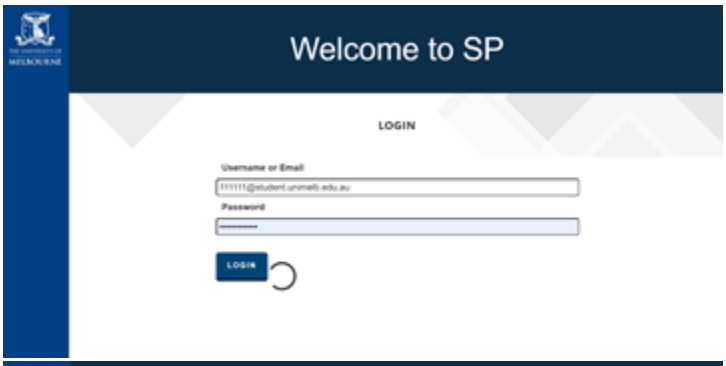
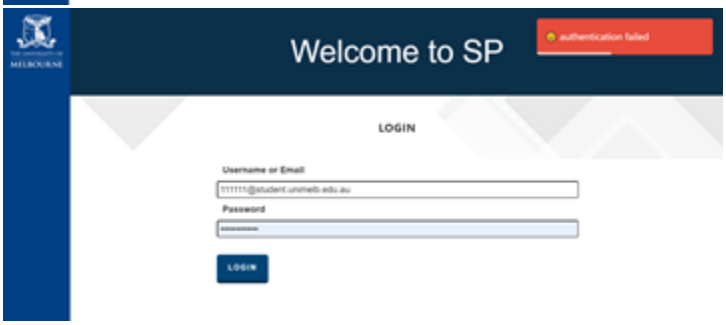
Handover Report

Strengths of our Project

Good UI design (Screenshot and description)

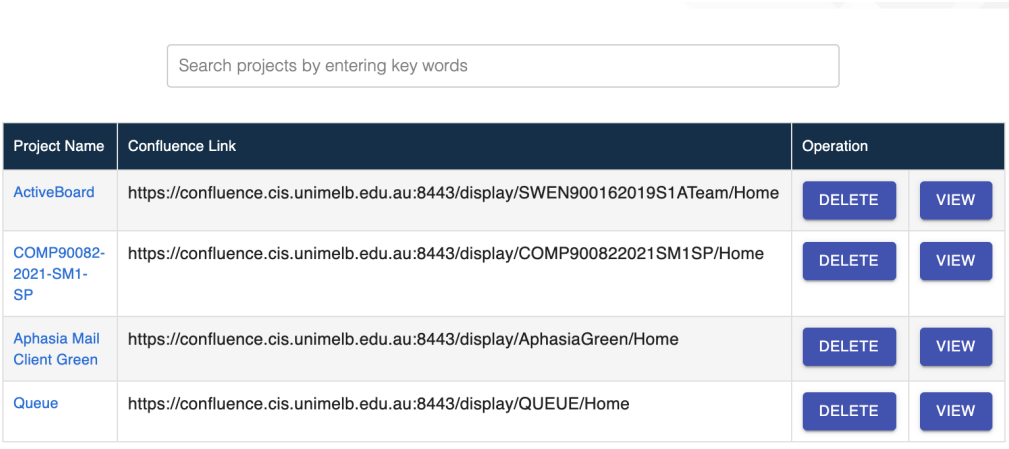
LoginWe used a progress bar and a notice bar to help the user know what's going on when they try to log in.





