

# **SWEN90016 Software Processes and Management**

## Agile Project Management Plan

T11\_Team\_3\_Agile

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## **2. Executive Summary**

The purpose of the IT project-website system is to manage the appointment. The website is developed by the team of SWEN90016 and locally hosted by MYD which is a business in Melbourne. In this website system, the owner of MYD can sell gift vouchers that could be used in some certain businesses. The points in the gift voucher can be used by the customers to consume. With different points, customers could enjoy different services. The reason for the project being undertaken is to provided the convenience and benefits to the employees, the owner of MYD and the small business.

In the delivery approach part, it briefly outlines some challenges in this project followed by the advantages of agile during the process of development compared with waterfall. Combined with the fact that students lack sophisticated technologies, the project has undefined requirements and is unstable, the agile approach is suitable. Compared to the advantages of each Software Development Lifecycle (SDLC) approach, the agile approach is used when developing the project.

The product owner, the scrum master, the Subject Matter Experts, the development team are the key internal stakeholders who will be responsible for implementing the project. Additionally, the external stakeholders are also identified which includes the businesses that cooperate with MYD and the employees in MYD.

The communication plan demonstrates the details of the communication model between the stakeholders. There are three modes analyzed in the table, including phone, email and face-to-face. Based on the power of solving certain types of problems, three levels (most suited, less suited, least suited) are shown in the table.

The business value is summarized for each key stakeholder since the project could bring many benefits to them. It could raise reputation for the product owner, promoting consumption for the small businesses, providing convenience and happiness for customers, gaining experience for students and improving the teaching quality for the teaching team and tutors. There is no cost constraint since the project is developed by the students from SWEN90016, the cost of this project is zero.

In the chapter of technology, it compares some web development frameworks and languages based on their advantages and disadvantages. The Java Web framework is decided because the development team members have the related experience in Java.

In the project planning part, the sprint backlog, the sprint swimlane board, the burndown and velocity chart are exhibited. In the sprint backlog, there are total 38 estimated story points that should be completed. The sprint swimlane board shows what has been done, what is doing and what is in the to do list. Through the burndown and velocity charts, the timeline and the process of the project can be easily recognized. The project will take around 3 weeks to complete, which will be finished by the end of May.

### **3. Content**

<b>4. Introduction .....</b>	<b>5</b>
<b>4.1 Purpose of document .....</b>	<b>5</b>
<b>4.2 Audience of document.....</b>	<b>5</b>
<b>4.3 Evolution of document.....</b>	<b>6</b>
<b>5. Project Information.....</b>	<b>9</b>
<b>5.1 Key Stakeholders .....</b>	<b>9</b>
<b>5.2 In-scope Features.....</b>	<b>10</b>
<b>5.3 Out-of-scope Features.....</b>	<b>11</b>
<b>5.4 Delivery Approach .....</b>	<b>11</b>
<b>5.5 Business Value .....</b>	<b>13</b>
<b>5.6 Constraints .....</b>	<b>15</b>
<b>6. Project Governance.....</b>	<b>17</b>
<b>6.1 Roles and Responsibilities .....</b>	<b>17</b>
<b>6.2 Communication Plan .....</b>	<b>19</b>
<b>6.3 Risk Management .....</b>	<b>22</b>
<b>6.4 Technology .....</b>	<b>28</b>
<b>6.5 Project Planning .....</b>	<b>34</b>
<b>7. Project Execution, Monitoring and Control .....</b>	<b>38</b>
<b>7.1 Project Status – week9 .....</b>	<b>38</b>
7.1.1 Process Related Artefacts .....	39
7.1.2 Product Related Artefacts .....	50
7.1.3 Risk Monitoring and Control .....	52
<b>7.2 Project Status – week10 .....</b>	<b>55</b>
7.2.1 Process Related Artefacts .....	56
7.2.2 Product Related Artefacts .....	66
7.2.3 Risk Monitoring and Control .....	68
<b>7.3 Project Status – week11 .....</b>	<b>69</b>
7.3.1 Process Related Artefacts .....	69
7.3.2 Product Related Artefacts .....	80
7.3.3 Risk Monitoring and Control .....	82
<b>8. After the project .....</b>	<b>82</b>
<b>8.1 Project Retrospective .....</b>	<b>82</b>
<b>8.2 Teamwork reflection .....</b>	<b>84</b>

## **4. Introduction**

### **4.1 Purpose of document**

The purpose of the document is to illustrate the plan of activities when developing the project. In the document, the roles and responsibilities of everyone are assigned. It makes each member in the project understand the goals and directions of the project. It also determines the methods to execute and monitor the project, including the overall content of the process, project life cycle, milestones, and phase divisions that the project needs to execute. The project management plan (PMP) is the basis and foundation for the formulation of other sub-plans, which is used to coordinate all project plans. A project with a sound management plan has a higher probability of success than a project without the plan. The document could boost project construction and improve the quality of the project.

### **4.2 Audience of document**

The audience of the project management plan is the product owner and the potential sponsors in the future since they are the person who would invest the project directly. Additionally, some other businesses which may want to join the website system could also be interested in the document. In the end, the document of the project management plan can also be regarded as a reference by the project manager and the project team. Since this project is developed by the team of SWEN90016, the tutor is also the audience to give some suggestions to the team members so that they can improve the project management plan.

### 4.3 Evolution of document

Version	Individual Responsible	Date Created	Comments
1.0	Tianqi Yu: Section 6.1, 6.4  Xun Zhang: Section 6.1, 6.4  Qianyuan Su: Section 6.1, 6.3  Jialiang Cheng: Section 5.2, 5.3, 6.1,6.5  Zhonghui Jiang: Section 2, 4, 5.1, 5.5, 6.1  Dingcheng Lu: Section 5.1, 5.4, 5.6, 6.1, 6.2, 6.5	April. 23th	Each group member created their own part for the first time.
1.1	Zhonghui Jiang	May.8th	Fixed some grammar mistakes and adjusted the format for each section.
1.2	Tianqi Yu: Section 6.4  Xun Zhang:	May.10th	According to the suggestions from the tutor, many sections have been improved and updated.

	<p>Section 6.4 Jialiang Cheng: Section 5.2, 5.3 Zhonghui Jiang: Section 2, 4.2, 4.3, 5.1, 5.5, 6.1, 6.2 Dingcheng Lu: Section 5.1</p>	<ul style="list-style-type: none"> <li>● Section 2: Make some changes of the preview of the project's plan and add the information of the duration of project</li> <li>● Section 4.2: Add the tutor in the audience</li> <li>● Section 5.1: The teaching team and tutors are mentioned in the stakeholders' list</li> <li>● Section 5.2: Change the format of the product backlog</li> <li>● Section 5.3: Describe the product potential features rather than the future market growth</li> <li>● Section 5.5: Describe the benefit in specific</li> <li>● Section 6.1: Change the format of roles and responsibilities table and align the roles to every member</li> <li>● Section 6.2: Add the teaching team and tutors in the communication plan</li> <li>● Section 6.4: Combine the technology and the case, write the advantages of some tools in the specific scenarios.</li> </ul>
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2.0	Zhonghui Jiang: Section 7.1, 7.2, 7.3  Dingcheng Lu: 7.11, 7.12, 7.21, 7.22, 7.31, 7.32  Jialiang Cheng: 7.11, 7.21, 7.31  Qianyuan Su: 7.12, 7.13, 7.22, 7.23, 7.32, 7.33	May.15th	The team created the content of section 7.
3.0	Qianyuan Su: 8.1, 8.2	May. 20th	The team created the content of section 8.
3.1	Zhonghui Jiang	May. 23rd	Fixed some grammar mistakes and adjusted the format for each section, make the final review.

## 5. Project Information

### 5.1 Key Stakeholders

**Stakeholder Register**

Name	Position	InInternal/ External	Project Roles	Contact information
Floro	Supplier	External	Source Supplier	
Gifty	Supplier	External	Source Supplier	
Foody	Supplier	External	Source Supplier	
Cafey	Supplier	External	Source Supplier	
Patisseriey	Supplier	External	Source Supplier	
Hairdressingy	Supplier	External	Source Supplier	
Employees in MYD		External	Customers	
Zhonghui Jiang	CIO	Internal	Product Owner	zhonghuij@student.unimelb.edu.au
Dingcheng Lu	Consultant	Internal	Scrum Master	dingchengl@student.unimelb.edu.au

Qianyuan Su	Senior Manager	Internal	Subject Matter Expert	qisu@student.unimelb.education.au
Xun Zhang	CTO	Internal	Development Team member	xunz4@student.unimelb.edu.au
Tianqi Yu	Technical specialist	Internal	Development Team member	tyyu2@student.unimelb.edu.au
Jialiang Cheng		Internal	User Experience professional	jialicheng@student.unimelb.edu.au
The teaching team and tutors	Consultant	External	Conductor	mzalk@unimelb.edu.au

## 5.2 In-scope Features

1. As a super admin user, I can have a pre-defined and system recognizable email username and a default password so that I can login the system
2. As an admin user, I can see 12 options for voucher service type so that I can add a new server to the system in terms of those providing types.
3. As a customer, I can provide my Personal\_information (Name, Email Address, Contact Phone, Initial Password) to the system, so that I can register in the system
4. As a customer, I can add my Bill\_information (Name on the invoice,Bill Email Address)to the system, so that I can have a separate bill information part after registration
5. As a customer, I can enter my registered email address and password to verify, so that I can login the system
6. As a customer logged in, I can view and modify my personal and bill information, so that I can update my private information at any time

7. As a customer logged in, I can redeem my vouchers, so that I can request a Voucher\_Booking
8. As a customer logged in, I can select type of voucher service from a list of available types, date and time, pick-up or local delivery for the booking of service, and enter optional message so that I can create one completed booking for voucher service
9. As an admin user, I can receive one email from the system after one customer completed the booking of voucher, so that I can record of information of name, phone, email address of customer, date and time of booking and optional message
10. As a customer completed booking, I can receive email from system after admin on behalf of service provider to accept my booking already so that I can confirm my information of name, email address, phone and date, time and location of booking
11. As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my booking at any time
12. As an admin user, I can view all Voucher\_Booking request of all Voucher\_Service\_Types so that I can check the information of all of booking at any time
13. As an admin user, I can receive one email from the system after one customer cancel the booking, so that I can view the information of the booking, customer and the booking cancellation message
14. As a super admin, I want Admin, Customer, Personal\_Information, Biller\_Information, Voucher\_Service\_Type and Voucher\_Booking information persisted in the system so that I can check the information by view database

### **5.3 Out-of-scope Features**

- Add and edit admin information
- Open registration system (except NYD employees)
- Purchase or add voucher
- Modify service
- Choose service provider
- Verify user email/password

### **5.4 Delivery approach**

Agile methodology as the choice as final SDLC. (Waterfall as comparison)

According to scenario B, the first challenging characteristic of this project we can define is students' group as the major development team. Tianyi is determined to deliver this web-based system to one outsourcing group, which consists of the students enrolled in SWEN90016. The apparent drawback of students is lack of sophisticated tech or abilities. Students cannot ensure tackling tech challenges properly or afford some of the charged tools or equipment compared to those experienced and professional companies. Therefore, the restriction of the development condition is not qualified for waterfall, but agile has no specific request for it, which is suitable for the group of students.

The second challenging characteristic of this project is unstable. From one view, Tianyi decided to build one system, but no specific documents, clear scope or a sequencing of schedule confirmed. Nevertheless, unclear requirements will lead to confusion by exploiting Waterfall.

In addition, Tianyi intended to base on the feedback of this system from her employees or other users to decide to develop the product further, remaining an unstable product and adequate space for altering. Agile will be one better choice in terms of the users' feedback to make changes. In this case, the project relies on customers' demand more than the scheduled process.

Agile could make adjustments to flexible requirements changing rather than waterfall. Waterfall includes clients' approval at the final stage, which is otherwise-minded to Tianyi.

From another view, He did make one distinct decision, which is to leave this project to students. Unfortunately, one of the features of students is uncertainty, because there is no formal procedure to let them stay except responsibilities.

Thus, agile can adapt to any kind of staff mobilization compared to waterfall.

In terms of the further development mentioned in case, Tianyi will integrate this system with others such as PayPal and Visa/MasterCard. Agile has ample talent to build one integration not only for the last phase, but also with other systems. Moreover, waterfall is difficult to integrate if the product of the last phase is flexible.

However, a fly in the ointment, during the period of COVID-19, the contact approach for our team is remote, the number of meetings also lessened or even cancelled. Waterfall has less request for contact, it is the merely point satisfied waterfall.

In conclusion, the project is unstable with the changeable requirements. The environment and source supplies remain in low-level. By the analysis of both of two main challenging characteristics, agile will be more suitable for this project. Apart from that, the potential risks such as project's member leaving or further development with integration become the cons to refuse waterfall model.

## **5.5 Business Value**

As for these shops such as Floro, Gifty, Foody, Cafey, Patisseriey and Hairdressery, the project could bring many benefits to them. For example, the points redemption system could stimulate the participation in business interaction, which helps shops to collect customers' personal information and consume appetite in order to do targeted marketing and thus improving the quantity of sale. These shops could achieve the purpose of better publicity through the point management system, thereby gaining better awareness from customers and obtaining more benefits especially for those small businesses which are experiencing struggle. As a result, the number of local customers who come to these small businesses to consume will increase.

Through the website, MYD could also raise its reputation and advertise itself among the shops. On the one hand, the product owner could establish long-term stable

cooperation with other shops, which is a win-win situation. On the other hand, the product owner could receive the commission when the vouchers are redeemed.

Moreover, the website will provide a channel for customers to get welfare from MYD, which also gives customers a convenient method to consume online. As a result, the sense of belonging and happiness between staffs in MYD will increase. Giving the vouchers to the employees is a good motivation method to encourage them to perform well in the work thus increasing their productivities and improving the economic benefit to MYD. Additionally, the project is totally done by students, so the cost is zero, which saves the money for MYD.

As for the others in the project team, the project gives them a great opportunity to demonstrate their development and management abilities. Additionally, the project could enrich their experience which is helpful to their future careers. If the project is successful and gets high popularity, the team's fame will also be disseminated and there will be further business opportunities for them. Moreover, by doing the project together, team members could learn how to work effectively thus gaining more cooperation experience. The most important thing for the students from SWEN90016 is that they can apply theories learned from class to practice, thus improving their industry and practical knowledge and skills. As the benefits for the teaching team, by giving them a good chance to put the knowledge into practice and providing the conduct, the teaching quality is improved.

## 5.6 Constraints

# Time constraints: 4

# Scope constraints: 2

Time constraints	Planning: No defined step and limited equipment	Scheduling: Agile Methodology does not have Gantt chart, so that it is difficult to make scheduling	Monitoring: No specific roles response for it and no professional guiding or document provided in this project	Control: No specific roles response for it and no professional guiding or document provided in this project
Scope constraints	No clear document provided by business owner	No project charter at the beginning of the project		

No cost constraint in this project due to the free students' group as an outsourcing company.

Apart from three primary constraints, the other non-functional constraints:

### **Usability of System:**

The system should allow for users to use the application without any confusion. Such as a neat interface that is clear and readable so that it is not too strenuous on the eyes.

That's the reason why our project group has one role for user experience

professionals, however, some of the teams only include 4 members, which means they do not have extra position for the responsibility of usability, thus, usability of this system still remains as one constraint in terms of this project.

### **Reliability of Data:**

When it comes to reliability of data, the information of customer, booking, voucher service and so on should be backup daily by the project support, but it is no request for this part, moreover, there is no specific description of resolving exception such as memory overflow or providing some solutions such as database rollback to tackle the accidents.

In addition, the tracking details of the user can be securely backed up whenever the user needs. However, no consideration for the frequency of backup in this project.

