

MUST GRADUATE APPLICATION FORUM POSTER

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Abstract

MUST Graduates Application Forum (MGAF) is an online platform. By posting, commenting and interacting with other users, MUST students can acquire valuable information, like academic backgrounds and the admission results of former applicants.

Introduction

Background:

MUST students, as a very special group of applicants, have limited resource of application data to refer to and hard to find admission results with similar background.

Motivation:

MGAF aims at helping MUST students position themselves accurately in graduates' applications and get great admission results.

Implementation Methods:

- ✓ Frontend: HTML5 + CSS + JavaScript and vue.js.
- ✓ Backend: Python3.7.9
- ✓ Packages: Flask + PyMySQL +Jinja2
- ✓ Database: MySQL 8.0.23.

Results:

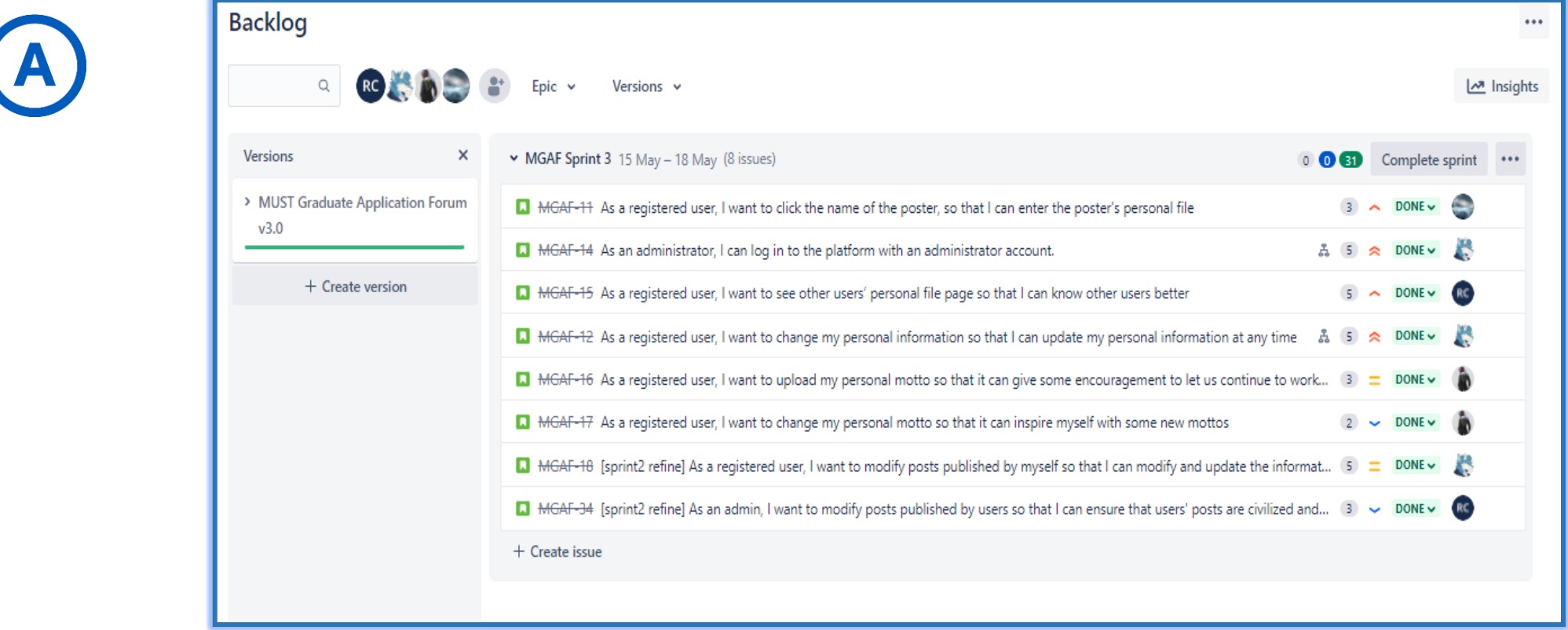
With the valuable information of MGAF, MUST students can better position themselves, set more accurate goals, and receive satisfactory admission results.