Coordinator Home

- Designed a simple and intuitive table to display the imported project name, Confluence Link and the coordinator can also do delete and preview action in this table. At the same time, the Coordinator can easily find the items it wants to import from the Search Bar



- Using a right drawer for pre-viewing student name and student email of all students who took the specific project

COMP90082-2021-SM1-SP

Student Name	Student Email
Pin Wang	pinwang@student.unimelb.edu.au
Zixin Ye	yezy2@student.unimelb.edu.au
Jingdan Cui	jingdanc1@student.unimelb.edu.au
Jirat Pasuksmit	pasuksmitj@student.unimelb.edu.au
Ruofan Zhang	ruofzhang@student.unimelb.edu.au
Sarah Sultan A AL YAHYA	salyahya@student.unimelb.edu.au
Boyang Sun	boyangs@student.unimelb.edu.au
Chongjing ZHANG	chongjingz@student.unimelb.edu.au
Fengrui Zhang	fengrzhang@student.unimelb.edu.au

Project Overview

- We add profile for team member to help coordinator remember students.
- Set threshold of the list to 30 and display warning of Confluence visibility if the list exceeds the threshold.

Name	Profile	Student ID	Email Address
Pin Wang		pinwang	pinwang@student.unimelb.edu.au
Zixin Ye		yezy2	yezy2@student.unimelb.edu.au
Jingdan Cui		jingdanc1	jingdanc1@student.unimelb.edu.au
Jirat Pasuksmit		pasuksmitj	pasuksmitj@student.unimelb.edu.au
Ruofan Zhang		ruofzhang	ruofzhang@student.unimelb.edu.au

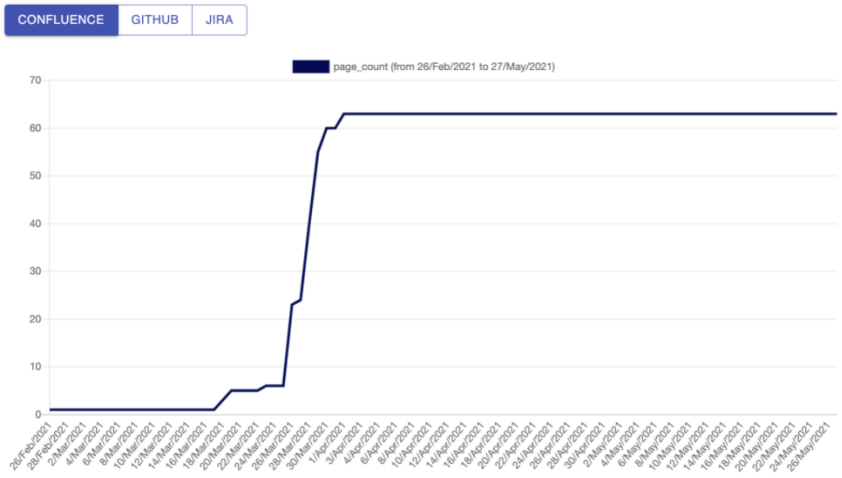
Product Quality:

- We made a vertical table to make better use of the space.

Metric	Number
Lines	846
Classes	12
Files	12
Functions	53
Comment Lines	253
Comment Lines / Code Lines	0.3
Declaribles Statements	126
Excutable Statements	718