### **Security of System:**

When it comes to the requirements of security, not only regarding the system will approve the user's request during the login by the verification of password and username that setup before, but also regarding the system can restrict the access to visit different content of website in terms of different roles (logged in customer or normal user)

In addition, exploiting cookie or ignored token copy url to have access to login or some drawbacks of verifying authentication could become vulnerabilities for those web server attacks.

Unfortunately, there is considerable value in this project from this aspect.

### **Scalability:**

Although we select agile methodology to adjust any kind of change or further expand, the limitation of students' groups still could cause the restriction of storage of servers, if more and more users will join in this system. The scalability and capability of the system is worth considering due to the request of all of the information of customers, booking voucher service and so on need to be persisted in the database.

## 6. Project Governance

### 6.1 Roles and responsibilities

Project Roles	Name	Responsibilities
Product Owner	Zhonghui Jiang	<ol style="list-style-type: none"><li>1. Express the requirements of the product and which features should be added in and decide the time and length of product development.</li><li>2. Responsible for the Benefits and return on investment.</li><li>3. Decide and adjust the priority of features as needed.</li><li>4. Accepts or reject work results.</li></ol>
Scrum Master	Dingcheng Lu	<ol style="list-style-type: none"><li>1. Manage the project and makes the team more productive.</li><li>2. Responsible for the development of Scrum values.</li><li>3. Promote cooperation.</li><li>4. Protect the team from outside interference.</li><li>5. Manage the project and update the process.</li></ol>
Development Team Members	Tianqi Yu Xun Zhang	<ol style="list-style-type: none"><li>1. Responsible for the development of the appointment system.</li><li>2. Create sprint backlog (User stories) from product backlog.</li><li>3. Estimate sprint backlog in team velocity and story points.</li></ol>

		<p>4. Presenting what it accomplished during the sprint.</p> <p>5. Demonstrating demo, which includes the completed product module currently.</p> <p>6. Reviewing the development process, having meetings frequently to discuss the improvement of approaches.</p>
Subject Matter Expert	Qianyuan Su	<p>1. Responsible for providing guidance and professional knowledge to the team.</p> <p>2. Give some suggestions and feedback so that the team members could make some improvements.</p>
User Experience Professional	Jialiang Cheng	<p>1. Think about how to improve the process of the project from the perspective of the user, try to give advice to the project team from an objective perspective.</p> <p>2. Advise on the development framework based on the user's perspective.</p> <p>3. Give suggestions on the development of software features.</p> <p>4. Help with the post-debugging and adjustment of the software.</p>

## 6.2 Communication Plan

Stakeholder	Communication Objective	Format	Frequency	Owner	Importance
Product Owner and Scrum Master	<p>Introduce the project status</p> <p>Identify any requirements, scope change, and review the deliverable completed</p>	Document/ Regular Meeting	Start of each business day	Scrum Master	Medium
Development Team	Identify the requirements and planning of product development	Format Report/ Regular Meeting	Weekly	Scrum Master	High
Subject Matter Expert	Identify risks and mitigation strategies to ensure they are being followed	Risk Management Plan	Weekly	Project Support	Medium

Project Team	Identify the update, issue on project progress  Discuss requirements change	Stand-up meeting/ Project Plan	Daily	Scrum Master	High
Tutors in SWEN90016	Give suggestions to the students and point out where should be improved	Email and the canvas discussion board	Daily	Project Support	High
All of Stakeholders	After the first sprint, in terms of the showcase, collect feedbacks and plan for the further step	Presentation of showcase	At the end of each sprint	Scrum Master	High

In addition, as one virtual team during this period of time, we need to prepare one communication charter in case a regular communication plan does not work properly. First of all, setup one decent discipline about how the team should communicate, including the consideration about personality, different working time, cultural difference and so on. Subsequently, the guidelines on communication mode.

	Phone	Email	Face-to-face
Confirm commitments	2	1	3
Make consensus	2	1	3
Solve conflict	1	2	3
Resolve misunderstand	1	2	3
Address negative behavior	1	2	3
Tackle fatal accident	2	3	1

1 - most suited 2 - less suited 3 - least suited

Finally, in terms of the approach of the communication of confidential or sensitive information, we prefer one appropriate channel, even if the secure level cannot reach the encrypted, at least requiring more privacy rather than our informal chatting group such as WhatsApp or Wechat.

### 6.3 Risk Management

Risk ID	Risk Type	Description	Probability (0-1)	Impact (1-10)	Justification
1	Project	The communication between the team and the customer and the team itself is inefficient	0.8	5	<p>Due to COVID-19, the student team can only work and communicate online. Customers can also only contact the product owner online to discuss requirements and acceptance results. However, due to time difference, work schedule conflicts or some other reasons, not all team members and customers can participate in every meeting, which will lead to deviations in everyone's understanding of the project, causing more meetings to be organized to solve previous problems in the development process.</p>
2	Project	Insufficient management experience of the	0.4	8	The product owner of this project is still a student at school and has no specific

		product owner, resulting in slow project progress.			development management experience. He may not correctly understand the requirements and cause the development team to spend too much energy on things that are not necessary to do.
3	Project	Lack of an experienced scrum master, so that the sprint allocation is unreliable, causing that the team cannot complete some sprints on time and the schedule and planning are chaotic.	0.5	6	The scrum master is like a team interface, dealing with all kinds of people. Internally, he needs to communicate with all the personnel in the development process, such as product owners, developers, testing members, etc. Externally, he needs to show each sprint's results to customers. In addition, it is his role to organize daily meetings within the whole team and participate in various meetings with customers. However, with rare experience, the scrum master of this project may sometimes not be able to

					<p>efficiently communicate with the team members and understand their ideas, causing problems in project progress.</p> <p>What's more, the whole team are students in the university who are not familiar with agile. They may meet a large number of troubles in developing progress after allocating the tasks which would waste a lot of time and affect the enthusiasm of team members.</p>
4	Project	Developers have poor development ability and unfamiliar with development tools,	0.7	4	<p>The development team are all students and have not formally participated in the design and development of a website, so they have incomplete consideration of the function and architecture of the system. They may not be able to choose a suitable development tool or use the development tools efficiently and correctly, and they are not proficient</p>

					in the development process. The need to learn while developing leads to difficulties in project implementation.
5	Product	Low customer satisfaction. After booking a service, the admin's response time is too long for the customers.	0.3	7	After a customer makes an appointment, the administrator needs to confirm and reply before the appointment is completed. However, there is no administrator who specifically manages the appointment reply email in the requirements, so there must be a time difference between the email sent by the customer and the administrator accepts. If the administrator is busy with other tasks and cannot respond in time when the customer sends an email, it may affect the customer's schedule and cause a bad user experience.

Risk ID	Trigger	Owner	Response	Response Strategy type	Resources Requirement
1	Customer, product owner or scrum master is busy with work and has no time for every meeting.	Zhonghui Jiang Dingcheng Lu	Arrange the meeting time by email in advance. If someone can't attend the meeting temporarily, contact other meeting participants to discuss changing the time to ensure that everyone can attend each meeting.	Avoid	Everyone's email-address Online meeting software
2	First time as a product owner	Zhonghui Jiang	The product owner can learn related technologies in advance and maintain communication between users and developers at any time to ensure that they	Mitigate	Internal and external audit review Confirm requirements with customers

			reach a consensus on the understanding of the needs of the project.		
3	The Scrum master did not lead the team members properly and did not assign tasks properly.	Dingcheng Lu	The scrum master needs to pay attention to the daily work of each member and organize the complete work in time. He also needs to clearly analyze each sprint and its workload, and arrange it reasonably. Then he has to organize regular meetings to make the whole team have a clear understanding of the project progress, so as not to cause the sprint to be delayed.	Mitigate	Win the trust of the team Control the whole team

4	Dev team members are not proficient in the use of development tools.	Jialiang Cheng Tianqi Yu Xun Zhang Qinyuan Su	Learn the use of relevant development tools in advance, make preparations for development, and ask the team members for help in time if you don't understand	Mitigate	Related literature Development experience
5	The administrator can't accept the Voucher_Booking in time.	Floro Gifty Foody Cafey Patisseriey Hairdressery	Product owner can employ a dedicated administrator to manage the Voucher_Booking from the customers.	Transfer	A new employee

#### 6.4 Technology

Since basically, the project is merely a Web development, rather than some high-tech research such as scientific calculation. Therefore, utilizing some Web development framework is good enough. There are some quite mature technologies, allowing the technique team to choose, like Java, Python, php, etc. The following part will discuss several mature frameworks and languages together, which are frequently used in the IT-Project.

## **Database**

Considering the attributes of each kind of user are fixed, like name, contact phone number, email address, initial password, etc. Hence the SQL structure will be accommodated. In this case, using JDBC to connect with a MySQL database is a rational choice.

## **Python**

Python is a typically interpretive language, now it is widely used in every information technology field like algorithm, Web development, scientific calculation. Naturally, Python has many obvious advantages as one of the candidate languages of the project.

- Easy

Python is a readable language, which means it is easier to understand and thus easy to learn. Selecting Python as a development language is a rational choice because the majority of the team are student, who lacks experience with developing applications

- Cross platform

Python is available to run on various OS systems. If the project needs to change OS systems in the future, Python is more convenient to transplant to other OS systems due to its portable characteristics.

## **Python Web framework**

Python is the best high-level programming language for many state of art domains such as machine learning, data science. However, it is equally loved for the Web development prowess due to its versatility and abundance of frameworks. The following part will illustrate why Python Web frame is appropriate to this project, take Django as an example.

- Django

Django is an open-source Web development framework, which is written by Python, and follows the MVC design. It includes many convenient components, like

- Object-relational mapping
- Templates
- Forms
- Admin
- Authentication
- HTTP communication

Because Django has so many functional components, it is perfect for this project. The MVC design separates the front-end and back-end, the controller in MVC design is responsible for data transmission between front-end and back-end, which will increase the efficiency of the development. Object-relational mapping simplifies the design of the database model design and the connection to the database. Since the project includes email communication, and Django has a `HttpResponse` object, it is easier to implement. Developers may utilize this component, not to mention it is quite easy to configure the component. Currently Django is widely used in the IT industry, for instance chinese version Quora - ZhiHu, is developed by Django framework.

Since the project mainly focuses on the operations on the database(create, delete, update, search), it is quite crucial if the operation on the database is convenient. Luckily, using Django to connect to the database is very convenient because Django has a “`setting.py`” file in itself, developers can use this file to configure the database categories, and the connection. Due to the MVC module, Django is very suitable to handle web development, especially involving many front-page designs. Django can easily deal with bootstrap tech and the relation between front-end and back-end.

However, Python and Django also have some disadvantages. Although Python has some oriented-object characteristics, Python is still a functional language basically. So it is not easy for developers who are used to using OOP language to convert to functional language. Second, Django fundamentally only supports a single thread, it will meet many difficulties when the project wants to support multi-threads, which is terrible because normally the Web supports enormous users to use it at the same time. Third, although

Python & Django have many useful libraries, many of them can only be used in Unix-based systems instead of Windows. So there will be some problems with compatibility. Currently this project will be developed in the windows platform, so it will become a huge problem during the development period. Fourth, the establishment of Django is troublesome, the virtual environment has to be established.

## **Java**

Java is always a popular object-oriented programming language. Using Java to develop the Web project has many advantages. First, due to the object-oriented characteristic, it will make the development more readable and accessible. This logic intends to separate each component, to concentrate on each part, and integrate every part altogether at the end. Developing one part is more comfortable than developing the whole part at one period. Moreover, Java Web development is not rare in the IT industry, so there are various mature framework, tools and technique articles we can use and reference, to save the time cost.

### **Java Web framework**

The most common and convenient Java Web framework, to integrate front-end and back-end, is Spring + Spring MVC + Mybatis.

- Spring

Spring is a quite widely used framework in Java Web, which includes nearly every newest tool and component. This unique advantage allows the development team to match tools more flexibly. In this project, Spring MVC and Mybatis are very useful.

- Spring MVC

It is an important part of Spring framework, the most vital advantage is to simplify some steps like the receipt of data, forms authentication, URL requests drastically. MVC, means model - view - controller, is a common structure in Web development.

Model is responsible for the back-end. View is used for designing the HTML of the front-end, and deciding how to present the data. Controller is responsible for the logical design and data transmission between front-end and back-end.

- Mybatis

Mybatis simplifies the process of using JDBC to connect to MySQL. The Model In Spring MVC can use Mybatis to design databases and back-end.

Overall, Spring provides the configuration of the environment, Spring MVC provides the development structure, Mybatis optimizes the structure of the data link.

Using Java, or Java Web framework to connect databases is very easy because usually there are many mature libraries, documents developers can use. Also, thread pool is available during the connection to the database. Most importantly, due to the oriented-object characteristic, the design of Java class is much similar with the design of the table of the database. The configuration process is not hard since XML and properties files can be used to configure the database during the connection.

However, using Java and its framework also have some disadvantages. Although there are plenty of mature libraries, they are provided by different third parties. So there may be some compatibility problems.

### **Front-end design**

Bootstrap is an open source development tools package for front-end design. Since the whole project will rather focus on back-end design, using bootstrap to design the front-end will significantly increase the efficiency of the development. Thymeleaf is a template engine, supported by Spring framework, which is responsible for embedding data in an HTML page.

The template engine is a very important component in the front-end design. It is used to parse the corresponding type of template file, and then dynamically generate a view file consisting of data and static pages. By using tag, it can respond to various parsing actions, displaying the corresponding data to the specified location.

In this project, after careful consideration, the team decides to use Java Web framework to develop. The reason is quite simple and straight-forward. First, all members of the team have experience with Java development, but just a few members are used to Python Web. Therefore, using Java will actually avoid many troubles. Second, Django is a kind of heavy weight development framework, although it includes so many mature functional components, it takes more time due to the scale of the project. Even more, Java and Spring framework are widely used for many years, countless IT teams use Java and Spring to develop Web projects. Hence the materials of Java Web are much more than Python Web. In most aspects, like the front-end, back-end, Http communications which are involved in the user story, there are no critical differences between Java and Python. But from the above, we all know that the majority of operations will concentrate on databases, and Java web is much better than Python web. So considering these aspects, the development team decided to use Java Web to implement.

