

Project Progress Report 1 Checklist

1. Title of the project. (5%)

MUST Graduate Application Forum

2. Team Members (Name and ID in English). (5%)

- Workload Distribution/Contribution.
 - Mark down the checklist number beside the member's info.

Information of Team Members

Cao Yulong, Student ID: 19090853C-I011-0017

Chen Rui, Student ID: 19098533-I011-0171

Lu Jie, Student ID: 19098533-I011-0085

He Xinyi, Student ID: 1909853G-I011-0070

Work Distribution

Cao Yulong: Code for user story (1) ~ (5), points 6, 7 in report, Jira management for one week

Chen Rui: Code for user story (3), points 3, 4, 5, 6, 7 in report, Jira management for one week

Lu Jie: Code for user story (4), points 1, 3, 6, 7, 8 in report, Jira management for one week

He Xinyi: Code for user story (2), points 2, 3, 4, 6, 7 in report, Jira management for one week

More specific work distribution can be seen in the Daily Scrum records (point 6 in report).

3. Derive/Discover Product Backlog and list them in JIRA+Scrum. (40%)

- List & prioritize the task-level details to execute your project. (30%)
 - List the User Stories with Acceptance Criteria. (20%)
 - Prioritize/divide the user stories into 3 Sprints. (10%)

To complete this project, we divide our task through several user stories. And according to the complexity of the implementation and the request of our project, we divided these user stories into 3 sprints and the priority is marked for the execution of each user story in the sprint [7].

In the sprint 1, we mainly built and set up the environment required by the project, built and improved the main page and login page of the forum, and also made a preliminary design for the post function of the forum. Therefore, in print 1, the user stories are included:

(1)Main Page

As a user, I want to be able to go to the home page of MUST Graduate Application Forum so that I can know and access a series of functions provided by the forum.

Acceptance Criteria

1. There will be a navigation bar on the left side of the home page, which contains the options of Latest Posts, Offers Overview, Notifications and Account Management.
2. If the user hasn't registered, there will be one reminder sign showing as "Sign up free", which is a hyperlink to the registration page.
3. If the user has registered, the current user account sign will be shown as "Logged in as xxx" if, which is also a hyperlink to the user account management page.
4. The latest Posts stream will be shown on the main part of the page.

Priority: High

(2)Registration

As an unregistered user, I want to register so that I can access more functions provided by the forum.

Acceptance Criteria

The registration page should provide the new user with a registration button.

1. The registration page contains a form with the following fields:
 - Enter username option
 - Enter password option
 - Submit button
 - Filling all the fields in the form and submitting the registration page form correctly will create a new account
2. Incorrect input of user information will cause an alert message which reminds that the username or password is wrong

3. Correct input will lead to a new page with successful registration information
4. New users can successfully log in to the system by using the account after registering

Priority: High

(3) Login

As a registered user, I want to login with my username and password so that I can access a series of functions provided on the website.

Acceptance Criteria

1. The login page contains a form with the following fields:
 - Enter username option
 - Enter Password option
 - Submit button
2. Enter the registered username and password and click the “log in” button correctly, then the user will access the website
3. Incorrect input of user information will prompt error messages that specify which username or password was wrong
4. Correct input will prompt successful login information

Priority: High

(4) Post Text

As a registered user, I want to post my experience with text so that we can help others understand the information of applying.

Acceptance Criteria

1. The page should contain these elements:
 - Form to be written with text
 - Post button
2. Users can post the text after pressing the post button
3. Posts sent by users can be seen by others

Priority: Medium

(5) Tag the Post

As a registered user, I want to tag my post when I post information so that I can make it more distinctive and help users with specific needs.

Acceptance Criteria

1. This page should have an “add label” button
2. The tag will be below the post when seeing the posts

Priority: Low

When we have completed these basic designs in sprint 1, we will work on sprint 2. In sprint 2, we will gradually improve the function of posting such as like or comment, and also add some design of management permissions. Therefore, in sprint 2 stage, our main work revolves around the following user stories:

(6) Offer Information Sharing

As a registered user, I want to upload my offer related information so that it can be provided to other users in need.

Acceptance Criteria

1. This page contains a form with the following fields:
 - Offer picture upload button
 - Fill in all information boxes of offer, such as country, University, GPA, etc
 - Save button
2. After clicking the Save button, the offer display page can display the relevant information about this offer

Priority: High

(7) Admin Management

As an admin, I want to have several permissions so that I can better manage the forum.