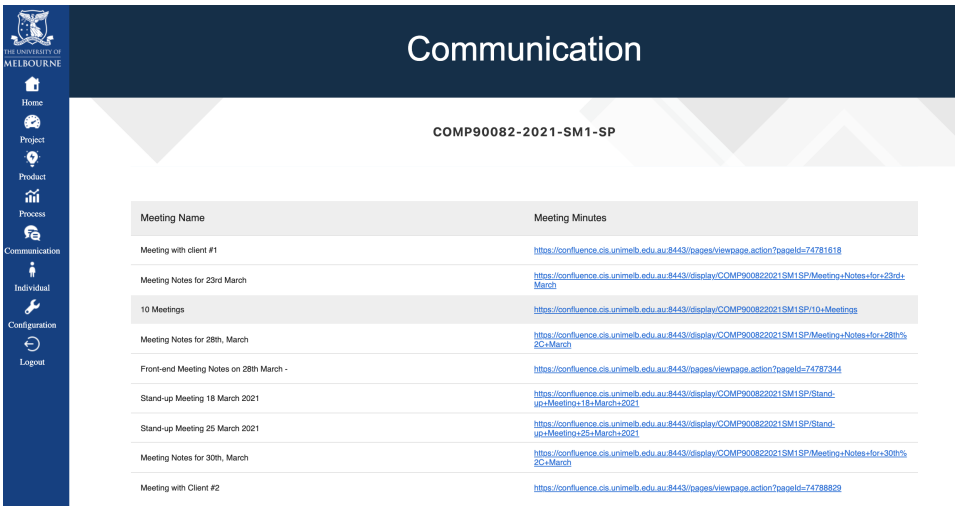
Process Quality

- We use line chart to show data clearly.



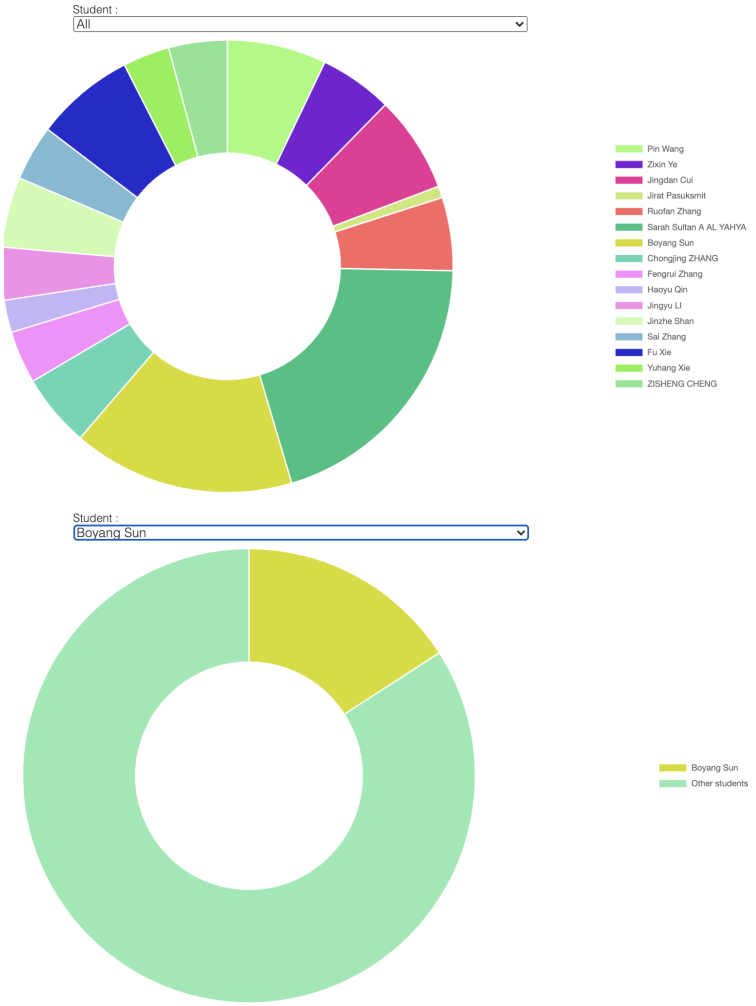
Communication

- We made a table to display, which is more straightforward for users to access the meeting minutes.