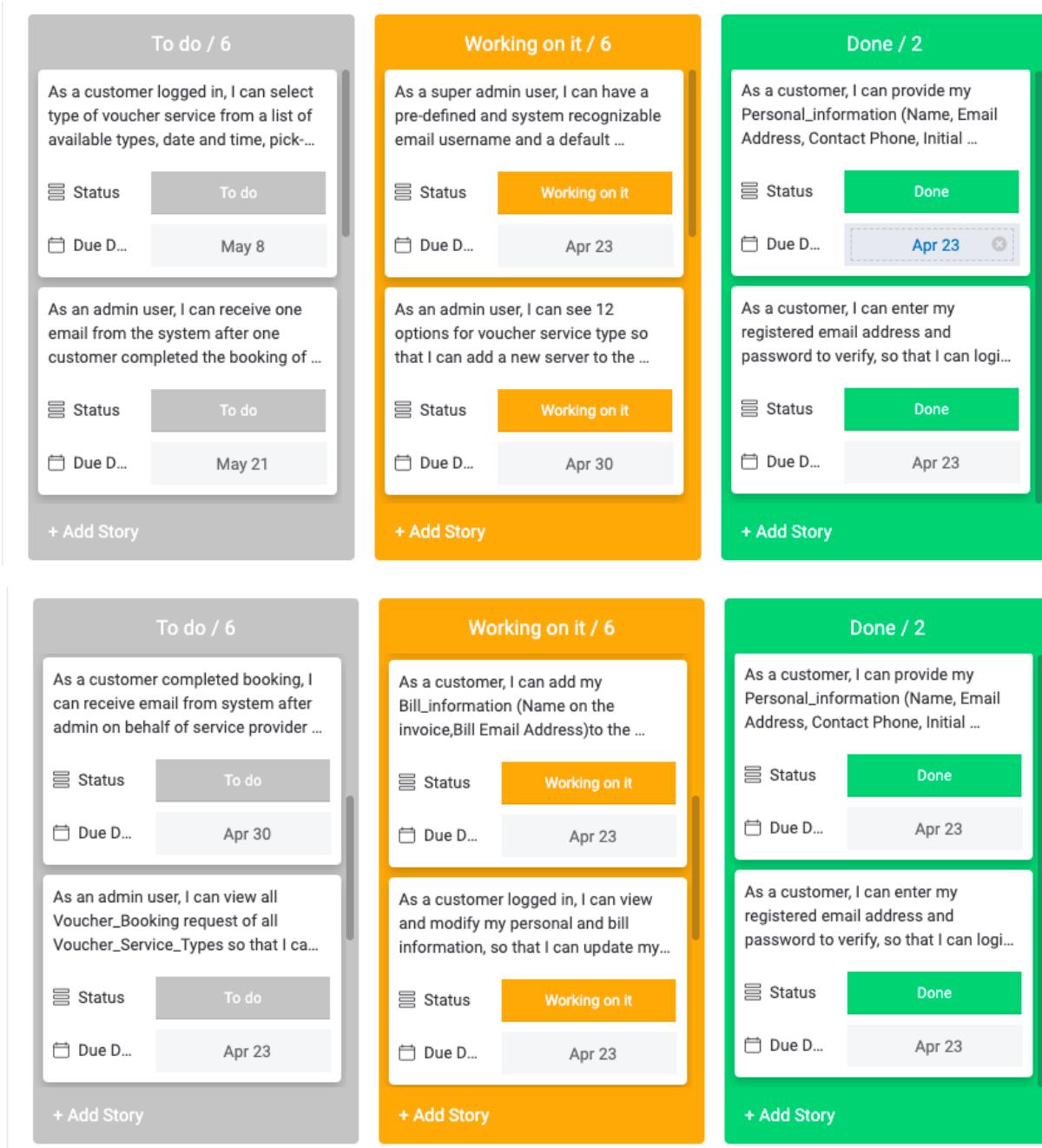
## 6.5 Project Planning

## Sprint Backlog:

Backlog	Status	Priority	Estimated SP	Due Date	+
As a customer, I can provide my Personal_Information (Name, Email Address, Contact Phone, Initial Password) to the system, so that I can register in the system	Done	High	1 SP	Apr 23	
As a customer, I can enter my registered email address and password to verify, so that I can login the system	Done	High	1 SP	Apr 23	
As a super admin user, I can have a pre-defined and system recognizable email username and a default password so that I can login the system	Working on it	High	2 SP	Apr 23	
As an admin user, I can see 12 options for voucher service type so that I can add a new server to the system in terms of those providing types.	Working on it	High	1 SP	Apr 30	
As a customer, I can add my Bill_Information (Name on the invoice,Bill Email Address)to the system, so that I can have a separate bill information part after registration	Working on it	Low	2 SP	Apr 23	
As a customer logged in, I can view and modify my personal and bill information, so that I can update my private information at any time	Working on it	Medium	3 SP	Apr 23	
As a customer logged in , I can redeem my vouchers, so that I can request a Voucher_Booking	Working on it	High	3 SP	Apr 30	
As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my booking at any time	Working on it	Medium	3 SP	May 8	

Backlog	Status	Priority	Estimated SP	Due Date
As a customer logged in, I can select type of voucher service from a list of available types, date and time, pick-up or local delivery for the booking of service, and enter optional message so that I can create one completed ...	To do	Medium	5 SP	May 8
As an admin user, I can receive one email from the system after one customer completed the booking of voucher, so that I can record of information of name, phone, email address of customer, date and time of booking and optional ...	To do	Medium	5 SP	May 21
As a customer completed booking, I can receive email from system after admin on behalf of service provider to accepted my booking already so that I can confirm my information of name, email address, phone and date, time and ...	To do	Medium	5 SP	Apr 30
As an admin user, I can view all Voucher_Booking request of all Voucher_Service_Types so that I can check the information of all of booking at any time	To do	High	2 SP	Apr 23
As an admin user, I can receive one email from the system after one customer cancel the booking, so that I can view the information of the booking, customer and the booking cancellation message	To do	Medium	4 SP	Apr 23
As a super admin, I want Admin, Customer, Personal_Information, Biller_Information, Voucher_Service_Type and Voucher_Booking information persisted in the system so that I can check the information by view database	To do	Medium	1 SP	May 30
<a href="#">+ Add Story</a>				

## Sprint Swimlane Board:



**To do / 6**

As an admin user, I can receive one email from the system after one customer cancel the booking, so tha...

Status	To do
Due D...	Apr 23

As a super admin, I want Admin, Customer, Personal\_Information, Biller\_Information, ...

Status	To do
Due D...	May 30

+ Add Story

**Working on it / 6**

As a customer logged in , I can redeem my vouchers, so that I can request a Voucher\_Booking

Status	Working on it
Due D...	Apr 30

As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my booking at ...

Status	Working on it
Due D...	May 8

+ Add Story

**Done / 2**

As a customer, I can provide my Personal\_information (Name, Email Address, Contact Phone, Initial ...

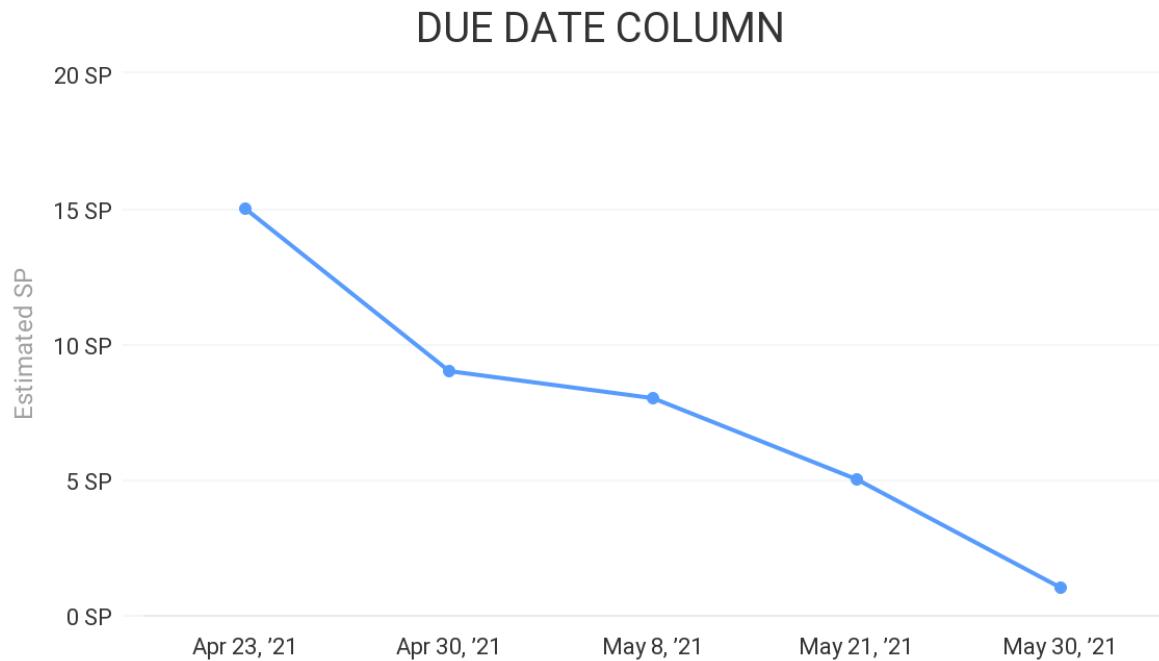
Status	Done
Due D...	Apr 23

As a customer, I can enter my registered email address and password to verify, so that I can logi...

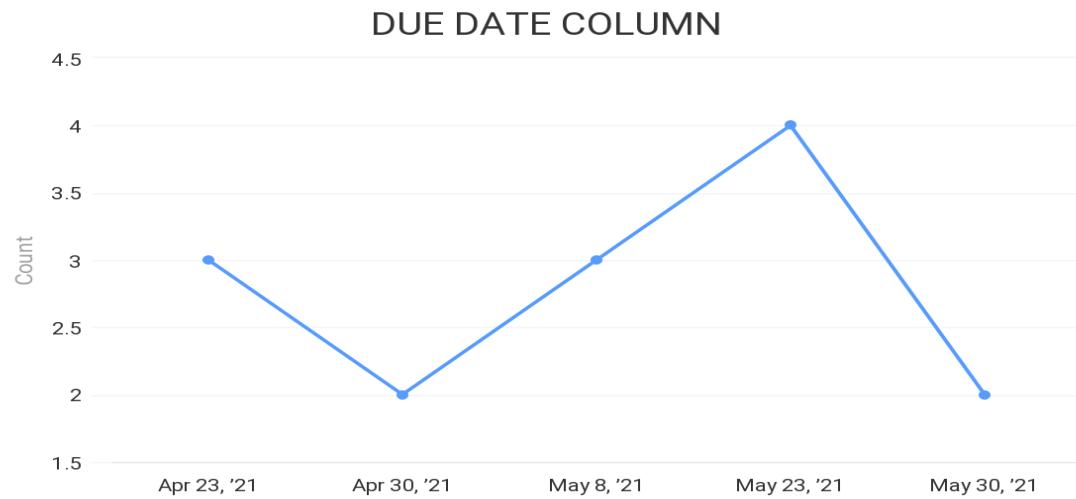
Status	Done
Due D...	Apr 23

+ Add Story

### Burndown Chart:



## Velocity Chart:



Can view the whole plan through: <https://alex145845.monday.com/boards/1229802017/>

## **7. Project Execution, Monitoring and Control**

### **7.1 Project Status - week 9**

There are 3 sprints which includes 38 story points in total, after the first week of beginning, 10 story points have been completed. The milestone is the establishment of the database and the framework and the completion of the login and register systems. At the end of the first sprint, there are 18 story points in the next sprint to be done. The deliverables are tracked by the backlog and the milestones are tracked by having meeting with the development team.

Some functions have been realized in the first week. Firstly, the login interface is established so that the super admin user could log the system by using the certain email and the default password. Moreover, the admin user can see the 12 options for voucher service type and add new services in terms of those providing types to this system in the interface of voucher source type. Secondly, the register system is built for the customers, they can use their personal information such as their names, email addresses, phone numbers and initial passwords to register in the system. Additionally, the biller information management interface is created. Customers can add their bill information such as the name that appears on the invoice and the bill email address to the system, so that they can have a separate bill information part after registration. After customers registration, they can enter their registered email address and password to verify, and then login the system. Lastly, as the customers logged in, the personal information interface allows them to view and modify the personal and bill information interface allow them to update their biller information at any time.

## 7.1.1 Process Related Artefacts

### 7.1.1.1 Agenda

1. Welcome: T11\_Team\_3
2. Apologies: []
3. Interview the stakeholders for the answers of the questions during the interview.
4. Record interview information and upload to google drive.

Action Sheet from Meeting 3/5/21 by online meeting (Zoom)

Item	Action	Person(s) Responsible	Expected completion date/time
4.1	Interview the stakeholders	Dingcheng Lu  Zhonghui Jiang	3 May
4.2	Take note for the answer from stakeholders	Dingcheng Lu  Zhonghui Jiang	3 Mar

	<p>1. How do you want to design the pages for customers? (i.e Sign-up)  <a href="#">Sign up and register a page with the prototype in advance.</a></p> <p>2. What kind of information type do you want to display in the admin part? (e.g Name, E-mail, Password)  <a href="#">Name, Email, Contact Phone Number.</a></p> <p>3. How do you want to store this information in a database (e.g local file, cloud)?  <a href="#">Local file</a></p> <p>4. How often do you need to back-up this data?  <a href="#">Daily Backup</a></p> <p>4.2 cont</p> <p>5. What kind of method to display 12 options for admin to select service types?  <a href="#">Dropdown list</a></p> <p>6. Because we need to have a pre-defined system for super admin, what kind of channel and page for super admin, how to demonstrate it due to no interface included here?  <a href="#">Illustrated by database structure diagram</a></p> <p>7. Do you plan on implementing some sort of pages for error exception?  <a href="#">Next release</a></p>
--	---

Progress update from team member

Item	Progress	Person(s) Responsible	Updated result
1	Select template for UI	Tianqi	Confirmed
2	Draw all of logic connection and prototypes for the system by Lucid chart	Tianqi	Some of navigations between pages are not reasonable

Activities for next submission

Item	Activities	Person(s) Responsible	Expected completion date/time
1	Information collection pages for customers	Tianqi	10 May
2	View the overall service list by admin	Tianqi	10 May

#### 7.1.1.2 Minutes (full version is attached in Appendix)

Meeting of: T11\_TEAM\_03

Held at: Zoom Meeting (Online)

Date: May 3, 2021

Time: 20:00 – 21:00

Present:

*T11\_TEAM\_03*

Apologies:

[]

Approval of minutes

The allocation of the further tasks and responsibilities.

Agenda items

1. Read and understand the requirements of the next part of the assignment.
2. Make a consensus on some points of user stories.
3. Implement one interview between Scrum Master, Business owner and development team

Action items

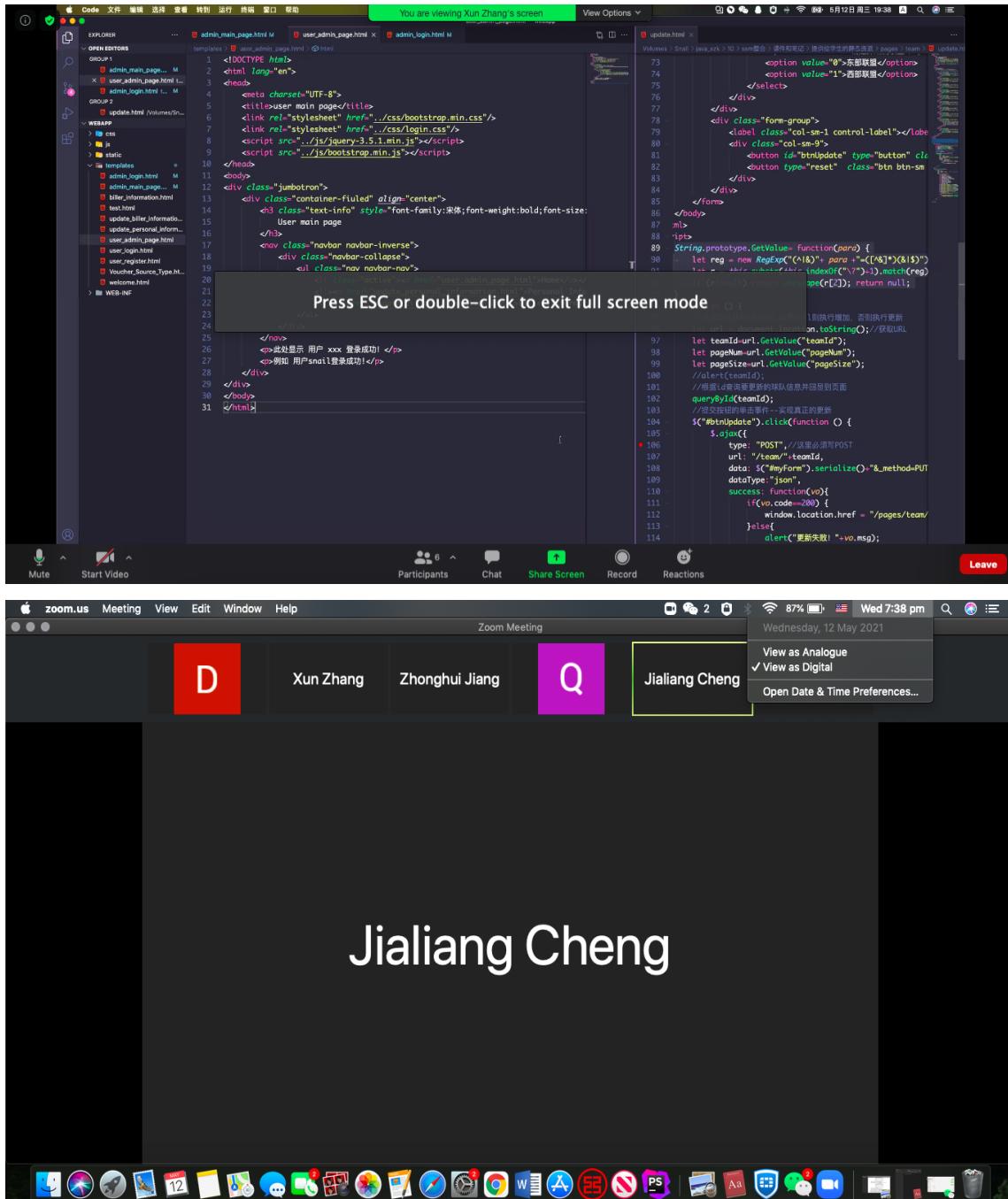
Action Item	Owner(s)	Deadline	Status
Interview record	Dingcheng Lu	May 3, 2021	Completed
Task Allocation	Dingcheng Lu	May 3, 2021	Completed
Modification of User Story	Tianqi Yu	May 4, 2021	In progress