Acceptance Criteria

1. The admin can be logged in with an admin account and have multiple admin permissions
2. Some illegal or inappropriate information in the forum can be deleted permanently by pressing the “Delete” button
3. The users who have posted lots of inappropriate information can be blocked by the admin temporally or permanently by setting the time duration.

Priority: High

(8) Password Reset

As a registered user, I can reset my password so that if I forget my password, I still have a chance to reset the password and have access to the forum

Acceptance Criteria

1. The users can choose an authentication question with their answer when registering or in Account Management.
2. The Login page provides user with an option of “Forgot my password”, which is a hyperlink to the password resetting page.
3. The password resetting page includes a form with fields of username, corresponding authentication question, answer, and the new password the user wants to be set.
4. An incorrect answer will cause an alert message which reminds that the authentication failed
5. A right answer will lead to a new page with new password information

Priority: Medium

(9) Comment on Others’ Post

As a registered user, I want to comment on other people's posts so that I can learn more relevant information from the sender.

Acceptance Criteria

1. The page should have a form to write the comment with a submit button and a delete button
2. Users can comment on other people's posts by pressing the submit button
3. Users can delete their comments by pressing the delete button

Priority: Medium

(10) Post Picture

As a registered user, I want to post my experience with pictures in order to help others understand the information of applying.

Acceptance Criteria

1. The page should contain these elements:
 - A place where pictures can be selected and uploaded from the photo library of the system
 - Post button
2. Users can post the pictures after pressing the post button

3. Posts sent by users can be seen by others

Priority: Low

(11) Give Likes to Others' Posts

As a registered user, I want to give a like to other people's posts so that I can express that this post is very helpful to me.

Acceptance Criteria

1. The page should have a like button
2. Users can give a like to other people's posts by pressing the like button
3. Users can cancel the like by pressing the like button again

Priority: Low

In sprint 3, in order to further realize the needs of the forum, we need to add a search function and a feedback function for the like and comment records to the posts, so that the users can find the content they need more quickly, and make the poster more clearly know the state of the post currently. Thus, in the sprint 3 stage, our work mainly expands from the following user stories:

(12) Change Personal Information

As a registered user, I want to change my personal information so that I can update my personal information at any time.

Acceptance Criteria

1. This page contains a form with the following fields:
 - Personal information before modification
 - Modify button
 - Save button
2. After saving, the personal information should be consistent with the modified content

Priority: High

(13) Set or Change Profile Photo (Child issue of Change Personal Information)

As a registered user, I want to change my profile photo so that I can show my personality and memorize better.

Acceptance Criteria

1. The profile photo can be set or changed after registration
2. The changing page contains the following fields:
 - A place where a photo can be selected and uploaded from the photo library of the system
 - Save button
4. After saving, the profile photo can be seen by any person in the forum.

Priority: High

(14) Search by Tags

As a registered user, I want to select tags to search for specific posts so that I can get more targeted information.

Acceptance Criteria

1. This page contains a form with the following fields:
 - Box for entering tags
 - Search button
2. After clicking the search button, the posts with tags will be displayed

Priority: Medium

(15) Search by Keywords

As a registered user, I want to enter keywords to search for specific posts so that I can get more targeted information.

Acceptance Criteria

1. This page contains a form with the following fields:
 - Box for entering keywords
 - Search button
2. After clicking the search button, the posts with keywords will be displayed

Priority: Low

(16) Search Offers

As a registered user, I want to enter keywords to search for specific offers so that I can get more targeted information about offers.

Acceptance Criteria

1. This page contains a form with the following fields:

- Drop down boxes for country, university, etc.
 - Search button
2. After clicking the search button, offers with qualifying conditions will be displayed

Priority: Low

(17) Receive Feedbacks

As a registered user, I want to receive feedback from likes and comments so that I can understand the situation and reply to the inquirer.