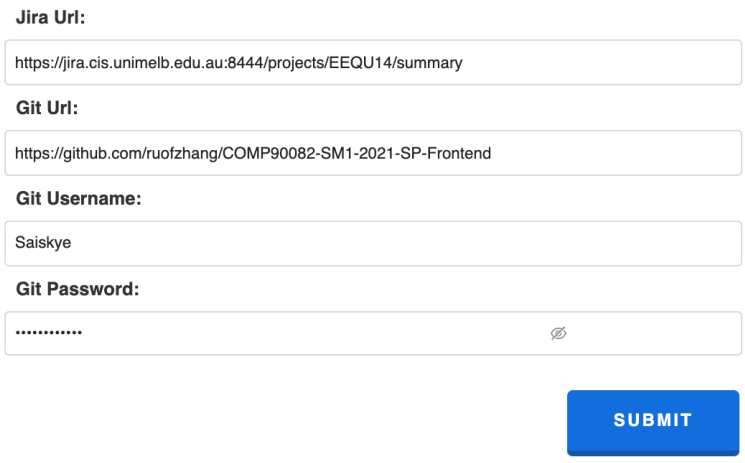
Individual Contribution

- Used a pie chart to show how many percentage of each individual contribution occupied in the whole team work. Each student' contribution are displayed by different colour, which is a very user-friendly design.



Configuration

- We add some spaces for users to provide Jira URL, Git URL, Git username and Git Password. After submitting the content, the information can also be shown if it turns to other pages and turns back. The Git password text field is hidden for privacy. The password can also be viewed if clicking the eye.



Good Back-end design (Code logic, performance data, and architecture diagram if needed)

- Confluence
  - Store and retrieve projects from the database instead of fetching data from Confluence
    - the page loading time from previously >10s to currently <1s

    - Update three tables, which are user list, individual confluence contribution and meeting minutes, every 24 hours
- Git
    - Add git authentication to restrict invalid access and be able to visit a private repository.
    - Use database cache to speed up visit time from more than 30s to less than 1s.
    - Git commits data in git commit database updated logic are designed in different situations: 1. No space_key in db, crawl, 2. Has space_key in db, execute logic 3, 3. If updated data with the space_key exists, do nothing, else update.
    - Data with timestamps are sorted by the last second of the day.
- Jira
    - Switched to jira-agile-metrics for ticket history fetching. Time required to do cold fetches is down from ~70min to ~5s .
    - Caching query results with Django. Long query times (~10s) only occur on cold fetches (initial caching) , hot fetches are within 1s.
    - Daily syncs with Jira for better data availability

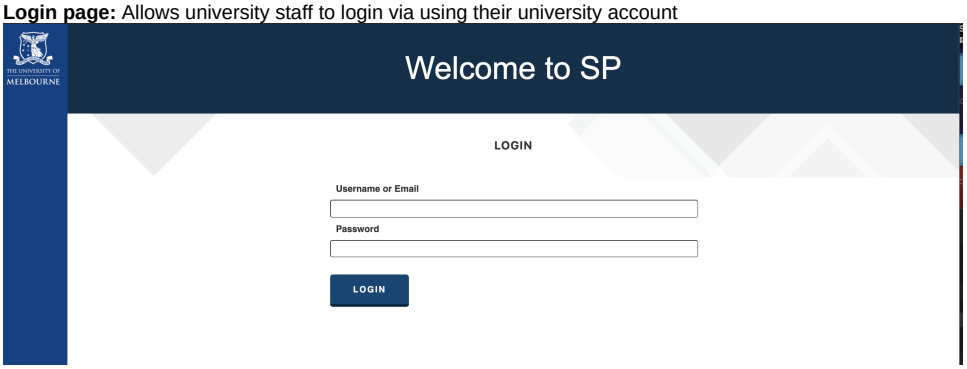
Implemented Optional Features of the client (Show how well we finish the optional feature of our requirement)

Code Metrics Optional Function **Jinzhe Shan**
Code Metrics is an optional function in the client's requirement. It is no any implement in the previous team because it is really a difficult module.
Base on the suggestion of Jirat and our client, I researched SciTools Understand software, which is a kind of professional code analysis tool and it needs to purchase a License.
I applied for the educational License for the whole SP Group with the help of Jirat and Eduardo and deploy the Understand into the Linux server.
Next, I got software source code using git methods.
Then, I used Understand Python API & Und Command Lines to generate indexes for describing the product quality of a software project and store them in JSON files.
Finally, I read the corresponding JSON file in Django and package them to Git Metrics API.