Next meeting

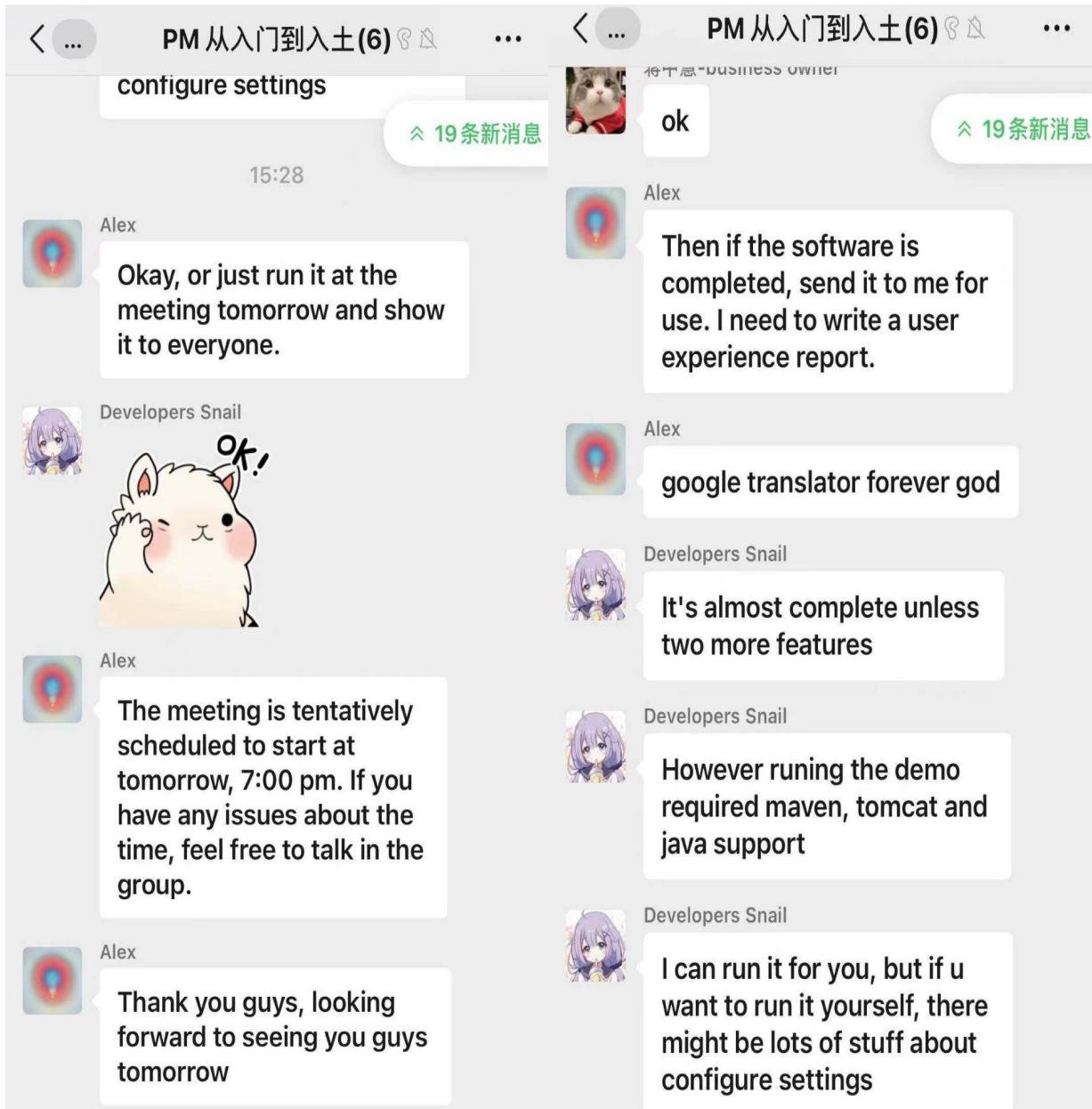
The next general meeting will be at 21:00 on May 4, 2021 at Zoom(Online).

### 7.1.1.3 Timesheet

#### 1. Evidence of discussion of Interview questions and showcase



## 2. Evidence of communication with development team after the Interview (wechat)



3.

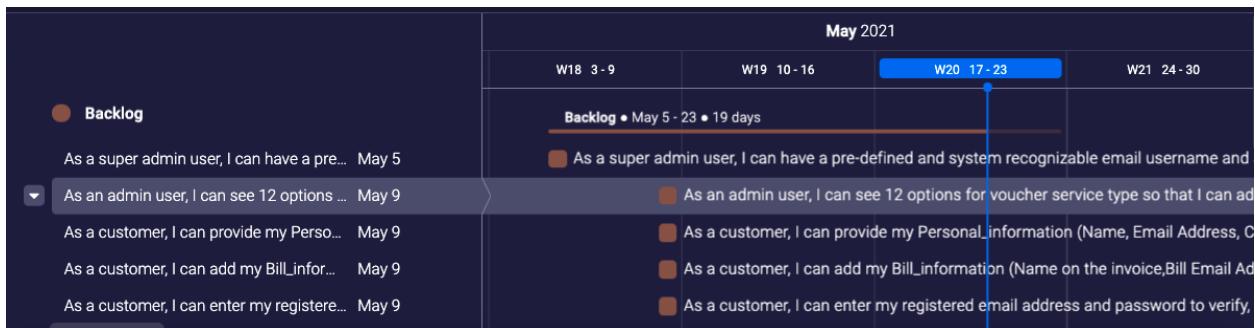
### **Timesheet**

*Member Name:* Dingcheng Lu  
*Team name:* T11\_Team\_3  
*Tutor:* [insert tutor name]  
*Date:* 17/5/21

Date	Activity	Planned	Actual
Monday 3 May	Reading Assignment spec	1 hour	1 hours
Monday 3 May	Attend meeting 1	1 hours	2 hours
Tuesday 4 May	Attend daily-up meeting 1	15 min	15 min
Wednesday 5 May	Attend daily-up meeting 2	15 min	10 min
Thursday 6 May	Attend daily-up meeting 3	15 min	10 min
Thursday 6 May	Finish make up for interview questions and agenda	1 hour	1 hour
Thursday 6 May	According to milestone and schedule plan to check the process	30 min	30 min
Saturday 8 May	Sprint Review - showcase	30 min	30 min
Saturday 8 May	Sprint Retrospective	30 min	30 min

**(full version is attached in the appendix)**

#### 4. Project Gantt Chart (full chart attached in Appendix)



#### 5. Updated Schedule

##### 5.1. Deliverables Schedule

Our deliverables include:

- Different written drafts of the prototypes, due on 10-05-2021.
  - We want at least three different versions of what UI of customers' part, the admin's part and super admin's part
  - The can be connected each other
- Storyboard of the final draft of the overall system, due on 10-05-2021.
  - The storyboard should be a series of pictures of what each different shot in the functions will look like.
  - Make sure to include details like navigations, expected results and error exceptions.

##### 5.2. Applicable Standards

We expect that the prototype will be helpful yet have a serious tone. We want the prototype to be professional. For example, a good prototype to follow may be the clear explanation of main function works.

##### 5.3. Acceptance Criteria

As a Scrum Master, I will deem teamwork to be acceptable if it can meet the following requirements:

- Contains the information needed to help the user do the following things:
  - How to booking a service
  - Sign up as visitor
  - Send email to cancel the reservation
- The prototypes are well design
  - Suitable UI
  - Clear clues helping the user to visit pages

## 6. Image of Kanban board



## 7. Sprint planning meeting outcomes

Item	1st half of meeting	2nd half of meeting
7.1	Design main UI as prototypes	Utilise Lucid chart to draw the drafts
7.2	Customer register, login and view personal information functions	Ensure the data transmit from database successfully and indicate by front-end
7.3	The admin part of service type list and view function	Utilise another temple of UI for the admin

## 8. Sprint review inputs and outcomes

### I. Accomplishments for Week 9 (From 3/5/21 to 9/5/21)

- Explain and allocate the most important functions in the system from this week.
- Complete customer registration, login, personal information and billing information.
- Complete the administrative part's UI design.

### II. Plans for Week 9 (From 3/5/21 to 9/5/21)

- Complete customer registration, login, personal information and billing information.
- Complete service type selected function of administrative part.

### III. Issues

- In terms of the progress of accomplishing the basic function of the admin part, only 85%.

### IV. Changes

- Change 1
  - Date: 4/5/21
  - Description: Location of UI for billing information.
- Change 2
  - Date: 5/5/21
  - Description: Due day for service type selected function of administrative part.

## **9. Low level task decomposition**

$T = \{T_1, T_2, \dots, T_q\}$ : task set need to be completed

$T_j = (j=1, 2, \dots, q)$ : subtask after task decomposition

T1: super admin user can have a pre-defined and system recognizable email username and a default password to login the system

T2: admin user can see 12 options for voucher service type to add a new server to the system in terms of those providing types.

T3: customer can provide my Personal\_information (Name, Email Address, Contact Phone, Initial Password) to the system to register in the system

T4: customer can enter my registered email address and password to verify and login the system

T5: customer logged in to view and modify my personal and bill information to update my private information at any time

$T_{j=1}$ : customer can view Personal\_information after logging in.

$T_{j=2}$ : customer can modify Personal\_information after logging in.

T6: customer can add my Bill\_information (Name on the invoice,Bill Email Address)to the system to have a separate bill information part after registration

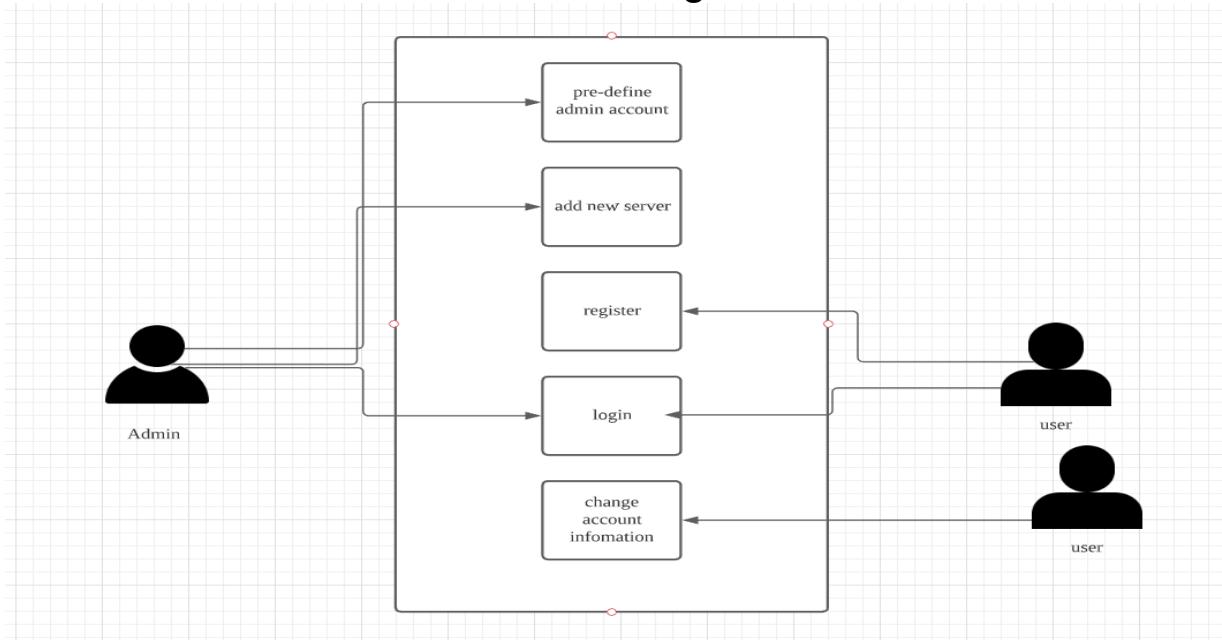
In total, 2 low level tasks after task composition.

### 7.1.2 Product Related Artefacts

Requirement type	User requirement	Process	Outcome(by User Experience team member)
User system	As a super admin user, I can have a pre-defined and system recognizable email username and a default password so that I can login the system	Complete	 
User system	As an admin user, I can see 12 options for voucher service type so that I can add a new server to the system in terms of those providing types.	Complete	
User system	As a customer, I can provide my Personal_information (Name, Email Address, Contact Phone, Initial Password) to the system, so that I can register in the system	Complete	
User system	As a customer, I can add my Bill_information (Name on the invoice,Bill Email Address)to the system, so that I can have a separate bill	Complete	

	information part after registration		
User system	As a customer, I can enter my registered email address and password to verify, so that I can login the system.	Complete	
User system	As a customer logged in, I can view and modify my personal and bill information, so that I can update my private information at any time	Complete	

## use case diagram



### 7.1.3 Risk Monitoring and Control

After the developers start designing the system, risk2 and risk 4 occurs.

In this week to develop the product, developers are confused about the role of the administrator because they don't know whether the administrator can modify the users' information. Due to the inexperienced developers and product owners, they did not proofread every requirement from the customer in detail at the beginning, which caused the developers to misunderstand the customers and waste time developing unnecessary requirements.

When it was discovered that the developers had misunderstood the requirements, our product owner carefully read the user requirements and communicated with developers more frequently and made them understand the requirements for content in products in more detail to ensure that there would be no misunderstandings about the customers' requirements.

At the requirement and design stage, the team members lack the required professional knowledge to make standard documents. When drawing all of the logic connections and prototypes for the system by Lucid chart, developers in the team meet a problem that some navigations between pages are not reasonable.

The solution is that the team members do a deep analysis of the standard documents content and sequencing diagram and redefine the new scope of these documents. They spend some time learning this.

By this modification, the developers succeed to keep the original time schedule.

At the same time, when the development team perfected the system, we defined a new risk, which is shown in Table

Risk ID	Risk Type	Description	Probability (0-1)	Impact (1-10)	Justification
6	Product	The booking message may be lost when two customers are booking at the same time	0.1	6	<p>When multiple customers book the same service at the same time, data crash is likely to occur during submission because the system cannot successfully receive the correct order. Such a situation may cause users to think that they have submitted an appointment but the admins deliberately do not respond, resulting in depressed emotions, which greatly reduces the user experience. At the same time, merchants cannot receive missed appointments.</p>

## **7.2 Project Status - week10**

In the second sprint, the development team has finished 18 story points on time. There are still 10 story points remaining for the last week. The milestone in the sprint 2 is establishing the email automatically sending system. The deliverables are tracked by the backlog and the milestones are tracked by communicating with the development team.