Acceptance Criteria

1. The page should show the specific reply received
2. The page should show the inquirer
3. This page contains a form with the following fields:
 - Like message summary
 - Comment message summary

Priority: Lowest

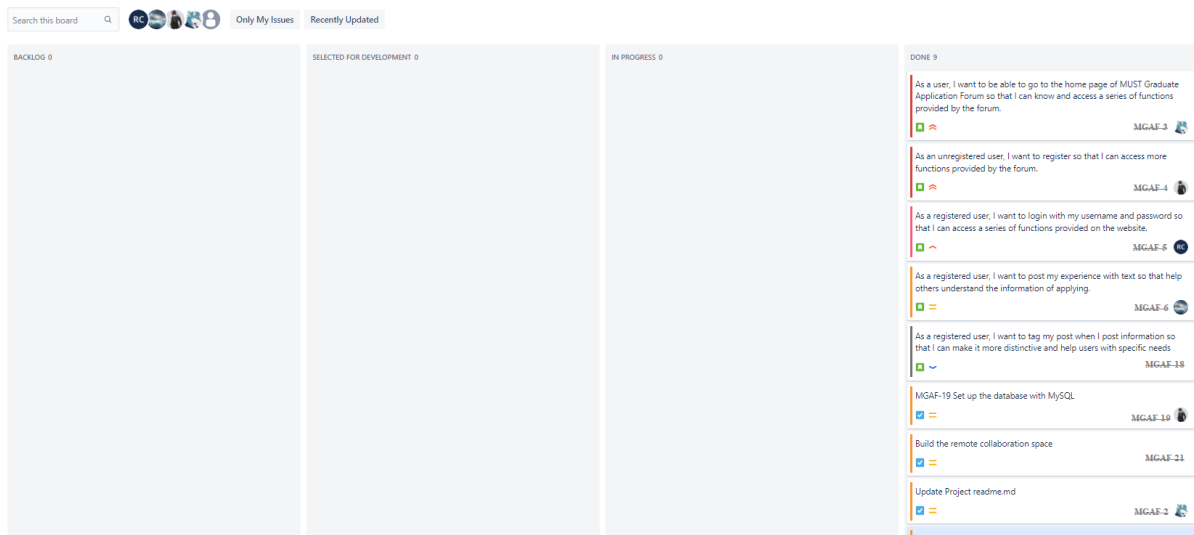
- You can simply export the issues as an **CSV** file (**Export Excel CSV (all fields)**) from JIRA and include them in your report. (10%)

The CSV files will be attached with this report named as '*JIRA_CSV.csv*'.

4. Consider Sprint1 as the Minimum Viable Product (MVP) and the MVP as of version 1. Implement Sprint1 as MVP and Release it as version 1 of your project. (10%)

- Show the workflow/progress as a Software Development project in JIRA Scrum. (5%)
 - You are asked to attach print screens of the workflow (**Active sprints**) in the report.

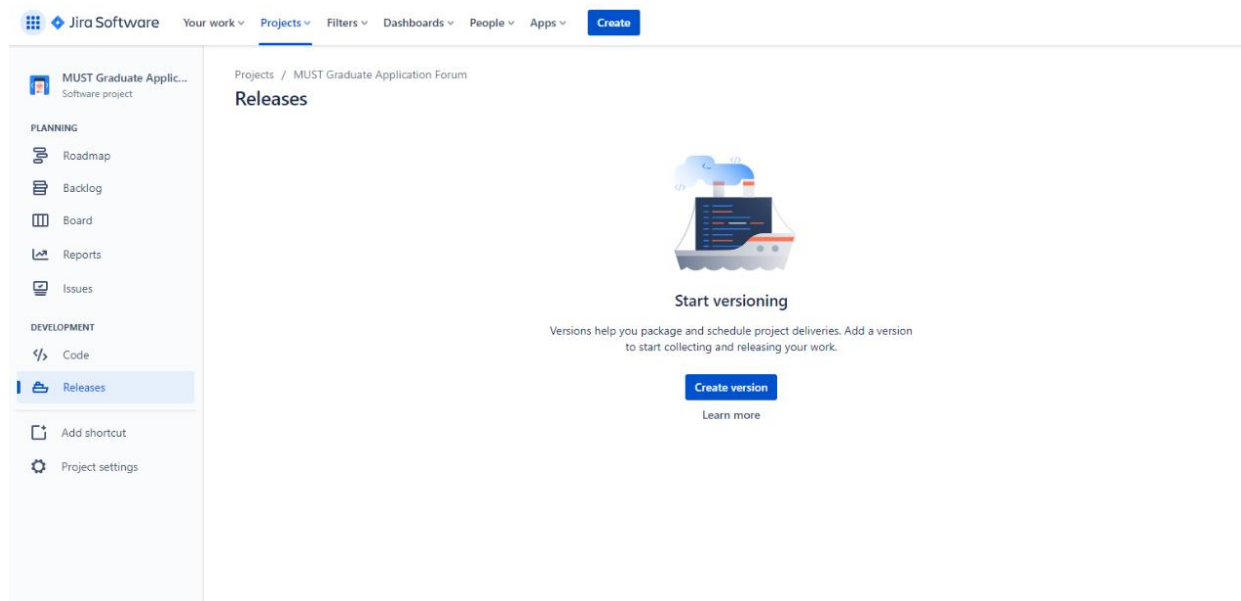
The following figure shows the workflow after sprint1 is completed:



