**Sprint Planning**

Before developing the system, we did discuss with the product owner to produce the highest-priority system in the product backlog and produce an idea or way of solving a problem.

To planning what so be delivered first, we used product backlog – a prioritized list of customer-centric features to work for the development team that is derived from the roadmap and its requirements. The product backlog is expressed in user story form.

The user stories are short and simple description of a feature or function written from the perspective of the user or customer of the system who desires the new capability. It captures “Why” and “How” the user uses the system. In user stories, we can estimate of how difficult or time consuming to develop based on different stories.

Before make discussion with product owner, we did require product owner, company staff and customer wrote their user story on index cards and stored in a shoe box. We arranged the index cards with user story written by users and customers on whiteboard to facilitate planning when during discussion.

During the discussion, we also planted which module should be delivered first and make sure the system can be completed on time through different user stories. After discussion with product owner, we did know what should be delivered first because the most important story has shown at the top of the product backlog.

Below are the user stories written by customer, company staff and product owner:

**User Stories**

1. As a customer, I can purchase the different item in one order so that I can make a payment at one time.
2. As a customer, I can retrieve my order record so that I can refer back what item I purchase before.
3. As a customer, I able to cancel my order before make payment so that I will not purchase the wrong item.
4. As a customer, I able to update my order which not yet make payment before so that I continue to add the item to order.
5. As a staff, I can be adding the new item to system so that I will not require development team help to add new item details.
6. As a staff, I able to update or change item details as time so that I can prevent an accidently mistake.
7. As a customer, I can view all the item details so that I won’t miss any important information of items.
8. As a staff, I can delete wrong item record so that customer will prevent purchase wrong item.
9. As a customer, I able pay for my order by debit/credit card, online transfer or PayPal.
10. As a customer, I can view my payment record so that I can refer the total amount I pay for my order.
11. As a customer, I able to make payment for my unpaid order/payment so that I will not require to making the same order again.

**Daily Scrum meeting**

In daily scrum meeting 3 question that had to be answered is that which is what we do yesterday, what we do today, and the obstacle we meet. These 3 questions let the scrum team understand what the progress of the system, so we tell others what we did during the meeting. Unfortunately, we do not have the time slot that allow us to conduct this meeting daily, so during our daily scrum meeting, we would tell others what we do these day and what next. After that, we discuss our obstacle that stop our progress and how to solve it.

The following part is some obstacles we meet and have discussion during daily stantup meetings in the first iteration.

**Week 1 Day 4 - Liew Yu Dien**

Obstacle met: Difficulty to establish connection between system and connection

**Week 1 Day 5 - Khong Yan Foo**

Obstacle met: Identical column found in payment and order table.

**Week 2 Day 3 - Chong Khai Yik**

Obstacle met: couldn’t compare the data between the input data and the actual data.

**Week 2 Day 5 - Chong Khai Yik**

Obstacle met: Difficulty to add item picture into database.

**Week Day 3 - Liew Yu Dien**

Obstacle met: Cannot get back all the desire item of the users.

After scrum team members had mention their obstacles they have, we will try our best to help each other to trace the issue and solve the problem.

**Sprint Retrospective meeting**

During the development of the system there are several things that went well and what didn’t go well. After the development process in the first iteration has ended a Retrospective meeting is conducted between the team to discuss how the development going on. Here are the summarize of the retrospective meeting.

**What Went Well**

There are things went well during the first iteration, first of all is the planned work expected to done during the first iteration had been completed, backlog that planned to complete in the first iteration has been created by the development team. This cause the sprint planning go as expected result.

In addition, thing went well in the first iteration is that scrum team are giving help to each other when obstacles is meet by scrum team’s member, this help member to solve many problems that he can’t solve alone. Solved problem included failed to retrieve or update data in database, date format of the system is different from the database format and etc…

Lastly, Scrum behaviours are put into practice, activities like sprint planning, daily scum meeting, having a sprint, and sprint retrospective is happening in the team to facilitate the use of scrum methodologies.

**What Didn’t Went Well**

There are things that didn’t go well, the first thing that didn’t go well is that daily standup meetings did not organize daily, instead of organize daily stantup meetings only happen 2 to 3 a week, this cause the progress not clear for the members.

Following things that didn’t go well is that, some of the features developed does not take much value to the business. Some developed module does not follow some of the requirement requested, so it bring less value to the business. For example, add order module does not allow user to purchase with few quantities, so it is rejected and waiting to restart.

Lastly, since the team does not be together most of the time, this make scrum team member have to do their work by their own. This cause the performance of scrum team is decreasing, since there are doing it alone, while member have some problem while he doing his work, no one could help him to solve the problem together, so this drain the member time on doing his work.

**Improvement could be made**

In term of improvement, we think that we could made improvement against the thing that didn’t went well in first iteration. Firstly, we think that we should spent some time every day to perform standup meetings daily as daily as possible.

Following improvement is that, we will try to get the real requirement clearly while trying to develop a feature. Lastly, since there is less time being together in the first iteration, we would try to find about 3 hours a day to develop our features together in the second iteration, for example perform daily meeting when we meet up and develop the features together at the same place after that.