Because we only have 2 people in our group, we will not add the ghost part into Iteration 3 that we used planned.

The Iteration 3 will continue the unfinished part in iteration 2 and adding coin collecting features. We also add 3 user stories to generate coin on the map on server side. Each user story has a acceptance test.

Before randomly generate coin on the server side, we need a virtual map or game board. To implement this, we will build a coordinate system with longitude and latitude and section out the range of playing area around the citadel. Then, randomly generate coin on the game board. Also, during the game, when the coins are not enough more, the server should randomly generate more coins.

For the player collecting coin, the coin will appear on the screen when a player is close to the coin. The player should then tap the coin to collect it. If more than one player find the same coin at the same time, when they tap the coin on their screen , their devices will send Json files to server. Server will decide the ownership of that coin by the sequence of the Json files it received. The first device who sent the Json file will earn the coin.

The amount of coins and the coins collected by a player will also display on their screen. The amount of coin will randomly replenish when it is not enough or more players join into the game.

Acceptance Tests:

A coin will appears on the player’s screen when the player is close to the coin

Server and clients are able to exchange data by Json.

Player’s location is updated to server ever several seconds.

During the game players can see their location change on the map. They can also see the total coins on the game board and the amount of coins that they collected.

The coins can be randomly generated at the beginning of game, and can be replenished when not enough or more players join into the game.

In iteration 3, we have three user stories which are:

“As a player, I want the server to randomly generate coin on the map that let players to collect.”

“As a player, I want to be able to move on the map and tap the screen to collect a coin when a coin appears.”

“As a player, I want to see the amount of coins that I collected to displays in the game.”

Each of them is general, we separate them into small tasks to implement. As we only have two members in our group, we will do more pair programming and simplify our work to implement the core of our little game. Although the game will be simplified, it will still have basic functions and will also be fun. We will also complete development process by using Agile development process simultaneously, and build some charts to show our rate of progress more intuitively.

Retrospective:

In iteration 3, simplified work has be done by the rest of two group members. We used Json to transform data between server and client. The updates of player’s location and the attributes of coin are related to Json. We transformed the longitude and latitude into integer coordinate in the coordinate system and express the game area with longitude and latitude. Coins are generated in the game board by using the random function. Our progress were much better than in iteration 2. Shuwen as a leader gave a lot of help and take our group run on the right path.