- Show the steps of creating a version and releasing the version in JIRA+Scrum. (5%)
 - You are asked to attach print screens of the steps in the report.

Create a version

Step1: Click on the Releases link, the screen appears as below [6]:



Step 2: Click on the Create version button. We implement Sprint 1 as MVP and release it as version 1.1 so it has the same start and end time of sprint 1. The creation information of Version1.1 is as follows [6]:

Create version

Name *

MUST Graduate Application Forum v1.1

Start Date

3/27/2022

×

Release date

4/17/2022

×

Description

This is our first version of MUST Graduate Application I

Save

Cancel

Releases

 Give feedback

Unreleased ▾

Create version

Version ▾	Status	Progress	Start date ▾	Release date ▾	Description ▾	
MUST Graduate Application Forum v1.1	UNRELEA...	<div></div>	Mar 27, 2022	Apr 17, 2022	This is our first version of MUST Graduate Application Forum. We have realized the functions of login, registration, homepage and posting in sprint 1.	Release ...

Release the version

We add issues in sprint 1 to version 1 of our project, as shown in the figure, version 1 is expected to be released on April 17 [6].

This is our first version of MUST Graduate Application Forum. We have realized the functions of login, registration, homepage and posting in sprint 1.

4 days left

Warnings Issues in version Issues done Issues in progress Issues to do

Issue	Assignee	Status	Development
MGAF-3 As a user, I want to be able to go to the home page of MUST Graduate Application Forum so that I can know and access a series of funct...	Yulong Cao	DONE	1 commit
MGAF-4 As an unregistered user, I want to register so that I can access more functions provided by the forum.	Rona He	DONE	1 commit
MGAF-5 As a registered user, I want to login with my username and password so that I can access a series of functions provided on the website.	Rui Chen	DONE	3 commits
MGAF-1 Create and Link GitHub Repository to Jira	Yulong Cao	DONE	
MGAF-2 Update Project readme.md	Yulong Cao	DONE	1 branch
MGAF-6 As a registered user, I want to post my experience with text so that help others understand the information of applying.	Lu Jie	DONE	2 commits
MGAF-20 Set up the environment for the project	Unassigned	DONE	1 commit
MGAF-21 Build the remote collaboration space	Unassigned	DONE	
MGAF-24 Set up the database with MySQL	Rona He	DONE	2 commits
MGAF-18 As a registered user, I want to tag my post when I post information so that I can make it more distinctive and help users with specific ne...	Yulong Cao	DONE	3 commits

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- You are also asked to present your work (**source code**) during the presentation.

Here is the Github link of our source code:

<https://github.com/NatsumeRyuhane/CS360-GroupProj>

NatsumeRyuhane / CS360-GroupProj Public

Code Pull requests Actions Security Insights

main 1 branch 0 tags
Go to file Add file Code

[chore] add IDE build files to VCS; file cleanup 1ed3e33 1 hour ago 38 commits

.idea	[chore] add IDE build files to VCS; file cleanup	1 hour ago
app	MGAF-5 [feat] implemented login function	1 hour ago
documentation	[chore] add IDE build files to VCS; file cleanup	1 hour ago
tests/utlis	[chore] add IDE build files to VCS; file cleanup	1 hour ago
venv	[wheel] add venv to VCS	3 days ago
LICENSE	Initial commit	last month
README.md	MGAF-2 [docs] update readme.md	last month

README.md

CS360-GroupProj

About

[Project description WIP]

Commit Style Guidelines

Note: GitHub supports markdown style rendering in commit messages. You may consider to use them to improve the readability of your commit.

The recommended commit style is shown as follows:

```
<jira-issue-key> [type]<scope> <subject> # This line is called as HEADER
# Blank line
<body>
# Blank line
<footer>
```

About

No description, website, or topics provided.

