose to buy different items, and in

order to do so they need to withdraw cash. With each successful completion of the learning trajectory items, players are now able to tutor in this topic, which allows for spiral learning.

We will increase the difficulty and complexity of the game as users progress by making the encounter with each NPC more complex. For example, once the user has learned to budget and save, they could come across the same shopping plaza mentioned before. At a lower level, the items in the shopping plaza would all have been sold at low prices so that the user didn't have to worry about saving versus using most of their money. However, at higher levels the items can have high prices, even ones that exceed the amount in the user's bank account. Now, the user not only has to withdraw money to purchase items, they have to continue weighing the pros and cons of buying an expensive item, and even budget to save up and buy an item that they cannot right now. The users will be able to come back to cities they explored before. In this case, the difficulty in encounters with different NPCs will still increase with the player's expertise level. For example, if the player has completed exploration of the city that taught about borrowing money and credit cards, they will have the option to use a credit card at the same shopping plaza and deal with instances when they go over their credit limit and so on.

Revised Learning Trajectory Make any revisions that you or I have decided should be made. Then add this content to the end of the document.