Related Work

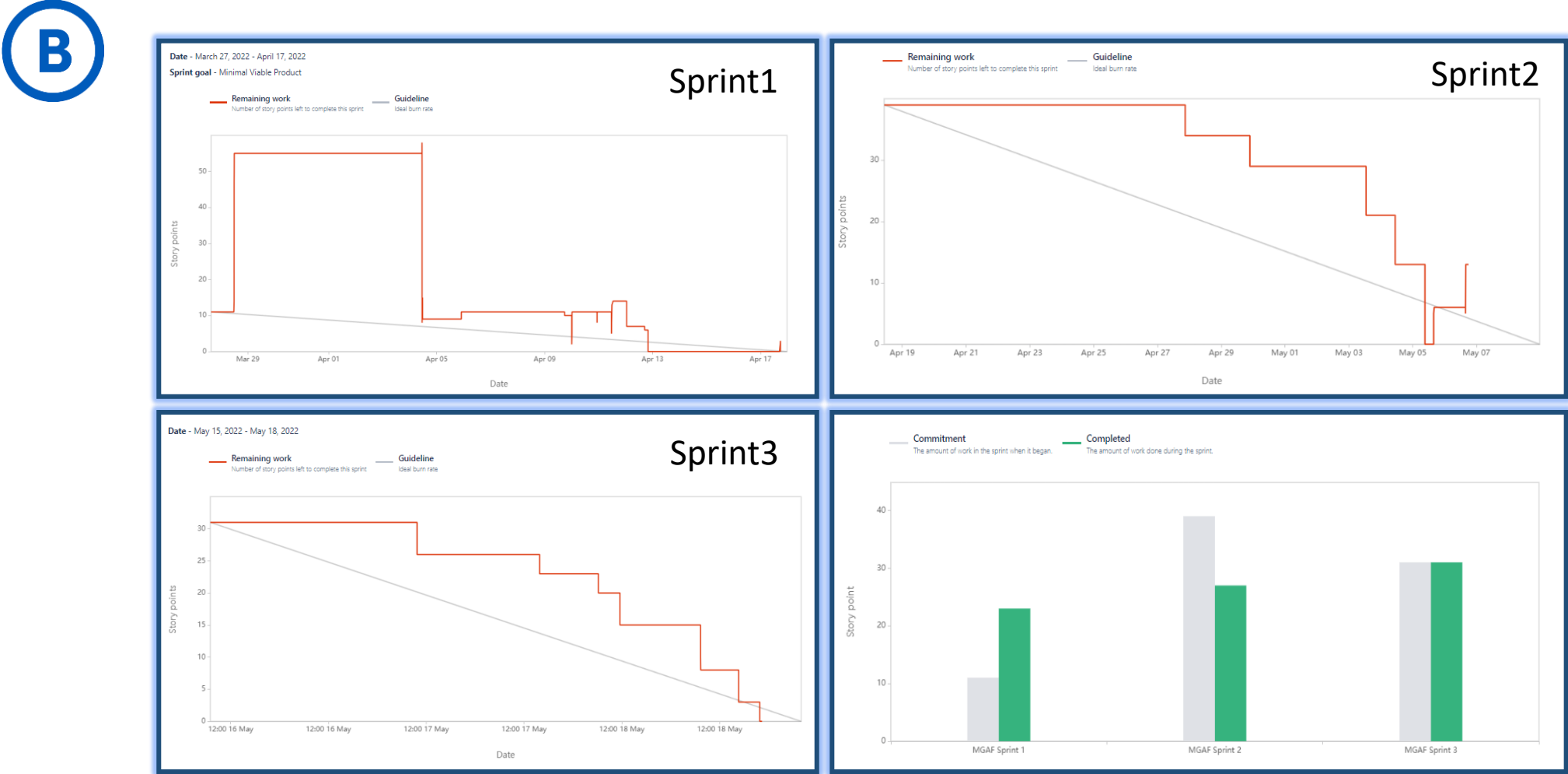
- With the development of the internet, DIY application becomes popular.
- Online platforms with application information become prevailing with the increasing number of DIY applicants, such as the global forum "The GradCafe Forums"[1] and the Chines forum "1Point3Acre" [2].