Readme

GPL-3.0 License

0 stars

1 watching

0 forks

Releases

No releases published

[Create a new release](#)

Packages

No packages published

[Publish your first package](#)

Contributors 4

NatsumeRyuhane Ryuhane

Rona-dt Rona He

coocoding CRRRRRR

Languages

Python 89.1% JavaScript 10.5%

CSS 0.1% Shell 0.1% C 0.1%

HTML 0.1%

The following picture shows the file structure of our project:

```
[natsumeryuhane@Ryuhane-MBP Group Project] % tree
```

```
.
├── LICENSE
├── README.md
├── __pycache__
├── app
│   ├── __pycache__
│   │   ├── init.cpython-37.pyc
│   │   └── user.cpython-37.pyc
│   ├── app.py
│   ├── data
│   ├── init.py
│   ├── posts.py
│   ├── sounds
│   ├── static
│   │   ├── css
│   │   │   ├── colors.css
│   │   │   ├── function-page.css
│   │   │   ├── index.css
│   │   │   └── login.css
│   │   ├── images
│   │   │   └── img.png
│   │   ├── js
│   │   │   ├── jquery-3.6.0.js
│   │   │   └── vue.js
│   │   └── sql
│   │       └── init.sql
│   ├── templates
│   │   ├── index.html
│   │   ├── login.html
│   │   └── new-page-template.html
│   └── user.py
├── documentation
│   ├── notes.md
│   └── presentation\ 1
│       ├── Frontend\ Demo
│       │   ├── css
│       │   │   └── index.css
│       │   ├── images
│       │   │   └── img.png
│       │   ├── index.html
│       │   ├── js
│       │   │   ├── jquery-3.6.0.js
│       │   │   └── vue.js
│       │   └── User\ story.docx
│       └── proposal_pre.pptx
├── tests
│   └── utils
│       └── data_generation.sql
└── venv
```

5. Show the workflow/status/progress of your project using Burndown Chart, Burnup Chart, Sprint Report, Velocity Report. (15%)

- You can simply export the Burndown Chart, Burnup Chart, Sprint Report, Velocity Report from JIRA+Scrum and attach them to your report. Finally, explain them and identify the loopholes/impediments in your project (if any).

- You are also asked to present the project-related Burndown Chart, Burnup Chart, Sprint Report, Velocity Report directly from your JIRA+Scrum during the presentation.

Burnup Chart

It displays the Burndown chart of the sprint1 like how our team is progressing towards the committed task. The red line displays how much work we remaining in the form of story points. As can be seen from the figure, we have set a total of 22 story points and issue count 10 in sprint1. The green line shows the completed tasks as a form of story points, which reaches the same point with the red one. Finally, from March 26 to April 13, we completed all the tasks of sprint 1 and our completion speed is slightly faster than the ideal burn rate [2].

Burnup report

[How to read this repo](#)



Note: The report will be attached named as '*Burnup report.pdf*'.

Burndown Chart

Sprint burndown chart uses red line to indicate the number of story points left to complete in sprint 1. Our task has been completed on April 13, which also a little faster than the ideal burn rate at the later stage [3].

Sprint burndown chart

[How to read this repo](#)



Note: The report will be attached named as '*Sprint burndown report.pdf*'.