Some functions have been realized. First of all, the voucher booking system is established. As the customers logged in, they can request a voucher booking to redeem the vouchers. They can select type of voucher services from the pre-defined types in the list which includes the pick-up and local delivery service along with the specific time and date in a calendar. Customers can leave optional message in order to create one completed booking for voucher service. Secondly, the email automatically sending system is set up, which plays an important role in the booking procedure. After a customer completing booking, admin will receive an automatically sent email from the system with the customers' information such as the name, the phone number and the email address. Additionally, the time and the optional message of booking will be showed on the interface of the users' voucher. The 'accept' and 'reject' bottom is built to let the admin to make decision. When the admin accepts the voucher booking, customers can receive an automatically sent email from the system with their confirmation information with their register personal information and the location of booking.

## 7.2.1 Process Related Artefacts

### 7.2.1.1 Agenda

1. Welcome: T11\_Team\_3
2. Apologies: []
3. Progress update from team member

Item	Progress	Person(s) Responsible	Updated result
3.1	Rest UI display of administrative part	Tianqi	Completed
3.2	Setup the main functions for sprint two	Dingcheng Lu	Some of story points are not mentioned

4. Activities for next submission

Item	Activities	Person(s) Responsible	Expected completion date/time
4.1	All of UI for customers' part	Tianqi	17 May
4.2	Email display for the admin	Tianqi	17 May
4.3	Customer email, booking, redeem function	Xun Zhang	17 May

### **7.2.1.2 Minutes (full version is attached in the appendix)**

*Meeting of:* **T11\_TEAM\_03 (sprint planning meeting)**

*Held at:* **Zoom Meeting (Online)**

*Date:* **May 10, 2021**

*Time:* **20:00 – 21:00**

**Present:**

**T11\_TEAM\_03**

**Apologies:**

[]

**Approval of minutes**

The final showcase and updated schedule from last sprint.

**Agenda items**

1. Setup scope for this sprint.
2. Make a consensus on some points of user stories.
3. Allocate functions need to be developed.

**Action items**

Action Item	Owner(s)	Deadline	Status
Meeting record	Dingcheng Lu	May 10, 2021	Completed

Task Allocation	Dingcheng Lu	May 10, 2021	Completed
Modification of User Story	Tianqi Yu	May 10, 2021	In progress
Scope for this sprint (1st half)	Tianqi Yu	May 10, 2021	Completed
Methods to realize functions	Xun Zhang	May 10, 2021	Completed

#### Next meeting

The next general meeting will be at 21:00 on May 11, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

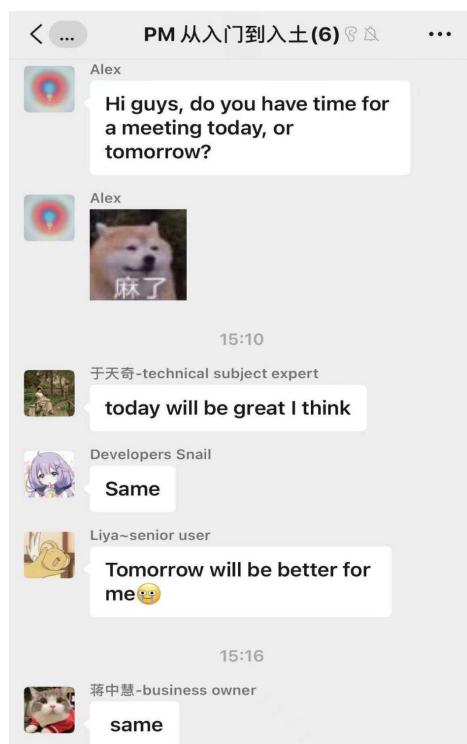
Approved by: Dingcheng Lu

### 7.2.1.3 Timesheet

#### 1. Evidence of online meeting and showcase

Backlog	Status	Priority	Estimated SP	Due Date	+ Add Story
As a super admin user, I can have a pre-defined and system recognizable email username and a default password so that I can login the system.	Done	High	2 SP	May 5	
As an admin user, I can see 12 options for voucher service type so that I can add a new service to the system in terms of those providing type.	Done	High	1 SP	May 9	
As a customer, I can provide my Personal_Information (Name, Email Address, Contact Phone, Initial Password) to the system, so that I can login the system.	Done	High	1 SP	May 9	
As a customer, I can add my Bill_Information (Name on the invoice, Bill Email Address) to the system, so that I can have a separate bill info.	Done	Low	2 SP	May 9	
As a customer, I can enter my registered email address and password to verify, so that I can login the system.	Done	High	1 SP	May 9	
As a customer logged in, I can view and modify my personal and bill information, so that I can update my private information at any time.	Done	Medium	3 SP	May 9	
As a customer logged in, I can redeem my vouchers, so that I can request a Voucher_Booking.	Voucher on it	High	3 SP	May 16	
As a customer logged in, I can select type of voucher service from a list of available types, date and time, pick up or local delivery for the booking.	Voucher open	Medium	5 SP	May 16	
As an admin user, I can receive one email from the system after one customer completed the booking of vouchers, so that I can record it.	Voucher open	Medium	5 SP	May 16	
As a customer completed booking, I can receive email from system after admin on behalf of service provider accepted my booking application.	Voucher open	Medium	5 SP	May 16	
As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my booking at any time.	To do	Medium	3 SP		
As an admin user, I can view all Voucher_Booking request of all Voucher_Service_Types so that I can check the information of all bookings.	To do	High	2 SP		
As an admin user, I can receive one email from the system after one customer cancel the booking, so that I can view the information of the cancellation.	To do	Medium	4 SP		
As a super admin, I want Admin, Customer, Personal_Information, Biller_Information, Voucher_Service_Type and Voucher_Booking information.	To do	Medium	1 SP		

#### 2. Evidence of communication with development team after sprint meeting (wechat)



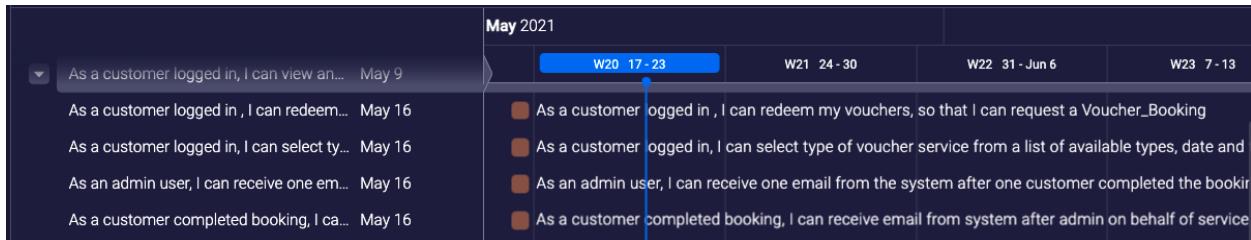
### Timesheet

Member Name: *Dingcheng Lu*  
 Team name: *T11\_Team\_3*  
 Tutor: *[insert tutor name]*  
 Date: *16/5/21*

Date	Activity	Planned	Actual
Monday 10 May	Attend sprint planning meeting	1 hour	1 hours
Monday 10 May	Check the project status and requirements change	1 hours	1 hours
Tuesday 11 May	Attend daily-up meeting 1	15 min	15 min
Wednesday 12 May	Attend daily-up meeting 2	15 min	10 min
Thursday 13 May	Attend daily-up meeting 3	15 min	10 min
Thursday 13 May	According to milestone and schedule plan to check the process	30 min	30 min
Saturday 15 May	Sprint Review - showcase	30 min	30 min
Saturday 15 May	Sprint Retrospective	30 min	30 min

(full version is attached in the appendix)

#### 4. Project Gantt Chart (full chart attached in Appendix)



#### 5. Updated Schedule

##### 5.1. Deliverables Schedule

Our deliverables include:

- Voucher booking service, due on 17-05-2021.
  - We want UI has clear input reminder for user
  - The information of booking can be transmit to database and storage
  - The admin can view and receive the booking information
- Email reminder of the system, due on 17-05-2021.
  - The admin can receive email including booking and customer's information.
  - Customers can receive email including booking and customer's information.

##### 5.2. Applicable Standards

We expect that the system can offer basic functions. For example, one customer can exploit our website to redeem a voucher and book one Voucher\_Service.

##### 5.3. Acceptance Criteria

As a Scrum Master, I will deem the teamwork to be acceptable if it can meet the following requirements:

- The development team do the following things:
  - Decent UI without confusion
  - Data storage safety
  - Different access between the admin and customer, customer and normal visitor
- The rest team members do the following things:
  - Record meeting and give feedback
  - Following the schedule and update requirements on time

## 6. Image of Kanban board

The image shows a Kanban board titled "Stories" with three columns: "To do / 4", "Working on it / 4", and "Done / 6".

**To do / 4**

- As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my booking at any ...  
Status: To do  
Due D...  
+ Add Story
- As an admin user, I can view all Voucher\_Booking request of all Voucher\_Service\_Types so that I can ...  
Status: To do  
Due D...  
+ Add Story
- As an admin user, I can receive one email from the system after one customer cancel the booking, so that...  
Status: To do  
Due D...  
+ Add Story
- As a super admin, I want Admin, Customer, Personal\_Information, Biller\_Information, ...  
Status: To do  
Due D...  
+ Add Story

**Working on it / 4**

- As a customer logged in, I can redeem my vouchers, so that I can request a Voucher\_Booking.  
Status: Working on it  
Due D... May 16  
+ Add Story
- As a customer logged in, I can select type of voucher service from a list of available types, date and time, pick-u...  
Status: Working on it  
Due D... May 16  
+ Add Story
- As an admin user, I can receive one email from the system after one customer completed the booking of ...  
Status: Working on it  
Due D... May 16  
+ Add Story
- As a customer completed booking, I can receive email from system after admin on behalf of service provider t...  
Status: Working on it  
Due D... May 16  
+ Add Story

**Done / 6**

- As a customer, I can provide my Personal\_Information (Name, Email Address, Contact Phone, Initial ...  
Status: Done  
Due D... May 9  
+ Add Story
- As a customer, I can add my Bill\_Information (Name on the invoice, Bill Email Address) to the ...  
Status: Done  
Due D... May 9  
+ Add Story
- As a customer, I can enter my registered email address and password to verify, so that I can logi...  
Status: Done  
Due D... May 9  
+ Add Story
- As a customer logged in, I can view and modify my personal and bill information, so that I can update my...  
Status: Done  
Due D... May 9  
+ Add Story

## **7. Sprint planning meeting outcomes**

Item	1st half of meeting	2nd half of meeting
7.1	Customer booking service function	One page will all of the input fields provided
7.2	Customer email confirm function	System will send email to customer
7.3	Customer redeem voucher function	One link or interface provided for customer
7.4	The admin part of email function to show customer booking information	System will send email to the admin

## **8. Sprint review inputs and outcomes**

### **I. Accomplishments for Week 10 (From 10/5/21 to 16/5/21)**

- Complete customer booking Voucher service function .
- Complete all of the UI design for customers' part.
- Complete customer redeem voucher function.
- Complete customer service confirmation by email
- Complete the admin part of email function to show customer booking information

### **II. Plans for Week 10 (From 10/5/21 to 16/5/21)**

- Complete customer booking Voucher service function .
- Complete all of the UI design for customers' parts.
- Complete customer redeem voucher function.
- Complete customer service confirmation by email
- Complete the admin part of email function to show customer booking information
- Test email functionality of the admin
- Test email functionality of customer

### **III. Issues**

- No testing for the email functionality of the system so that cannot ensure stakeholders will receive emails correctly.

### **IV. Changes**

- Change 1
  - Date: 11/5/21
  - Description: Due day of email functionality of customer delayed.
- Change 2
  - Date: 12/5/21
  - Description: Due day of email functionality of the admin delayed.
- Change 3
  - Date: 12/5/21
  - Description: Due day for customer booking Voucher service function.
- Change 4
  - Date: 12/5/21
  - Description: Access from redeem voucher to request booking service has been cancelled.
- Change 5
  - Date: 13/5/21
  - Description: UI design for customer email confirmation simplified.

## **9. Low level task decomposition**

$T = \{T_1, T_2, \dots, T_q\}$ : task set need to be completed

$T_j = (j=1, 2, \dots, q)$ : subtask after task decomposition

$T_1$ : customers logged in can redeem their vouchers to request a Voucher\_Booking.

$T_{j=1}$ : customers can redeem their vouchers after logging in.

$T_{j=2}$ : customers can request a Voucher\_Booking.

$T_2$ : customer logged in can select the type of voucher service from a list of available types, date and time, pick-up or local delivery for the booking of service, and enter an optional message to create one completed booking for voucher service.

$T_{j=3}$ : customer can select the type of voucher service from a list of available types for the booking of service after logging in.

$T_{j=4}$ : customer can select date and time for the booking of service after logging in.

$T_{j=5}$ : customer can select pick-up or local delivery for the booking of service after logging in.

$T_{j=6}$ : customer can enter an optional message to create one completed booking for voucher service.

T3: admin user can receive one email from the system after one customer completed the booking of the voucher to record information of name, phone, email address of customer, date and time of booking and optional message.

Tj=7: admin user can receive one email from the system after one customer completed the booking of the voucher to record information of name.

Tj=8: admin user can receive one email from the system after one customer completed the booking of the voucher to record information of phone number.

Tj=9: admin user can receive one email from the system after one customer completed the booking of the voucher to record information about the email address of the customer.

Tj=10: admin user can receive one email from the system after one customer completed the booking of the voucher to record information of date and time of booking.

Tj=11: admin user can receive one email from the system after one customer completed the booking of the voucher to record information of optional messages.

T4: customer completed booking can receive email from system after admin on behalf of service provider to accept their booking already to confirm their information of name, email address, phone and date, time and location of booking.

Tj=12: customer completed booking can receive email from system after admin on behalf of service provider to accept their booking already to confirm their information of name.

Tj=13: customer completed booking can receive email from system after admin on behalf of service provider to accept their booking already to confirm their information of email address.

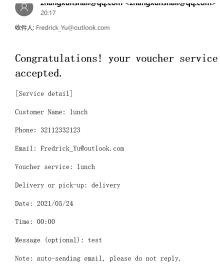
Tj=14: customer completed booking can receive email from system after admin on behalf of service provider to accept their booking already to confirm their information of phone number.

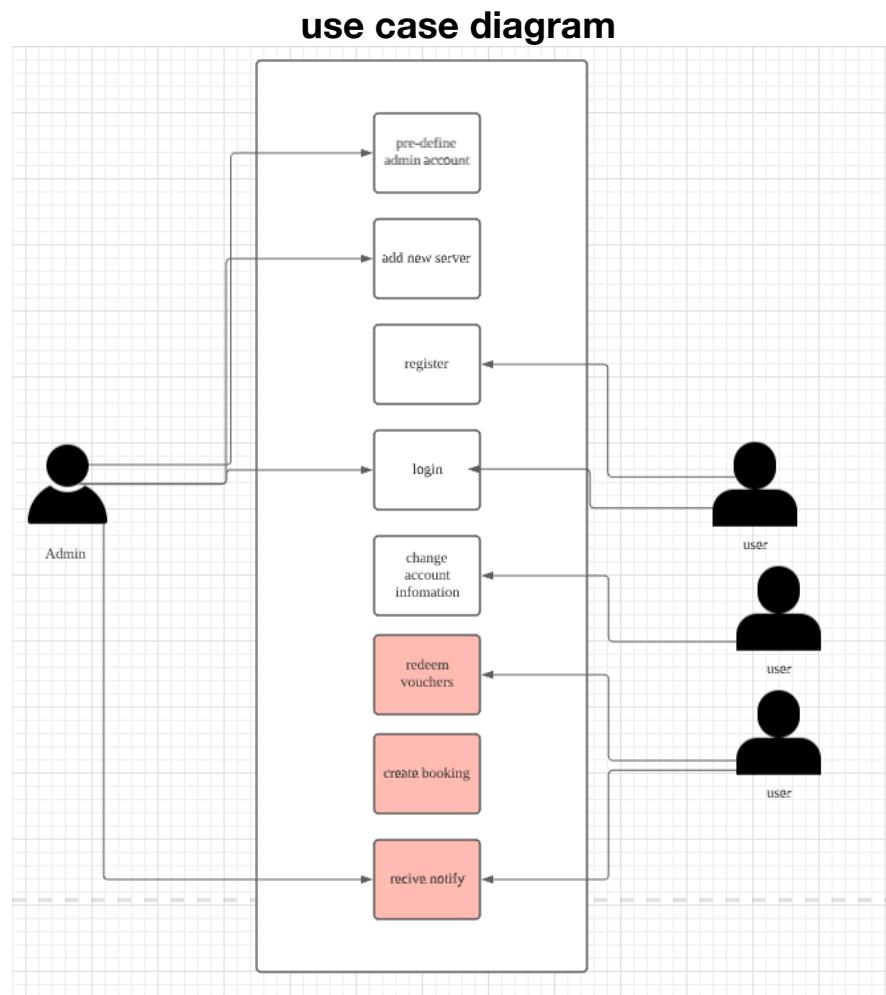
Tj=15: customer completed booking can receive email from system after admin on behalf of service provider to accept their booking already to confirm their information of date and time.