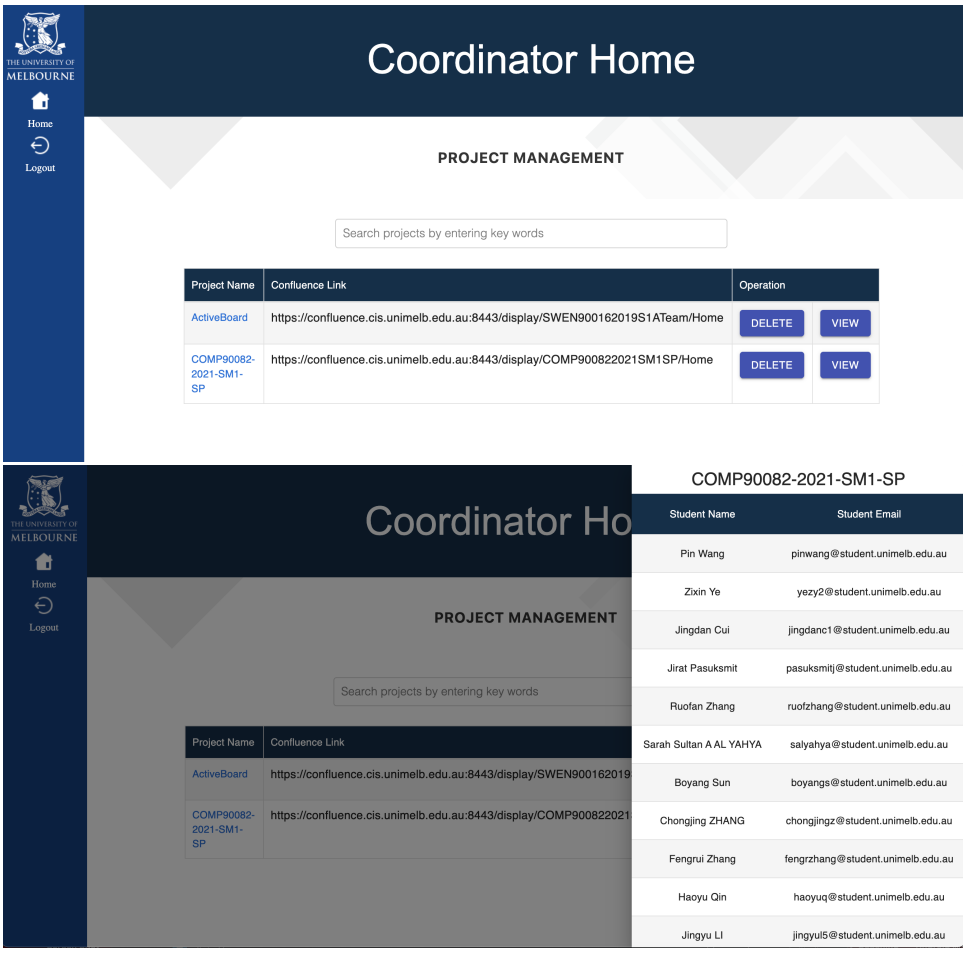
The Whole WorkFlow of Get Code Metrics is shown as bellow:

What we have done(you can use our final presentation ppt as core materials)