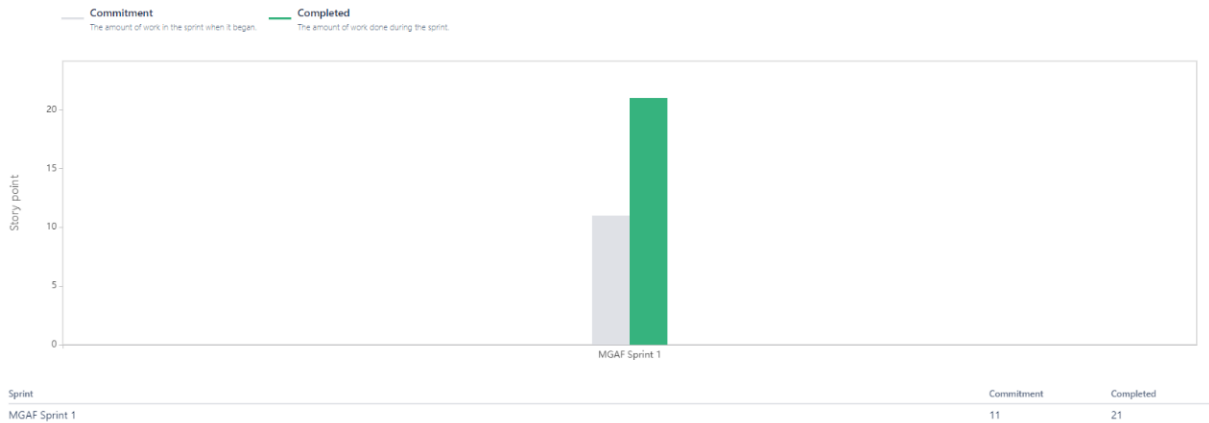
Sprint Report

Our sprint report will be attached with this report. The report shows a series of relevant information about the issue, including all issue type, the change in estimation of story point and the issues we have already completed. In total, we completed 22 story points in this sprint and sprint commitment has increased by 11 story points [4].

Note: The report will be attached named as '*Sprint burndown report.pdf*'.

Velocity Report

In this report, we can see that y-axis displays the statistic used for story points while x-axis shows the sprint we have completed. The grey columns show the work we need to commit, which is 11. At the same time the green column shows the completed work, whose number is equal to 21. The reason why the numbers are not equal is that we created some tasks with story points in sprint 1, and this part is not included in the report as a commitment [5].



Note: The report will be attached named as '*Velocity Report.pdf*'.

For this project, first of all, we have encountered the same problem in both burnup chart and burndown chart. Since the issue was not divided into sprints when it was initially created, there was a large sudden drop in the work scope part of each sprint chart after the subsequent sprints, which made our report seem to have some problems.

Secondly, in the process of executing the issue, we found that the distribution of some user stories in the sprint is unreasonable, or there is redundancy or lack of functions. Thus, we modified the issues created, resulting in floating of the existing story points.

Finally, we have some shortcomings in controlling the completion speed of team project, resulting in a large gap in the speed before and after the tasks. As can be seen from the figure, our work completion speed shows a downward trend from slow to fast our completion speed.

6. Summary of Sprint1 Daily Scrums. (10%)

Our Daily Scrum is mainly focused on these three questions:

- What did you do yesterday?
- What are doing today?
- Is there anything blocking you?

We have made a brief record of each meeting, which is summarized by table as follows:

DAILY SCRUM (3.23-3.25)				
Team member	Question	Wednesday	Thursday	Friday
Cao Yulong	What did you do yesterday?	——	Discuss contents of user stories	Evaluate the feasibility of
	What are doing today?	Discuss contents of user stories	Evaluate the feasibility of designed functions	Getting familiar with HTML, CSS and Javascript
	Is there anything blocking you?	Hard to find out all the possible functions	Not sure if the designed function can be completed	——
He Xinyi	What did you do yesterday?	——	Discuss contents of user stories	Modify the user stories
	What are doing today?	Discuss contents of user stories	Evaluate the feasibility of designed functions	Divide the user stories into sprints.
	Is there anything blocking you?	Hard to find out all the possible functions	Not sure if the designed function can be completed	Hard to evaluate the progress
Chen Rui	What did you do yesterday?	——	Discuss contents of user stories	Discuss details of user stories, familiar with python
	What are doing today?	Discuss contents of user stories	Discuss details of user stories, familiar with python	Git configuration
	Is there anything blocking you?	Hard to define user stories	Not familiar with some knowledge of python	Not familiar with some knowledge of git
Lu Jie	What did you do yesterday?	——	Discuss contents of user stories	Discuss details of user stories
	What are doing today?	Discuss contents of user stories	Discuss details of user stories, familiar with python	Git configuration
	Is there anything blocking you?	Hard to define user stories	Not familiar with some knowledge of python	Not familiar with some knowledge of git