Tj=16: customer completed booking can receive email from system after admin on behalf of service provider to accept their booking already to confirm their information of location of booking.

### 7.2.2 Product Related Artefacts

Requirement type	User requirement	Process	Outcome(by User Experience team member)
Voucher system	As a customer logged in , I can redeem my vouchers, so that I can request a Voucher_Booking	Complete	
Voucher system	As a customer logged in, I can select type of voucher service from a list of available types, date and time, pick-up or local delivery for the booking of service, and enter optional message so that I can create one completed booking for voucher service.	Complete	
Voucher system	As an admin user, I can receive one email from the system after one customer completed the booking of voucher, so that I can record of information of name, phone, email address of customer, date and time of booking and optional message	Complete	

Voucher system	As a customer completed booking, I can receive email from system after admin on behalf of service provider to accepted my booking already so that I can confirm my information of name, email address, phone and date, time and location of booking	Complete	 <p>Congratulations! your voucher service has been accepted.</p> <p>[Service detail]  Customer Name: lunch  Phone: 32112332123  Email: Frederick.Yu@outlook.com  Voucher service: lunch  Delivery or pick-up: delivery  Date: 2021/05/24  Time: 00:00  Message (optional): test  Note: auto-sending email, please do not reply.</p>
----------------	---	----------	--



### 7.2.3 Risk Monitoring and Control

In week10 to develop the product, risk2 occurs.

Developers are confused about Voucher\_source\_type which is related to requirement about modification and delete function for option. Due to the inexperienced developers and product owners, they did not proofread every requirement from the customer in detail that happens again.

After communications between the developers and product owner, they come to a conclusion that it should have add function but not modify and delete.

By this modification, the developers succeed to keep the original time schedule.

At the same time, when the development team perfected the system, we defined a new risk, which is shown in Table

Risk ID	Risk Type	Description	Probability (0-1)	Impact (1-10)	Justification
7	Project	Code about some interfaces are not unified, causing bugs in developing the system	0.3	3	The front-end and back-end development are completed by two members separately, but due to COVID-19, students cannot develop together at the same location, so they only develop their own parts independently and then combine the parts together. At this time, it is easy to have an interface failure Correct connection, causing bugs to appear.

## **7.3 Project Status – week11**

In the week 11, the development team completed the remaining 10 story points successfully. The milestone for sprint 3 is finishing the front-end and back-end of voucher design and passing unit test. The deliverables and milestones are tracked by having meeting and receiving the feedback from development team and the user experience professional.

The total voucher system is finished with some new features. Firstly, customers have the right to view or cancel all of the voucher booking after logging in, so that they can modify or check the booking at any time. If they choose to cancel, they will receive the email from the admin with the booking information and the confirmation of cancellation. Next, the admin user can view all booking request of all service types so that he can check the information of all of booking at any time. Finally, the information about the admin, customer, personal information, biller information, voucher service type and voucher booking information are ensured to be persisted in the system so that the super admin can check the information by view database.

### **7.3.1 Process Related Artefacts**

#### **7.3.1.1 Agenda**

1. Welcome: T11\_Team\_3
2. Apologies: []
3. Progress update from team member

Item	Progress	Person(s) Responsible	Updated result
3.1	Testing for email functionality of customers	Xun Zhang	Approved
3.2	Testing for email functionality of the admin	Xun Zhang	Approved

#### 4. Activities for next submission

Item	Activities	Person(s) Responsible	Expected completion date/time
4.1	The admin accept the booking of service	Xun Zhang	22 May
4.2	The admin can view all the list of booking service	Xun Zhang	22 May
4.3	Customer can cancel the booking	Xun Zhang	22 May

##### 7.3.1.2 Minutes (full version is attached in the appendix)

Meeting of: *T11\_TEAM\_03 (sprint planning meeting)*

Held at: *Zoom Meeting (Online)*

Date: *May 17, 2021*

Time: *20:00 – 21:00*

Present:

*T11\_TEAM\_03*

Apologies:

*[]*

## Approval of minutes

The final showcase and updated schedule from last sprint.

## Agenda items

1. Setup scope for this sprint.
2. Make a consensus on some points of user stories.
3. Allocate functions need to be developed.

## Action items

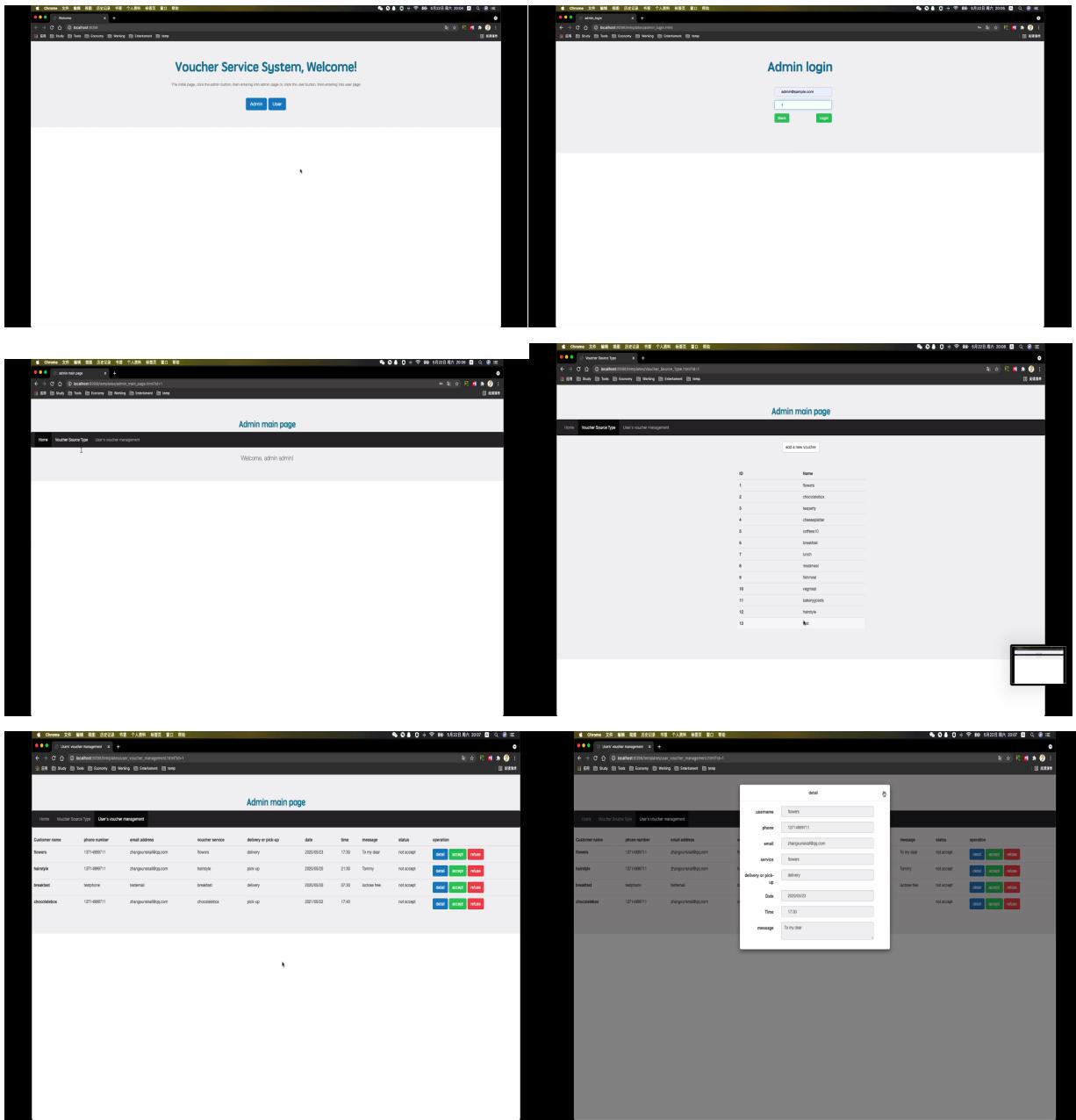
Action Item	Owner(s)	Deadline	Status
Meeting record	Dingcheng Lu	May 17, 2021	Completed
Task Allocation	Dingcheng Lu	May 17, 2021	Completed
Modification of User Story	Tianqi Yu	May 17, 2021	In progress
Scope for this sprint (1st half)	Tianqi Yu	May 17, 2021	Completed
Methods to realize functions	Xun Zhang	May 17, 2021	Completed

## Next meeting

The next general meeting will be at 21:00 on May 18, 2021 at Zoom(Online).

### 3. Timesheet

#### 1. Evidence of online meeting and showcase

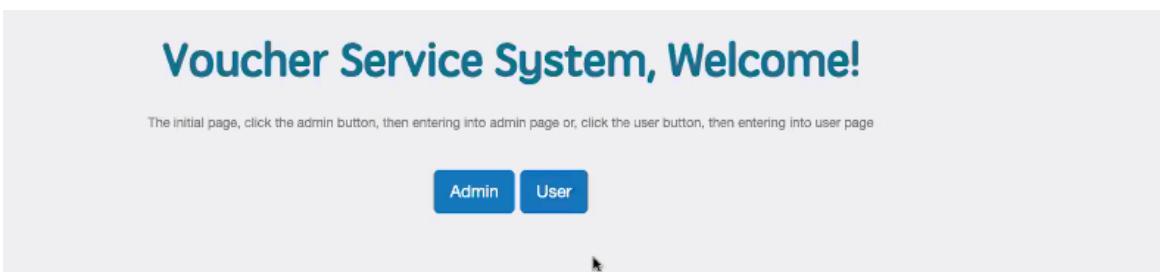
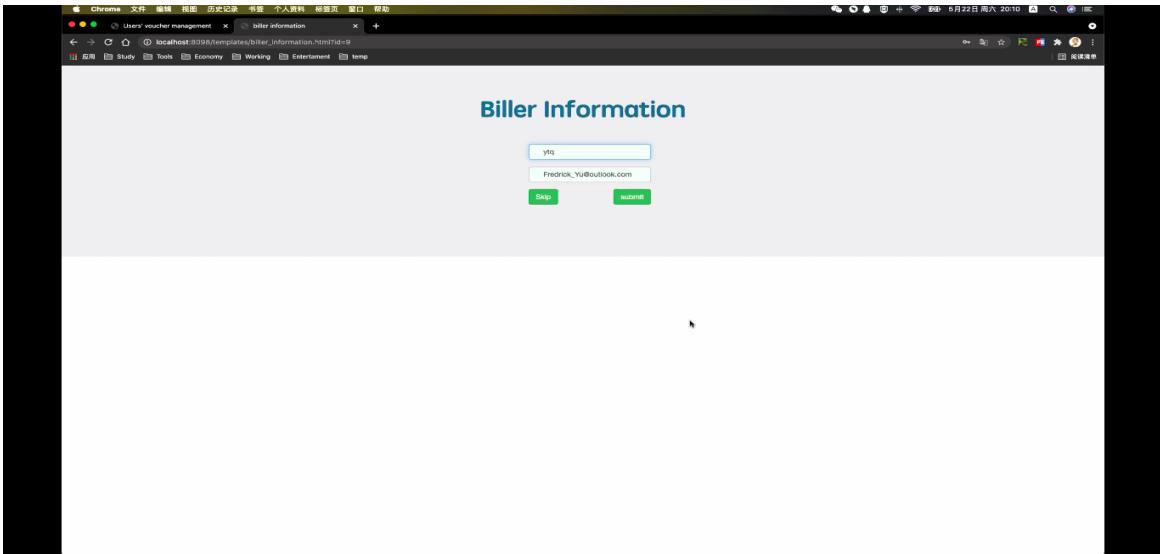


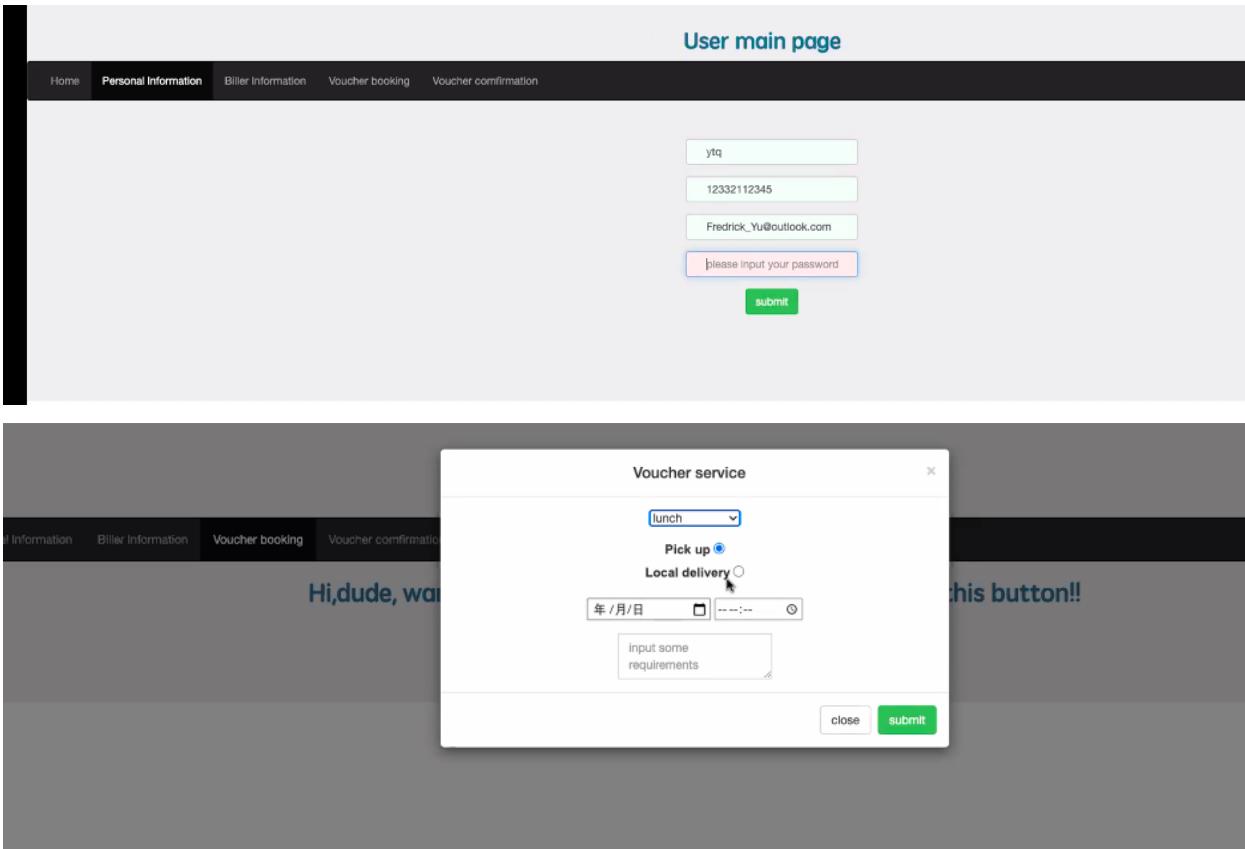
The image consists of three screenshots of a web application interface:

- User login (Top Left):** A simple form with fields for email and password, and buttons for 'Login' and 'Register'.
- User login (Top Right):** A similar form with additional text at the bottom: "No account? Please register now!" and buttons for 'Login' and 'Register'.
- User Register (Bottom):** A form titled "User Register" with a dropdown menu for "please input your name". The dropdown shows several options: 秋丽, java, 玄铁, 芭姆水晶, Snail, test2, and 钢琴. A green "SEARCH" button is visible next to the dropdown.