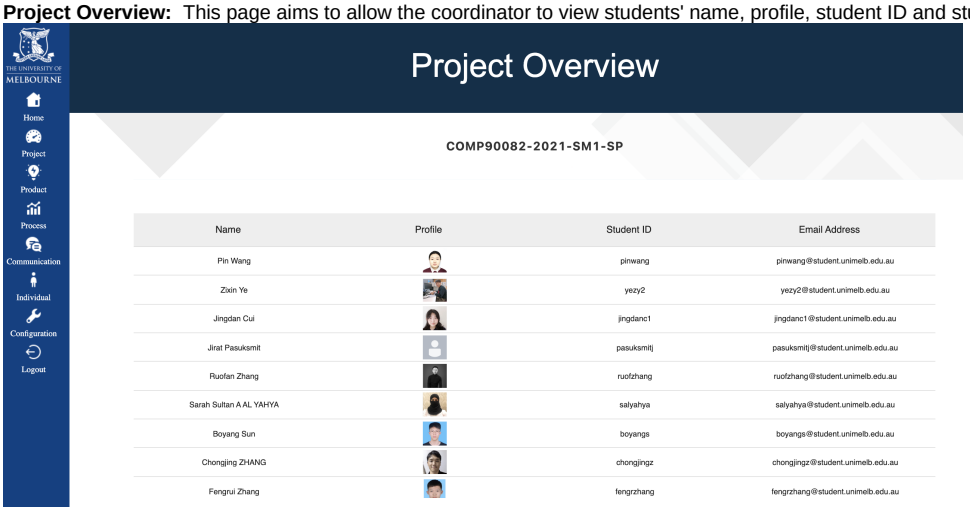
Front-end

- **Login page:** Allows university staff to login via using their university account
    - 

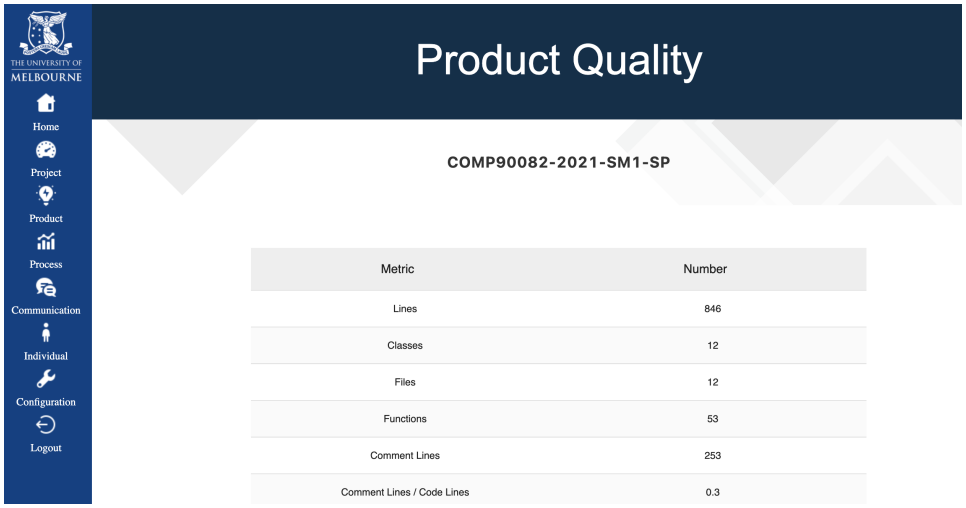
- **Coordinator Home:** Shows the list of team members and their corresponding projects. A coordinator can Viewing Project, Importing Project, Deleting Imported Project and Viewing Specific Imported Project.