DAILY SCRUM (3.28-4.1)						
Team member	Question	Monday	Tuesday	Wednesday	Thursday	Friday
Cao Yulong	What did you do yesterday?	Familiar with Flask	Familiar with Flask	Writing home page layout code	Writing home page frame code	Writing codes of home page layout and style
	What are doing today?	Familiar with Flask	Writing home page layout code	Writing home page frame code	Writing codes of home page layout and style	Build the remote collaboration space
	Is there anything blocking you?	——	——	Bugs in code	——	Bugs in code
He Xinyi	What did you do yesterday?	Modify the user stories and sprints	Jira management	Familiar with HTML, CSS	Writing summary about daily meeting; Prioritize the issues in Jira	Getting familiar with Flask
	What are doing today?	Jira management	Familiar with HTML, CSS	Prioritize the issues in Jira	Getting familiar with Flask	Writing codes of home page layout and style
	Is there anything blocking you?	Not quite familiar with the fuctions in Jira	Not familiar with some of HTML, CSS knowledge	——	Flask is hard to understand	Bugs in code
Chen Rui	What did you do yesterday?	Modify the user stories and sprints	Create and link issues in Jira	Familiar with HTML, CSS	Prioritize the issue in Jira	Writing summary about daily meeting; Getting familiar with Flask
	What are doing today?	Create and link issues in Jira	Familiar with HTML, CSS	Prioritize the issue in Jira	Getting familiar with Flask	Writing codes of home page layout and style
	Is there anything blocking you?	——	Not familiar with some of HTML, CSS knowledge	——	Flask is hard to understand	Bugs in code
Lu Jie	What did you do yesterday?	Jira management	Make team learning plan	Getting familiar with Flask	Getting familiar with Flask	Familiar with Flask
	What are doing today?	Make team learning plan	Getting familiar HTML, CSS	Getting familiar with HTML, CSS	Familiar with Flask	Writing summary about daily meeting
	Is there anything blocking you?	——	Not familiar with some of HTML, CSS knowledge	Flask is hard to understand	Flask is hard to understand	——

DAILY SCRUM (4.4-4.8)						
Team member	Question	Monday	Tuesday	Wednesday	Thursday	Friday
Cao Yulong	What did you do yesterday?	Implementation of flask application server; Refactor project file structure	Finish home page code; fix the wrong assets	Writing login page frame code	Writing code of login and resigter page layout and style	Improve login and resigter page code
	What are doing today?	Improve home page code; fix the wrong assets	Writing login and register page frame	Writing code of login and resigter page layout and style	Improve login and resigter page code	Writing code of login page layout and style
	Is there anything blocking you?	The layout of home page is not stable	——	Some code bugs in the register page	——	——
He Xinyi	What did you do yesterday?	Writing summary about daily meeting	Build the remote collaboration space	Writing project progress report	Writing project progress report	Writing code of login and resigter page layout and style
	What are doing today?	Build the remote collaboration space; adjust sprint allocation in Jira	Writing project progress report	Writing project progress report	Writing code of login and resigter page layout and style	Improve login and resigter page code
	Is there anything blocking you?	Collaboration mode cannot run code	——	——	Hard to decide the colour of login page	Pycharm's remote collaboration is unstable
ChenRui	What did you do yesterday?	Jira management	Writing summary about daily meeting	Writing project progress report	Writing summary about daily meeting	Writing code of login and resigter page layout and style
	What are doing today?	Build the remote collaboration space; Writing summary about daily meeting	Writing project progress report; adjust sprint allocation in Jira	Writing project progress report	Writing code of login and resigter page layout and style	Improve login and resigter page code
	Is there anything blocking you?	Collaboration mode cannot run code	——	——	Pycharm's remote collaboration is unstable	Pycharm's remote collaboration is unstable
LuJie	What did you do yesterday?	Writing codes of home page layout and style	Improve home page code; fix the wrong assets	Writing summary about daily meeting	Writing project progress report	Writing code of login and resigter page layout and style
	What are doing today?	Improve home page code; fix the wrong assets	Writing project progress report; Writing summary about daily meeting	Writing project progress report	Writing code of login and resigter page layout and style	Improve login and resigter page code
	Is there anything blocking you?	The layout of home page is not stable	——	——	Pycharm's remote collaboration is unstable	Pycharm's remote collaboration is unstable

DAILY SCRUM (4.11-4.13)				
Team member	Question	Monday	Tuesday	Wednesday
Cao Yulong	What did you do yesterday?	Update project information,	Code for post function; Writing project progress report	Code for post function and adding tag function
	What are doing today?	Code for post function; Writing project progress report	Code for post function and adding tag function	Code for adding tag function; meeting about sprint2
	Is there anything blocking you?	——	——	Lack of ideas for user feedback function
He Xinyi	What did you do yesterday?	Jira management	Set up the database with MySQL	Writing summary about daily meeting
	What are doing today?	Set up the database with MySQL	Writing summary about daily meeting; Writing project progress report	complete sprint1; meeting about sprint2
	Is there anything blocking you?	——	——	Lack of ideas for user feedback function
ChenRui	What did you do yesterday?	Jira management	Improve post function	Writing project progress report
	What are doing today?	Writing project progress report	Writing project progress report	Writing summary about daily meeting; complete sprint1; meeting about sprint2
	Is there anything blocking you?	——	——	Lack of ideas for user feedback function
LuJie	What did you do yesterday?	Writing summary about daily meeting	Writing project progress report	Improve post function
	What are doing today?	Writing project progress report	Writing project progress report	complete sprint1; meeting about sprint2
	Is there anything blocking you?	——	——	Lack of ideas for user feedback function