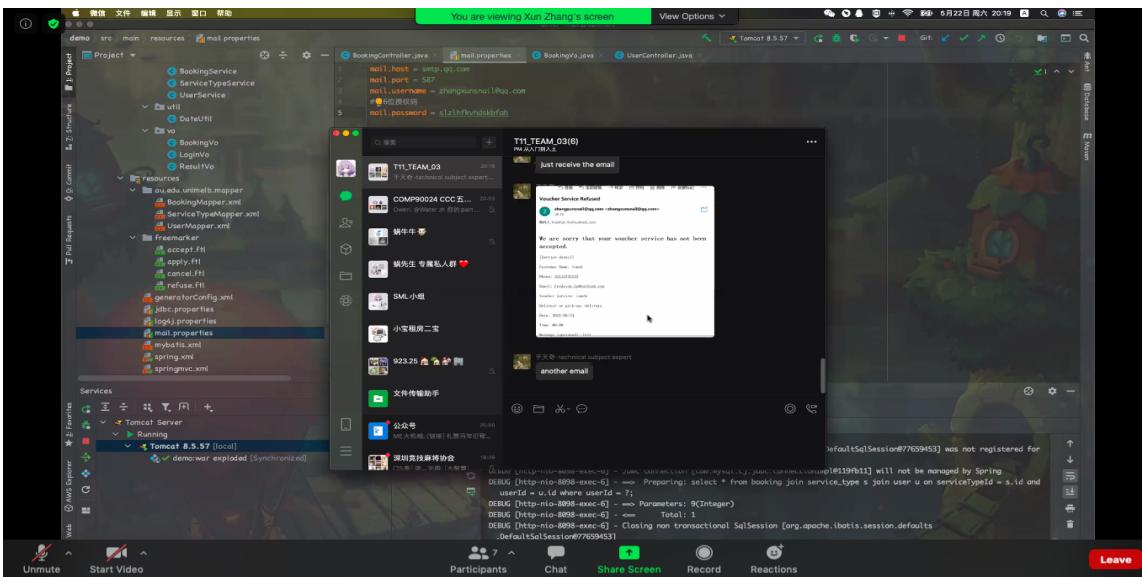
**Table Data (Bottom):**

name	phone number	email address	voucher service	delivery or pick-up	date	time	message	status	operation
lunch	32112332123	Frederick_Yu@outlook.com	lunch	delivery	2021/05/24	00:00	test	not accept	<button>modify</button> <button>cancel</button>





## 2. Evidence of communication with development team after sprint meeting (wechat)



```

Reading table information for your table 'booking'.
You can turn off this feature.
Database changed
mysql> select * from booking;
+----+-----+-----+-----+-----+-----+-----+-----+
| id | serviceTypeId | isDelivery | bookingDate | bookingTime | message | isValid | i |
+----+-----+-----+-----+-----+-----+-----+-----+
| 1  | 1           | 1          | 2020-05-23 | 17:30:00   | To my dear | 1       | 0 |
| 0  | 2           | 2          | 2020-05-20 | 21:30:00   | Tommy     | 1       | 0 |
| 2  | 12          | 0          | 2020-05-20 | 21:30:00   |           | 0       | 0 |
| 0  | 2           | 1          | 2020-05-20 | 07:30:00   | lactose free | 0       | 0 |
| 3  | 6           | 1          | 2021-05-22 | 17:40:00   |           | 0       | 0 |
| 4  | 8           | 2          | 2021-05-22 | 17:40:00   |           | 0       | 0 |
| 0  | 2           | 1          | 2021-05-22 | 17:40:00   |           | 0       | 0 |
+----+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>

```

```

You are viewing Xu Zhang's screen
Project: demo src / main / resources / mail.properties
BookingController.java mail.properties BookingVo.java UserController.java
1 mail.host = smtp.qq.com
2 mail.port = 587
3 mail.username = zhongxuan1@qq.com
4 邮件授权码
5 mail.password = s1zlnfkyvndskdfrh

T11.TEAM_03(6)
PM: XIAOYU
just receive the email

Voucher Service Refused
shengsun@10.10.10.10:~$ curl -X POST http://10.10.10.10:8088/voucher/refuse
{"msg": "We are sorry that your voucher service has not been accepted."}
DefaultSqlSession@77659453] was not registered for
DEBUG [http-nio-8088-exec-6] ->> Preparing: select * from booking join service_type s join user u on serviceTypeId = s.id and
userId = u.id where userId = ?;
DEBUG [http-nio-8088-exec-6] ->> Parameters: 9(Integer)
DEBUG [http-nio-8088-exec-6] ->> Total: 1
DEBUG [http-nio-8088-exec-6] ->> Closing non transactional SqlSession [org.apache.ibatis.session.defaults.DefaultSqlSession@77659453]

```

**3.**

### **Timesheet**

*Member Name:* *Dingcheng Lu*  
*Team name:* *T11\_Team\_3*  
*Tutor:* *[insert tutor name]*  
*Date:* *22/5/21*

<b>Date</b>	<b>Activity</b>	<b>Planned</b>	<b>Actual</b>
Monday 17 May	Attend sprint planning meeting	1 hour	1 hours
Monday 17 May	Check the project status and requirements change	1 hours	1 hours
Tuesday 18 May	Attend daily-up meeting 1	15 min	15 min
Wednesday 19 May	Attend daily-up meeting 2	15 min	10 min
Thursday 20 May	Attend daily-up meeting 3	15 min	10 min
Thursday 20 May	According to milestone and schedule plan to check the process	30 min	30 min
Saturday 22 May	Sprint Review - showcase	30 min	30 min
Saturday 22 May	Sprint Retrospective	30 min	30 min
Saturday 22 May	Final presentation for business owner	30 min	30 min

**(full version is attached in the appendix)**

#### 4. Project Gantt Chart (full chart attached in Appendix)

	W21 24 - 30	W22 31 - Jun 6	W23 7 - 13	W24 14 - 20
As a customer logged in, I can view or ...	May 23	As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my b...		
As an admin user, I can view all Voucher...	May 23	As an admin user, I can view all Voucher_Booking request of all Voucher_Service_Types so that I ca...		
As an admin user, I can receive one em...	May 23	As an admin user, I can receive one email from the system after one customer cancel the booking.		
As a super admin, I want Admin, Custo...	May 23	As a super admin, I want Admin, Customer, Personal_Information, Biller_Information, Voucher_S...		

#### 5. Image of Kanban board

The screenshot shows a Jira Kanban board with the following structure:

- To do / 0:** Summary card: "To do / 0". Below it are two story cards:
  - "As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my b..." (Status: Working on it, Due Date: May 23)
  - "As an admin user, I can view all Voucher\_Booking request of all Voucher\_Service\_Types so that I ca..." (Status: Working on it, Due Date: May 23)
- Working on it / 2:** Summary card: "Working on it / 2". Below it are two story cards:
  - "As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my b..." (Status: Working on it, Due Date: May 23)
  - "As an admin user, I can view all Voucher\_Booking request of all Voucher\_Service\_Types so that I ca..." (Status: Working on it, Due Date: May 23)
- Done / 12:** Summary card: "Done / 12". Below it are two story cards:
  - "As a super admin user, I can have a pre-defined and system recognizable email username and a default ..." (Status: Done, Due Date: May 5)
  - "As an admin user, I can see 12 options for voucher service type so that I can add a new server to the ..." (Status: Done, Due Date: May 9)

#### 6. Sprint planning meeting outcomes

Item	1st half of meeting	2nd half of meeting
6.1	Customer booking cancel service function	One button for the link to cancel the booking
6.2	The admin part of view and accept the booking service	The UI should include the option to accept each booking

#### 7. Sprint review inputs and outcomes

##### I. Accomplishments for Week 11 (From 17/5/21 to 23/5/21)

- Complete customer booking cancel service function.
- Complete the admin part of view and accept customer booking information
- Test email functionality of customer
- Testing email functionality of the admin
- Complete unit test for each button, option, submit and feedback

## II. Plans for Week 11 (From 17/5/21 to 23/5/21)

- Complete customer booking cancel service function.
- Complete the admin part of view and accept customer booking information

## III. Issues

- None

## IV. Changes

- Change 1
  - Date: 19/5/21
  - Description: The limitation of the input type and request of initial password.

## **8. Low level task decomposition**

$T = \{T_1, T_2, \dots, T_q\}$ : task set need to be completed

$T_j = (j=1, 2, \dots, q)$ : subtask after task decomposition

$T_1$ : customers logged in can view or cancel all of their booking to modify or check their booking at any time.

$T_{j=1}$ : customers can view all of their booking.

$T_{j=2}$ : customers can cancel a Voucher\_Booking.

$T_2$ : admin user can view all Voucher\_Booking requests of all Voucher\_Service\_Types to check the information of all of the booking at any time.

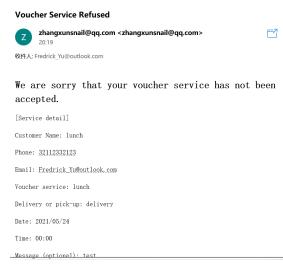
$T_3$ : admin user can receive one email from the system after one customer cancel the booking to view the information of the booking, customer and the booking cancellation message

Tj=3: admin user can receive one email from the system after one customer cancels the booking to view the information of the booking.

Tj=4: admin user can receive one email from the system after one customer cancels the booking to view the information of the customer.

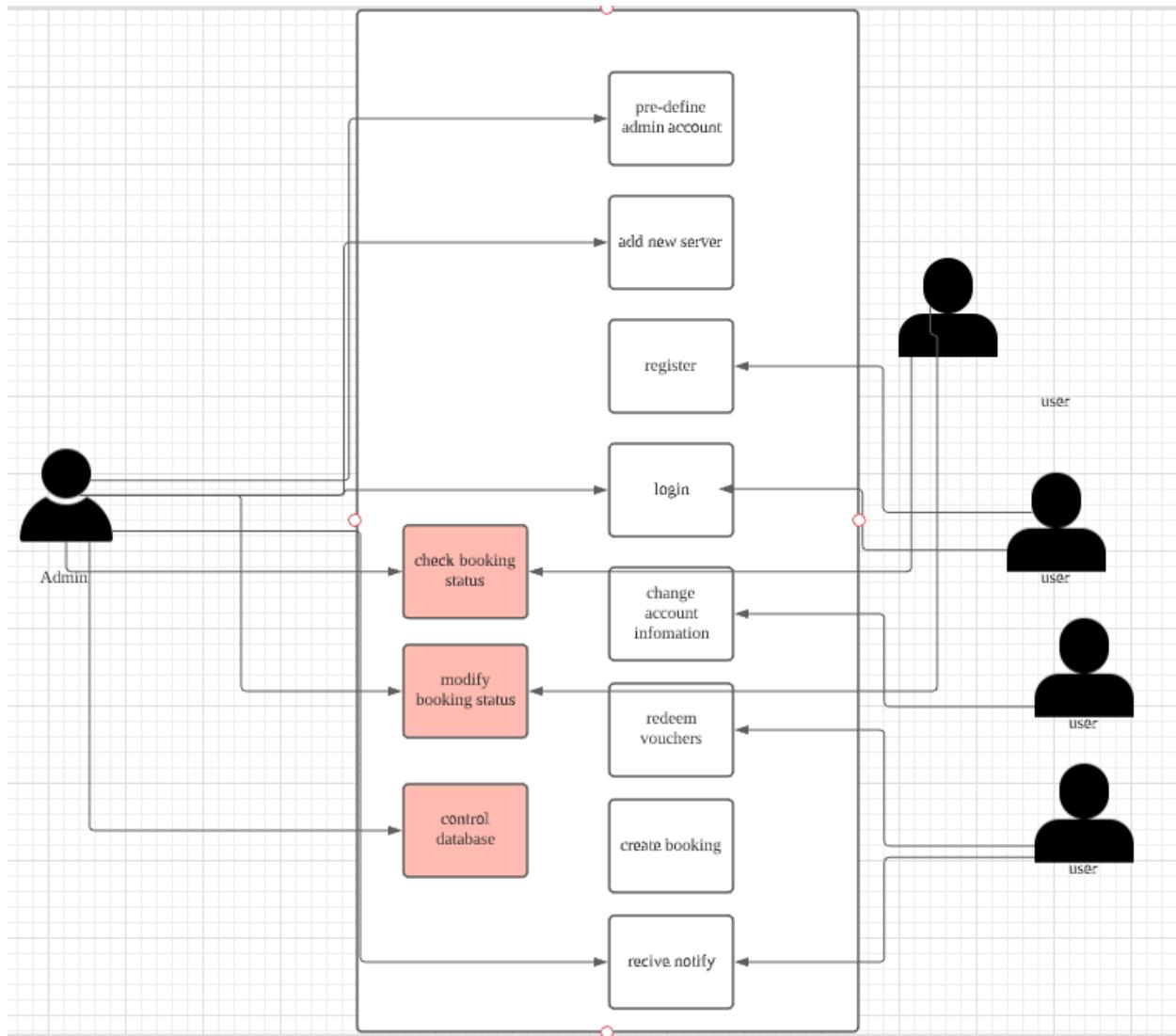
Tj=5: admin user can receive one email from the system after one customer cancels the booking to view the information of the booking cancellation message.

### 7.3.2 Product Related Artefacts

Requirement type	User requirement	Process	Outcome(by User Experience team member)
Voucher system	As a customer logged in, I can view or cancel all of my booking, so that I can modify or check my booking at any time	Complete	
Voucher system	As an admin user, I can view all Voucher_Booking request of all Voucher_Service_Types so that I can check the information of all of booking at any time	Complete	
Voucher system	As an admin user, I can receive one email from the system after one customer cancel the booking, so that I can view the information of the booking, customer and the booking cancellation message	Complete	
Voucher system	As a super admin, I want Admin, Customer, Personal_Information, Biller_Information, Voucher_Service_Type and Voucher_Booking	Complete	

	information persisted in the system so that I can check the information by view database		
--	--	--	--

**use case diagram**



### **7.3.3 Risk Monitoring and Control**

In week 11, the goal of the project is to complete the final modification and testing portion of the product. Some of the testing team members have already done contemporaneous testing during the development process, and they finish the final test this week after the functional integration.

So far, all the basic functions of this project have been completed, and the first five risks defined in the initial stage of development have not yet occurred this week. However, the latest risk defined in week 10 occurs. In our testing, the new risk defined in week 9 doesn't occur, but we can't make sure that it will not occur after putting it into real use.

At the same time, because of frequent communication, the rest of the development process is very smooth. However, since the front and back ends are independently developed, there is a conflict in the time format. Fortunately, this problem was discovered during the test and modified in time. After some adjustments, the developers completed all this project and passed the test successfully.

Therefore, we have not defined new risks at present.