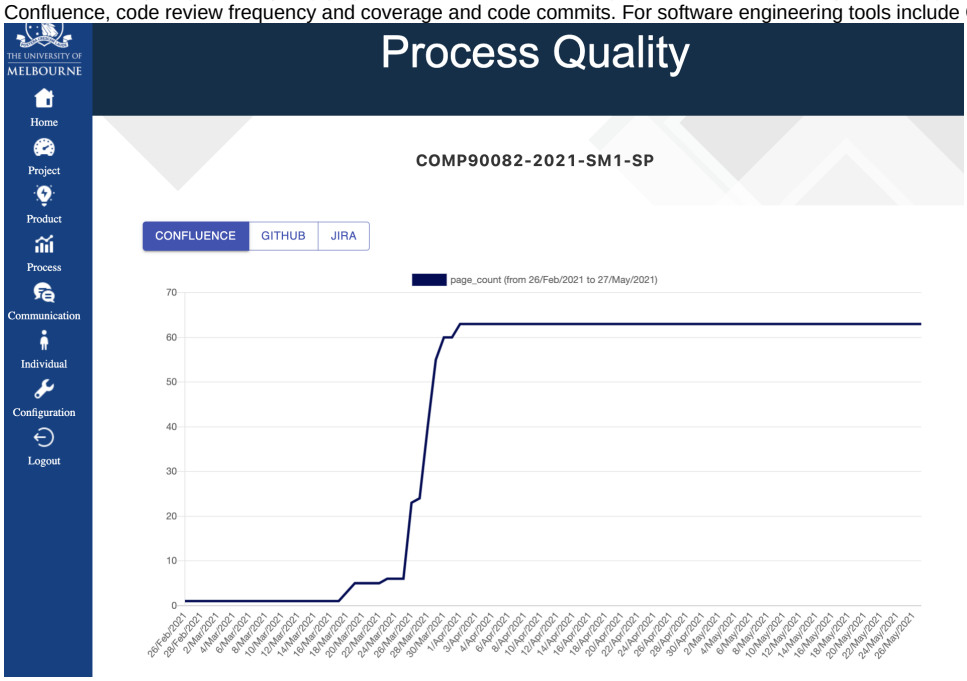
- **Project Overview:** This page aims to allow the coordinator to view students' name, profile, student ID and student email address.



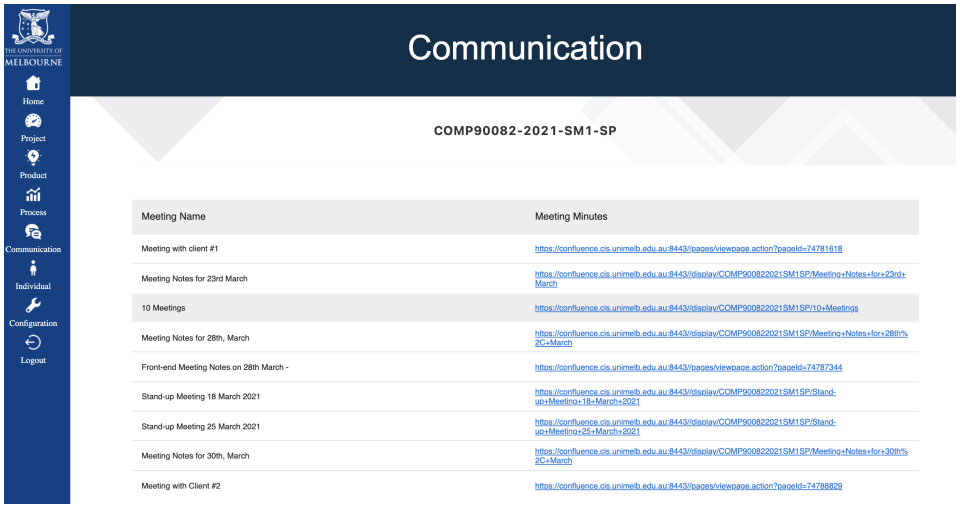
- **Product Quality:** In product quality page includes statistical and/or graphical summaries by code analysed tool (TBC) on: Code quality, Test code quality. For Software Engineering tools include Git (Team's choice of GitHub, GitLab or Bitbucket).