Through the form of Daily Scrum, we synchronize the progress between teams and solve the problems encountered by the team in the project. In general, we determine the project-related user stories in the first week (3.23-3.25), clarify the project functions and acceptance criteria. In the second week (3.28-4.1), we are familiar with the tools we will use in the project and complete the code writing of the home page, in the third week (4.4-4.8) we complete the writing of the login and registration pages and started writing the project report. In the fourth week (4.11-4.12) we completed the post function, tag function and prepared for the connection

of the backend. So far, with teamwork, we have completed the required function points for sprint1 and plan to start some functions in sprint2.

7. What are the challenges you encountered while working with JIRA+Scrum? How did you address the challenges? (10%)

- (1) **Challenge:** Jira cannot view the completed sprints with the included issues separately, only all the completed issues can be seen from reports and JIRA cannot review the workflow of the completed sprints.

The way to solve: We need to establish and clarify a good project management process, count the relevant team project information after all issues in each sprint are done, and then choose “complete sprint”. But if there is an operation sequence error, we have not found a good solution right now.

- (2) **Challenge:** Jira has adopted a rather unconventional model that allows multi-repository development to a particular project, which we were not very familiar with in our past history.

The way to solve: we read the official documents and learn the working system of Jira, so as to be familiar with and master the working system of Jira.

- (3) **Challenge:** Due to the lack of understanding of permission control in Jira, we also encounter some difficulties in installation of the GitHub plug-in in our Jira project

The way of solve: we read the official documents [1], tested and experiments with some test projects that allows us to finally learned how to configurate the Jira correctly.

- (4) **Challenge:** Because some issues are more complex, it may require several team members to submit code on one issue, which makes it impossible to determine who made the issue.

The way to solve: we solve this problem by holding Daily Scrum so as to increase the communication between team members. Every day, team members communicate with each other about their work, so that other team members can better understand the progress of some complex issues and what they need to do next.

- (5) **Challenge:** When we initially created the issue, we didn't make a plan to divide the sprints, so we choose to divide all issues into sprint1. In the follow-up, we discussed and divided the sprint according to the difficulty and other factors, and synchronized them to Jira. However, the relevant reports generated show the situation when the sprints are not divided. Therefore, there is a large upward and downward trend in the previous stage of our report.

The way to solve: Due to the lack of experience in using Jira, we should put the issues into backlog when the sprints are not divided, and then drag them into the corresponding sprints.

8. References (5%)

- Relevant references and cite the referred papers/articles/portals in your writing as in the academic papers.

[1] Jira producers. (2018, January 9). *Jira Documentation*, from *Jira Documentation*: <https://confluence.atlassian.com/jira>

[2] Erica Chappell. (2020, February 21). What's A Burn Up Chart & How Do You Use It, from What's A Burn Up Chart & How Do You Use It: <https://clickup.com/blog/burn-up-chart/>

[3] Team Asana. (2021, October 11). Burndown chart: What it is and how to use it, from Burndown chart: What it is and how to use it: <https://asana.com/resources/burndown-chart>

[4] David Lowe. (2017, May 15). Sprint Reports, from Sprint Reports: <https://scrumandkanban.co.uk/sprint-reports/>

[5] David Lowe. (2022, February 4). Velocity report, from Velocity report: <https://docs.microsoft.com/en-us/previous-versions/azure/devops/report/sql-reports/velocity?view=tfs-2017>

[6] Caitlin Mackie. (2020, December 15). What is the difference between sprints and versions in Jira, from What is the difference between sprints and versions in Jira: <https://www.easyagile.com/blog/sprints-versions-jira/>

[7] Luke Harrison. (2021, December 21). How to Create a Forum Website, from How to Create a Forum Website: <https://websitesetup.org/create-a-forum-website/>