## **8. After the project**

### **8.1 Project Retrospective**

In weeks 6 to 8, we begin to plan and schedule the project. We firstly carefully and precisely read the Case Study. We come to the conclusion that the project is unstable with the changeable requirements. The environment and source supplies remain at a low level. By the analysis of both of two main challenging characteristics, agile will be more suitable for this project. What's more, we determine the roles and responsibilities of each team member. After the meeting, our scrum master draws the Gantt chart. There was a recognition that utilizing some Web development framework is good enough to develop this project. There are some quite mature technologies, allowing the

technical team to choose, like Java, Python, php, etc, so that we started to collect some details to compare these technologies. Finally, we determined to use Java.

#### Team work:

Every team member exercises and improved communication skills, learns that how to organize a meeting, how to coordinate with team members in editing our google doc.

#### Technology choice:

This project is merely a Web development, rather than some high-tech research such as scientific calculation. Therefore, through many discussions, our team decides to use Java Web framework to develop.

#### Time & effort estimations:

We have planned the weekly sprints logically to ensure that each team member has a moderate daily workload and can successfully complete their tasks before the deadline. Although there appear some problems during the development process, we can find them at the first time in meeting and quickly solve them.

In week 9 to 11, we start to develop the project. In the beginning, we divide the whole project into 3 sprints which include 38 story points in total. Although some risks defined before the development have occurred, our team members found them in time then the solutions were found quickly. The entire developing process is very smooth so that all the basic functions of this project have been completed in week 11 and the project has passed the final test.

#### Team work:

We have learned how to organize an efficient meeting, where we quickly summarize the work done and assign every team member's next work properly. When we meet troubles in working, we put the problems to Wechat and discuss how to deal with them together.

#### Time&effort estimations:

We have planned the weekly sprints logically to ensure that each team member has a moderate daily workload and can successfully complete their tasks before the deadline. In conclusion, our team worked together happily with high efficiency. Everyone learned a lot from this project, such as communication skills, development ability etc. Meanwhile, we still have things we don't do well. For example, not every team member can participate in every meeting, so that our product owner has to spend more time communicating with him. However, in general, we enjoy our teamwork and successfully develop a project that meets all requirements of the customer.

#### 8.2 Teamwork reflection

Team Member	Role	Location	Development Goal	Motivation Drivers	How to apply motivational driver
Zhonghui Jiang	Coordinator	China	Express the requirements and decide the time and length of product development	Formal and easy to communicate	Sponsor Zhonghui in Melbourne Uni Masters program
Dingcheng Lu	Initiator	China	Sprint planning and review	Responsible and allocate sprints logically	Regular team meetings are effective and inclusive, and receive positive and supportive feedback

Qinyuan Su	Follower	China	Help developing the project	Appropriate workload	Allow 3 day per week work in line with Project activity
Xun Zhang	Follower	China	Detailed technical knowledge	Appropriate workload	Allow 3 day per week work in line with Project activity
Tianqi Yu	Follower	China	Detailed technical knowledge	Appropriate workload	Allow 3 day per week work in line with Project activity
Jialiang Cheng	Evaluator	China	Realize user experience	Understand users' opinions	Clear communication and get positive feedback

#### Team structures:

Because we choose Agile to develop this project, we have a product owner and a scrum team which includes a scrum master, a Subject Matter Expert, a User Experience professional, and two development team members. Each member has his own role in this team, and they must collaborate together. After the team's forming, we experienced a storming that two members have conflict point of views. But with a two-day discussion, they are on the same page. After this incident, every team member expressed their views actively in Wechat and meetings and the whole collaboration was very pleasant.

# **Appendix**

## **Meet Agenda**

Team *T11\_TEAM\_03* Agenda

Date

## **Meet Minutes**

Minutes

*Meeting of:* *T11\_TEAM\_03*

*Held at:* *Zoom Meeting (Online)*

*Date:* *Apr 13, 2021*

*Time:* *21:00 – 22:00*

Present:

Jiali Cheng, Zhonghui Jiang, Dingcheng Lu, Qinyuan Su, Xun Zhang, Tianqi Yu

Apologies:

[]

Approval of minutes

The minutes of this meeting have unanimously been approved

Agenda items

1. Read and analyze the assignment requirements

Allocate the tasks to each member

#### Action items

Action Item	Owner(s)	Deadline	Status
Decide the roles of each member and the sections each person should created	Dingcheng Lu Jialiang Cheng Zhonghui Jiang Xun Zhang Tianqi Yu Qinyuan Su	Apr 20, 2021	Assigned

#### Next meeting

The next general meeting will be at 20:00 on Apr 20, 2021 at Zoom(Online).

Minutes submitted by: Zhonghui Jiang

Approved by: Dingcheng Lu, Jialiang Cheng, Xun Zhang, Tianqi Yu, Qinyuan Su

## Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* Apr 15, 2021

*Time:* 14:30 – 15:30

### Present:

Dingcheng Lu/ Zhonghui Jiang

### Apologies:

[]

### Approval of minutes

The discussion about the key stakeholders

### Agenda items

## 1. Analysis of section 5.1

Decide the position and roles of stakeholders

### Action items

Action Item	Owner(s)	Deadline	Status
Decide the list of the key stakeholders	Dingcheng Lu, Zhonghui Jiang	Apr 16, 2021	Completed

### Next meeting

The next general meeting will be at 21:00 on Apr 20, 2021 at Zoom(Online).

Minutes submitted by: Zhonghui Jiang

Approved by: Dingcheng Lu

### Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* Apr 19, 2021

*Time:* 21:00 – 22:05

Present:

Dingcheng Lu/ Jialiang Cheng

Apologies:

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Approval of minutes

Final choice of SDLC switch from waterfall to agile.

Agenda items

1. Research on question 6.5

According to a sequencing of tasks to make an arrangement, then separate it into two sprints.

2. Implementation for question 6.5

Assign the signal task and search the relative tools for make up the blueprint for sprint planning and swimlane board representatively.

Action items

Action Item	Owner(s)	Deadline	Status
Burndown chart	Dingcheng Lu	Apr 21, 2021	In progress
Sprint backlog	Dingcheng Lu	Apr 21, 2021	In progress
Velocity	Jialiang Cheng	Apr 21, 2021	In progress
Swimlane board	Jialiang Cheng	Apr 21, 2021	In progress

## Next meeting

The next general meeting will be at 20:00 on Apr 20, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu, Jialiang Cheng

## Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom meeting

*Date:* 2021/4/20

*Time:* 3 p.m.-4 p.m.(CST)

### Present:

TianQi Yu

Xun Zhang

Apologies:

Everybody joined the meeting on time.

Approval of minutes

Most minutes of this meeting have unanimously been approved. However, the question about the language/framework which will be eventually used in the development has not been decided yet.

Agenda items

1. Analyzing Page 11 - Page 13 of the material more carefully, understand the basic requirement of the project. Task: make a basic development schedule, and decide which language and web framework should be used.
2. Reading question 6.4, investigating some development language and framework. Task: assigning the question 6.4 to two people to write

Action items

Action Item	Owner(s)	Deadline	Status
Decide which language and web framework should be used	Tianqi Yu, Xun Zhang	2021/4/21	Assigned
The question 6.4	Tianqi Yu, Xun Zhang	2021/4/21	Assigned

Next meeting

Not decided yet.

Minutes submitted by:

Tianqi Yu

Approved by: Xun Zhang

## Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* Apr 20, 2021

*Time:* 20:00 – 21:00

### Present:

Jialiang Cheng, Zhonghui Jiang, Dingcheng Lu, Qinyuan Su, Xun Zhang, Tianqi Yu

### Apologies:

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### Approval of minutes

The minutes of this meeting have unanimously been approved

### Agenda items

1. Discuss some questions about the part of project plan

Recognize some features of project and discuss the expected time to finish.

2. Discuss the executive summary

Modify the executive summary.

## Action items

Action Item	Owner(s)	Deadline	Status
Improve each section according to the group members' suggestion	Dingcheng Lu Jialiang Cheng Zhonghui Jiang Xun Zhang Tianqi Yu Qinyuan Su	Apr 23, 2021	In progress
Finish the executive summary	Zhonghui Jiang	Apr 23, 2021	completed

## Next meeting

The next general meeting will be at 20:00 on Apr 22, 2021 at Zoom(Online).

Minutes submitted by: Zhonghui Jiang

Approved by: Dingcheng Lu, Jialiang Cheng, Xun Zhang, Tianqi Yu, Qinyuan Su

## Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* Apr 21, 2021

*Time:* 21:00 – 21:30

### Present:

Dingcheng Lu/ Jialiang Cheng

### Apologies:

[]

### Approval of minutes

Select monday.com as our final tool for making up backlog and relative charts.

### Agenda items

1. Explore tools on the website to generate charts and templates of backlog  
As the brand-new users for the website, be familiar with how to utilise those tools to generate the charts as the first stage.

2. Make a consensus on some points of user stories  
In terms of different perspectives from different roles, we make a deal on the original distribution of attention or sources for the user stories.

### Action items

Action Item	Owner(s)	Deadline	Status

Burndown chart	Dingcheng Lu	Apr 21, 2021	In progress
Sprint backlog	Dingcheng Lu	Apr 21, 2021	Completed
Velocity	Jialiang Cheng	Apr 21, 2021	In progress
Swimlane board	Jialiang Cheng	Apr 21, 2021	Completed

#### Next meeting

The next general meeting will be at 21:00 on Apr 22, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu, Jialiang Cheng

## Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* Apr 22, 2021

*Time:* 20:00 – 21:00

### Present:

Jialiang Cheng, Zhonghui Jiang, Dingcheng Lu, Qinyuan Su, Xun Zhang, Tianqi Yu

### Apologies:

[]

### Approval of minutes

The minutes of this meeting have unanimously been approved

### Agenda items

1. Everyone shows and explained the sections they write

Identify some points that could be improved.

### Action items

Action Item	Owner(s)	Deadline	Status
Complete the project plan	Dingcheng Lu Jialiang Cheng Zhonghui Jiang Xun Zhang Tianqi Yu Qinyuan Su	Apr 22, 2021	Assigned

Next meeting

Have not decided yet

Minutes submitted by: Zhonghui Jiang

Approved by: Dingcheng Lu, Jialiang Cheng, Xun Zhang, Tianqi Yu, Qinyuan Su

Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* Apr 22, 2021

*Time:* 20:00 – 21:00

Present:

Jialiang Cheng

Apologies:

□

Approval of minutes

The minutes of this meeting have unanimously been approved

Agenda items

1. Explore tools on the website to generate charts and templates of backlog

As the brand-new users for the website, be familiar with how to utilise those tools to generate the charts as the first stage.

2. Make a consensus on some points of user stories.

In terms of different perspectives from different roles, we make a deal on the original distribution of attention or sources for the user stories.

Action items

Action Item	Owner(s)	Deadline	Status
Burndown chart	Dingcheng Lu	Apr 21, 2021	In progress
Sprint backlog	Dingcheng Lu	Apr 21, 2021	Completed
Velocity	Jiali Cheng	Apr 21, 2021	In progress
Swimlane board	Jiali Cheng	Apr 21, 2021	Completed

Next meeting

The next general meeting have not been decided yet

Minutes submitted by: Dingcheng Lu  
Approved by: Dingcheng Lu, Jialiang Cheng

Minutes submitted by: Dingcheng Lu  
Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03 (***stand up***)  
*Held at:* Zoom Meeting (Online)  
*Date:* May 4, 2021  
*Time:* 20:00 – 20:15

Present:  
Dingcheng Lu, Zhonghui Jiang, Xun Zhang, Tianqi Yu

Apologies:  
[]

Approval of minutes  
The frame for the overall system.

#### Agenda items

1. Determine the frame for developing.
2. Display the page after customers login

#### Action items

Action Item	Owner(s)	Deadline	Status
Page after login	Tianqi Yu	May 5, 2021	In progress

## Next meeting

The next general meeting will be at 21:00 on May 5, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03 (***stand up***)

*Held at:* Zoom Meeting (Online)

*Date:* May 5, 2021

*Time:* 20:00 – 21:00

## Present:

Dingcheng Lu, Zhonghui Jiang, Xun Zhang, Tianqi Yu

## Apologies:

[]

## Approval of minutes

The priority of customers being able to modify personal and billing information switched from high to medium

## Agenda items

1. Update the page for Personal\_Information
2. Storage of customer information and the view page for the admin

#### Action items

Action Item	Owner(s)	Deadline	Status
UI for Personal_Information	Tianqi Yu	May 6, 2021	In progress
Storage information in the admin	Xun Zhang	May 4, 2021	Completed

#### Next meeting

The next general meeting will be at 21:00 on May 6, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03 (**stand up**)

*Held at:* Zoom Meeting (Online)

*Date:* May 6, 2021

*Time:* 20:00 – 21:00

Present:

Dingcheng Lu, Zhonghui Jiang, Xun Zhang, Tianqi Yu

Apologies:

[]

Approval of minutes

The priority of customers being able to modify personal and billing information switched from high to medium

Agenda items

1. According the schedule planning, check the working process

Action items

Action Item	Owner(s)	Deadline	Status
Check milestone and KanBan	Dingcheng Lu	May 6, 2021	In progress
Allocate the workload for next sprint	Dingcheng Lu	May 6, 2021	Completed

Next meeting

The next general meeting will be at 21:00 on May 8, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

Minutes

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* May 8, 2021

*Time:* 20:00 – 21:00

Present:

T11\_TEAM\_03

Apologies:

[]

Approval of minutes

The showcase of first stage approved

Agenda items

1. Demonstrate the process of customer register and login without exception
2. Feedback for this sprint and confirm the scope for the next sprint
3. Sprint retrospective

## Action items

Action Item	Owner(s)	Deadline	Status
Booking Voucher service	Xun Zhang	May 11, 2021	In progress
Email function	Xun Zhang	May 11, 2021	In progress

## Next meeting



Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03 (**stand up**)

*Held at:* Zoom Meeting (Online)

*Date:* May 11, 2021

*Time:* 20:00 – 20:15

## Present:

Dingcheng Lu, Zhonghui Jiang, Xun Zhang, Tianqi Yu

## Apologies:



## Approval of minutes

The due time of customers' email functionality changed.

## Agenda items

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## Action items

[]

## Next meeting

The next general meeting will be at 21:00 on May 12, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03 (***stand up***)

*Held at:* Zoom Meeting (Online)

*Date:* May 12, 2021

*Time:* 20:00 – 21:00

## Present:

Dingcheng Lu, Zhonghui Jiang, Xun Zhang, Tianqi Yu

## Apologies:

[]

## Approval of minutes

The priority of customers being able to modify personal and billing information switched from high to medium

Agenda items

[]

Action items

[]

Next meeting

The next general meeting will be at 21:00 on May 13, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03 (**stand up**)

*Held at:* Zoom Meeting (Online)

*Date:* May 13, 2021

*Time:* 20:00 – 21:00

Present:

Dingcheng Lu, Zhonghui Jiang, Xun Zhang, Tianqi Yu

Apologies:

[]

Approval of minutes

[]

Agenda items

1. According the schedule planning, check the working process

## Action items

Action Item	Owner(s)	Deadline	Status
Check milestone and KanBan	Dingcheng Lu	May 13, 2021	In progress
Allocate the workload for next sprint	Dingcheng Lu	May 13, 2021	Completed

## Next meeting

The next general meeting will be at 21:00 on May 15, 2021 at Zoom(Online).

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu

*Meeting of:* T11\_TEAM\_03

*Held at:* Zoom Meeting (Online)

*Date:* May 15, 2021

*Time:* 20:00 – 21:00

Present:

T11\_TEAM\_03

Apologies:

□

Approval of minutes

The showcase of second stage approved

Agenda items

1. Demonstrate the email functionality and booking service without exception
2. Feedback for this sprint and confirm the scope for the next sprint
3. Sprint retrospective

Action items

Action Item	Owner(s)	Deadline	Status
Booking Voucher service	Xun Zhang	May 11, 2021	Completed
Email function	Xun Zhang	May 11, 2021	Completed

Next meeting

□

Minutes submitted by: Dingcheng Lu

Approved by: Dingcheng Lu