Agile Development: Scrum

(1) Product Backlog



(2) Burndown chart and velocity report



(3) Daily Scrum



Chart C- Daily Scrum of Sprint2

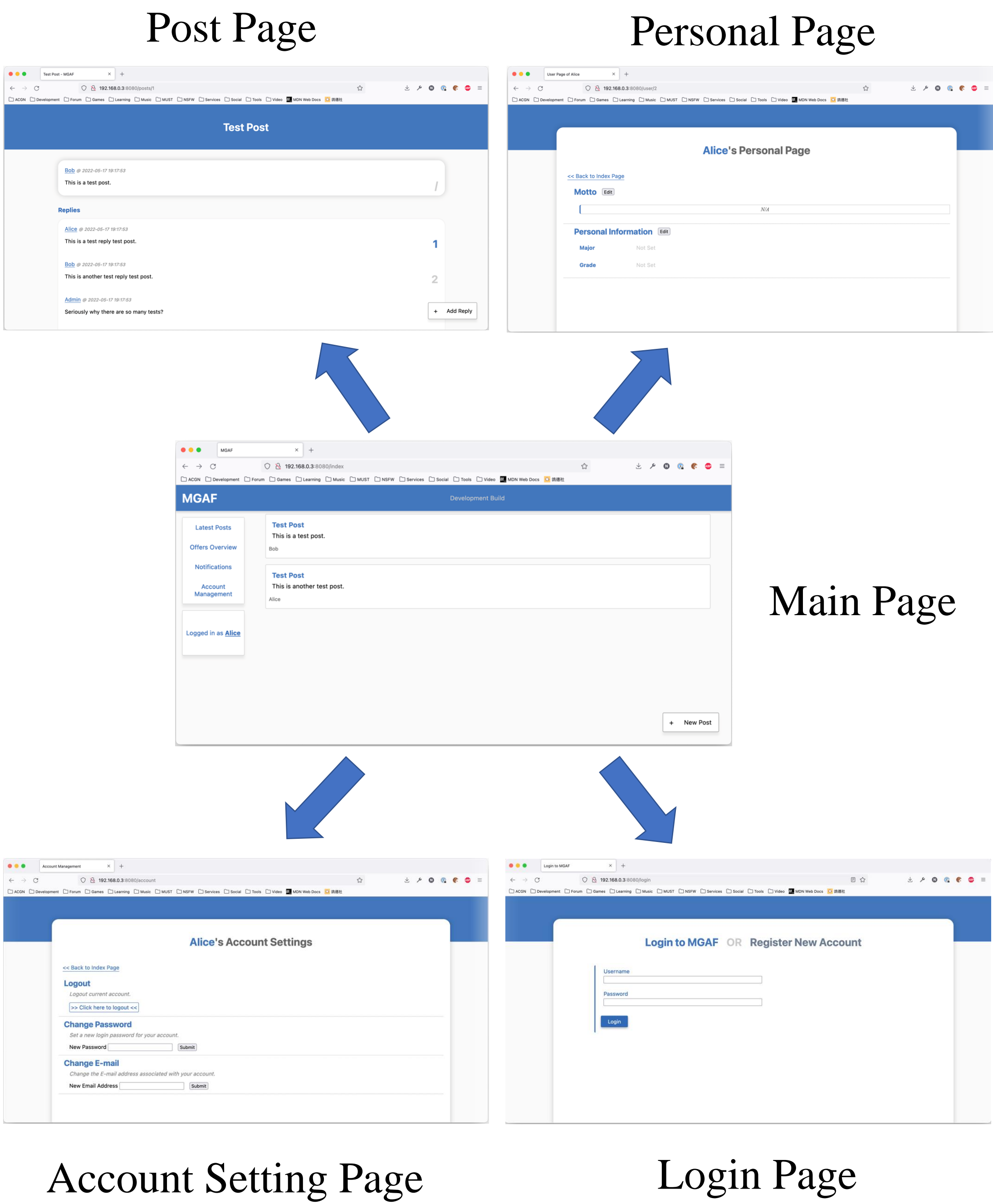
DAILY SCRUM					DAILY SCRUM				
ID	Group members	Date	Discussion Content	Key points	ID	Group members	Date	Discussion Content	Key points
1	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.4.20	Status: What did I do yesterday?	Review what needs to improve in sprint 1; Conserve the layout changes of login and register pages	2	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.4.23	Status: What did I do yesterday?	Summarize sprint 1; Sort out the issues to be completed by sprint 2
			Issues: What will I do today?	Change and improve the login and register pages in sprint 1				Issues: What will I do today?	Plan to start sprint2; Confirm the content of sprint 2 again and discuss the priority of issues and other related information.
			Action Items: Any difficulties or impediments stopping me from the Sprint goal?					Action Items: Any difficulties or impediments stopping me from the Sprint goal?	
DAILY SCRUM					DAILY SCRUM				
ID	Group members	Date	Discussion Content	Key points	ID	Group members	Date	Discussion Content	Key points
3	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.4.25	Status: What did I do yesterday?	Assign tasks that everyone needs to complete in sprint2	4	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.4.27	Status: What did I do yesterday?	Jira management; Plan to do the reset password permission.
			Issues: What will I do today?	Plan to start making offer upload page				Issues: What will I do today?	Do user reset password permission and offer upload page
			Action Items: Any difficulties or impediments stopping me from the Sprint goal?	The image upload function is relatively difficult				Action Items: Any difficulties or impediments stopping me from the Sprint goal?	The front end needs to consider the cooperation of JS, CSS and DOM
DAILY SCRUM					DAILY SCRUM				
ID	Group members	Date	Discussion Content	Key points	ID	Group members	Date	Discussion Content	Key points
5	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.4.29	Status: What did I do yesterday?	Jira management; Complete the functions of reset password.	6	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.5.1	Status: What did I do yesterday?	Plan to do the function of users publishing posts containing pictures.
			Issues: What will I do today?	Jira management; Complete the offer page uploaded by user and summarize; Adjust project schedule time.				Issues: What will I do today?	Do the function of posts containing pictures; Adjust project schedule time
			Action Items: Any difficulties or impediments stopping me from the Sprint goal?	There are many other learning tasks in the near future, and the original task completion plan may lag behind				Action Items: Any difficulties or impediments stopping me from the Sprint goal?	There are many other learning tasks in the near future, and the original task completion plan may lag behind
DAILY SCRUM					DAILY SCRUM				
ID	Group members	Date	Discussion Content	Key points	ID	Group members	Date	Discussion Content	Key points
7	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.5.3	Status: What did I do yesterday?	Jira management; Plan to start the likes function; Complete progress report	8	Cao Yulong; He Xinyi; Chen Rui; Lu Jie	2022.5.5	Status: What did I do yesterday?	Jira management; Complete all sprint content
			Issues: What will I do today?	Complete the administrator authority page and summarize; do the page of resetting the password authority for the user				Issues: What will I do today?	Check and improve sprint 2; Release the second version; Complete progress report
			Action Items: Any difficulties or impediments stopping me from the Sprint goal?					Action Items: Any difficulties or impediments stopping me from the Sprint goal?	

