## Project Part 2

Part 2 asks you to engage in analysis and design activities for your semester project. You will generate a detailed set of tasks that can be accomplished with your proposed system and a comprehensive design of that system. The goal of analysis and design activities is to generate information that will allow you to start implementing the system with confidence.

Your deliverable for Part 2 is a single .PDF that contains the information listed below:

1. Name: Woosung Jang

2. **Title:** Collecting Auction game

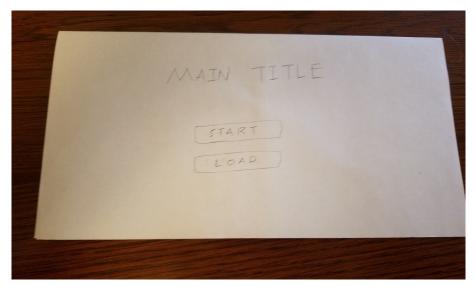
3. **Project Summary:** A collecting game that uses auction system. Player auction with AI players to collect animals using in game money.

## 4. Project Requirements:

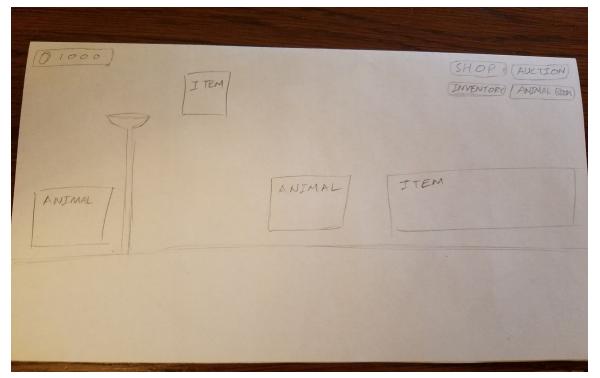
Req. ID	Requirements	Description
1	Player can collect animal	Player earns an animal when player wins the auction that he/she joined.
2	Player can save progress	When player click save button, game will make a savefile that saves current progress of game.
3	Player can place animals in player's home in the game	Player can place animals that he/she currently has in certain places at his/her home.
4	Player can earn gold (in-game money) by leave the game open	Player earns in game money per second by leave game open on screen.
5	Player competes with A.I. players on auction	Auction is where player can collect animals. Auction need more than 1 person to start, there will be 2-4 A.I. players in auction who competes with human player.
6	Player can view unlocked, locked animals in animal book	Animal book has list of animals that player collected and not collected. The animal book has short description of each animal.
7	Player can edit his/her game home.	Player can decorate certain part of his/her home with items from shop.
8	Player can buy decorations for player's home.	There are decoration items that player can buy with in-game money to decorate his/her home.

9	Player can buy background for player's home.	There are background items that player can buy with in-game money to decorate his/her home.
10	Animal played in player's home gives player bonus.	Animals have different bonuses for when they are placed at player's home. Most common bonus is bonus gold per second or minute.
11	Player can sell Animal for gold.	This is another way to collect gold which is sell animals you won from auction. This will remove the animal from your pet list, but will not erase animal book.

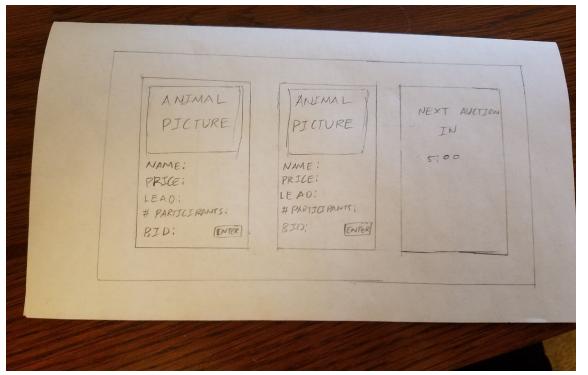
## 5. **UI Mockups:**



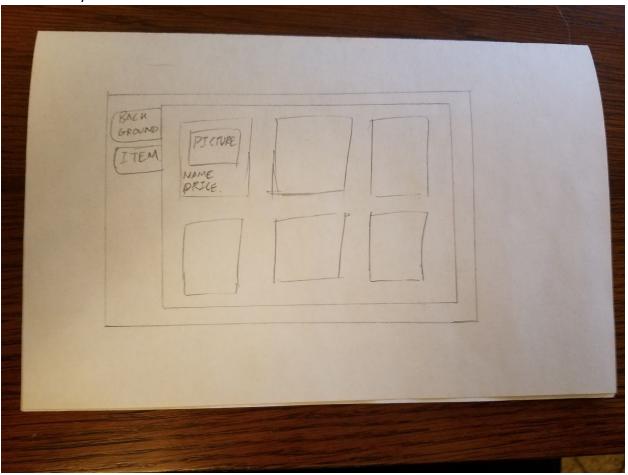
For main screen, There are title of game, Start button, Load Save button. If user clicks start button, the game will start with new savedata, if user clicks Load Save button, user can select savedata if there is one.



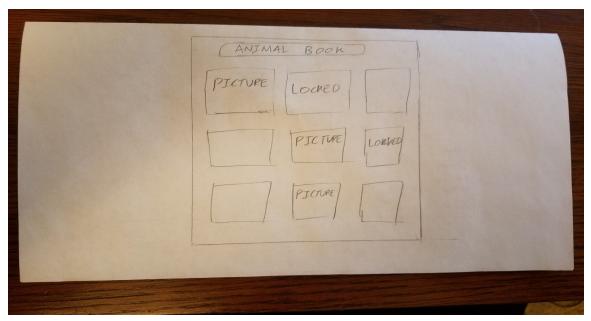
This is a player home screen. In this screen player can go into shop, animal book, your inventory or auction. The screen also shows how much gold player own currently, items, animals, background, that player placed. Each background has different number of animal and item slots.



This is a screen of auction. There can be up to 3 auction at a time. Each auction slot will display picture of animal, name of animal, current leader of the auction, number of participants, current price of animal, and bid option. Player can enter an auction by set bid and click 'ENTER' button.



This is a screen of shop. There are 2 categories at left: item and background. Each category displays items currently sell by shop. It is like auction slot, it will display picture of item, name of item and price of item.



This is an animal book. It displays unlocked animals and yet to be unlocked animal. When player clicks picture of animal, it expands the slot and shows detail of animal such as animal ID, description, animal name and rarity.

## 6. Class Diagram:

