

Team 13: SpinningPanda

	CMPE202 Section3	CMPE202 Section4
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Github Repository

<https://github.com/judyyang40/SpinningPanda>

Task Board

<https://waffle.io/judyyang40/SpinningPanda>

Kanban CFD Google Sheet

<https://docs.google.com/spreadsheets/d/1m0W40pCr6pZkWF20apoYZwC8bKDmMZWt2C0cwzZCw4/edit?usp=sharing>

Feedback (Chu-Yuan Yang)

To achieve test-driven development, our team should be writing test cases for our user stories and testable features. We still don't have the code to pass the test, but we should have the tests written first and have failing tests in the beginning. Then as we progress along in writing our code, we will start passing more tests. Also, it will be really helpful to write tests against bugs we have encountered. The team should pay attention to the feedback our system is giving us through these tests. The tests will give us a clear indication of what functions under our design are still missing, as well as which parts of our code are broken and needs fixing. All this should take place in parallel with code development. In the long run, our team will have a decent test coverage for our project.

While deciding to use Greenfoot or Processing, we've taken into consideration if either has built-in support for unit testing like Blue. We assumed there would be since Greenfoot was built on top of BlueJ, but it turns out that neither Greenfoot or Processing has it. So, based on our state diagram of the finite state machine, we decided we will be writing our own JUnit test classes for our participating Actors in the project, which will mainly be the Player, and the "Islands".

Respect (Teng Jin)

This week, we begin to design our project including how to draw the state diagram and the class diagram.

The thing I want to mention is all our team members perform excellent on respect value. During our discussion, we have a divergence on how to design our classes. In my point of view, we should firstly have an interface named `IIsland` and then have some class `Islands` to extend the interface `IIsland`. In this case, every islands can be regarded as a class which represents a state in the state machine. On the other hand, Yunli Wang have a contradicted idea that it is very complicated to design a class for every islands, because the behavior of every islands is similar. So he points out that every islands should be an object of the class `Island` and every object islands is behalf of a state in state machine. Even though we have different attitudes on designing the classes, we show respect to each other during our discussion. I mention many evidences to persuade him to follow my idea. Instead of interrupting me, he listens to what I say carefully and then talks about his opinion. Finally, I change my mind that his idea is better.

After the project meeting this week, I realize that the respect value is a very important value during our project, especially when we have different ideas, because showing respect to others or opposite ideas can help us find a better solution of our project. Therefore, I will keep encouraging our team member doing well in respect value.

Simplicity (QI LI)

We strictly accord to the instruction: do the necessary part first, no extended exercise. Our discussion and implement focus on these three aspects this week:

Map drawing: Whether or not let the program to generate a random treasure map for the players? No, for more easier implementation, we should first consider the big picture of the project, not the small details like how many treasure maps that we can generate. If still have some energy left, then we can do some research on this situation. For now we just need to generate a fixed number of treasure map for the purpose.

Multiplayer process: In the current stage, we focus on implementing one player side of game. Thus when we want to extend to multi-player, the transformation would be easier for us.

Game logic: Where should we put the choosing buttons (direction A or B)? One Button class corresponds to multiple locations? Or one island corresponds to two choosing buttons? We chose the latter. We then can save the trouble of recording what are the A and B button stand for every time we arrive at an island. Maybe also avoid some performance issues as the location list becoming longer and longer.

This week we take these small steps to implementing our project. All these decisions in the long term are great for the project. Our simplicity value is well kept.

Eliminate Waste (Tao Geng)

In this week, our team discussed the design of Finite State Automata in a short stand-up meeting, and described our design through two types of UML diagrams: class diagram and state machine diagram before code writing. Using class diagram, we clearly present the classes involved in the game, their properties, and various relationships among them, while state machine diagram demonstrates the lifetime behavior of a single object (i.e., an island in our case).

Starting from a detailed description of the process by UML, we are able to use these diagrams to allow rapid and effective communicate with each other and understanding of the detailed design information in a graphical manner to prevent potential time wasting. In particular, this technique is a powerful tool to “eliminate waste”, because the diagrams not only can be later followed to efficiently write code, but also enables the identification of activities without adding any value such as those unnecessary or even incorrect classes.

With agile development, we made a clear work vision to develop a game with a single player in our preliminary design. As such, its primary functions could be rapidly implemented, while multi-player game could be accomplished by adding extra small features into our current design. The iterated process (i.e., sprint in Scrum) allows us make small progresses regularly, while complete the entire project more efficiently in a given time period by making any beneficial changes immediately and avoiding low-quality and useless work.

Communication (Yunli Wang)

The key component of communication as defined in the XP core value is: **Everyone is part of the team and we communicate face to face daily. We will work together on everything from requirements to code. We will create the best solution to our problem that we can together.**

This is the goal we are trying to achieve during the project. The benefit of such practice is obvious. In our first group meeting, due to time conflict of some of the team members, we were unable to fix a time for everyone to meet face-to-face. So as an alternative, we had a online meeting which dragged out to be 5 hours long. During the meeting, the conversation was intermittent. Sometimes when I came back to the conversation after a 10 or 15 minute wait, I needed to catch back up on what was being discussed.

We later had another meeting after the lecture on Saturday. It only lasted for 15-20 minutes. But we were able to achieve similar result as the previous meeting. Because everyone is in the same situation, we can ask more questions to clear any confusion immediately. The flow went much more smoothly.

Comparing the experience of these two meetings, we have decided to move to a more face-to-face approach. This not only conforms to the key principle, but also suits our needs better and actually saves everyone's time significantly.

The only difference from the standard approach of having daily face-to-face meeting is that because each team member have their own schedule, we are deviating from the recommended meeting schedule. But we all agreed to meet at least once a week. I think this will work as the project we are trying to finish is much more simpler than those that needs to be done in real life. We only have to deliver a small set of features in a relatively long time. So it makes sense to also stretch out our meeting schedules accordingly. Additionally, everyone has agreed that if necessary, we can

meet more frequently in case any situation that requires immediate attention comes up during the whole process. In this case, I am convinced that such meeting interval will work in our interest.