Functions

- Sprint1:** Login and registration page and user posting page.
- Sprint2:** User comment function, user logout function, setting session cookie, sprint1 refine(separate login and register page).
- Sprint3:** User's personal file page, administrator-related permissions, user modifying posts, setting motto.



Chart D- MGAF Pages



Our Approach

(1) Using Jira to manage project progress

- List tasks in Jira as issues and assign them to individuals.
- Monitoring project progress through real-time status updates.
- Adjusting the speed of task completion through images and reports generated by Jira

(2) Hold daily scrum to assist team development

- Status: What did I do yesterday?
- Issues: What will I do today?
- Action items: Any difficulties or impediments stopping me from the Sprint goal

(3) Use “GitHub + PyCharm” to complete the project together

- Build the remote collaboration space
- connect Jira to Github for synchronous management

Evaluation

(1) Advantage:

- A. Audience: dedicated audience
- B. Function: It realizes basic forum requirements
- C. Use: The page of the forum is concise, easy to operate
- D. Development trend: rising demand and fill the vacancies of similar products

(2) Insufficient:

- A. Labels: no label or word and so on to quickly filter out the information.
- B. Count for interactions: no statistic mechanism for comments or likes to recommend popular posts to users.
- C. Security of the backend: We lack back-end security considerations, resulting in defects in the deployment of the project on the public server.

Conclusion

In the MGAF developing process, under the framework of the scrum, we carried out three sprints with planning, review, and retrospection in every sprint.

We used daily scrum to communicate and collaborate better, with Jira and Github helping us to schedule and manage the project more efficiently.

Eventually, we finished the development of MGAF with 3 prints, 25 issues, and 79 story points in total, and the major functions like posting, commenting, and user profiles have been fully implemented.

Reference

- (2022, May 17). The GradCafe. <https://forum.thegradcafe.com/>
- (2022, May 17). 1point3acres. <https://www.1point3acres.com/bbs/>