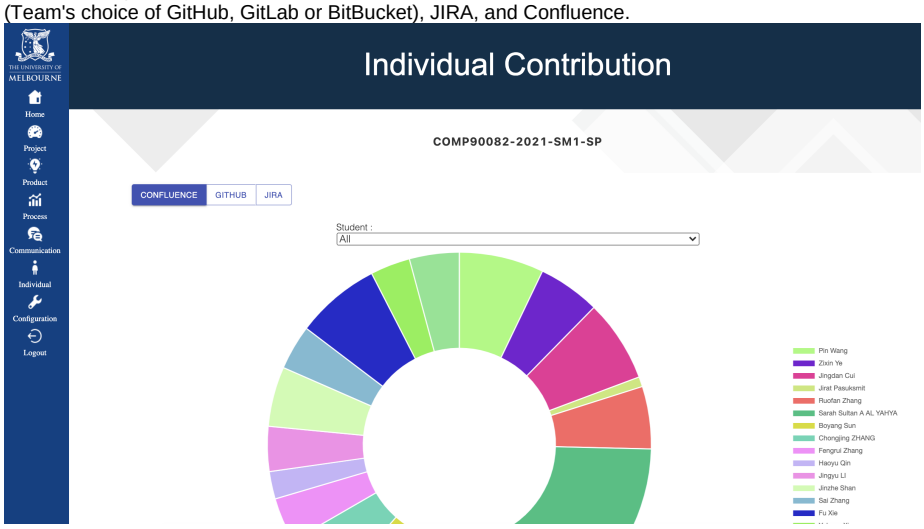
- **Process Quality**: In process quality page includes statistical and/or graphical summaries on sprint velocity and burndown, documentation on Confluence, code review frequency and coverage and code commits. For software engineering tools include GitHub, JIRA and Confluence.



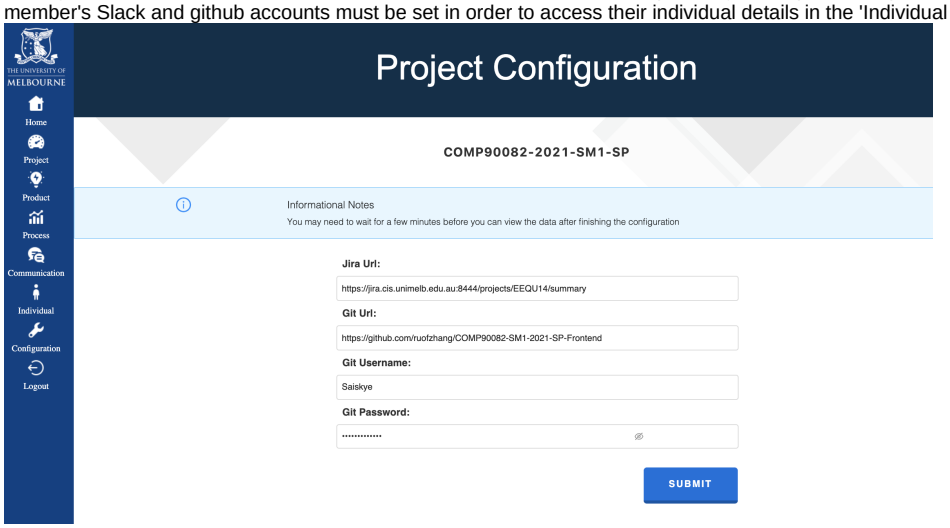
- **Communication:** In communication quality page includes statistical and/or graphical summaries on comments from engineering tools which are GitHub, Confluence.



- **Individual Contribution**: In individuals' contribution page includes statistical and/or graphical summaries of every team member's activities which are: task completion on JIRA, Code reviews on Git and Documentation contribution on Confluence. For software engineering tools include Git (Team's choice of GitHub, GitLab or BitBucket), JIRA, and Confluence.



- **Configuration**: Here the URLs for each of the team's tools should be set (currently not implemented). The account names/ emails for each team member's Slack and github accounts must be set in order to access their individual details in the 'Individual Contribution' section.



Back-end(Show related user stories here)

Confluence

Function	Previous	Current
User List	Use Confluence Group	Use Confluence Space; Daily update
Search Spaces by Keyword	Not Implemented	Search from our site
Total Number of Pages on Each Day	Not Implemented	Shows the progress Daily update
Import Project	Not implemented	Store the Confluence space key and the coordinator id into the database
Delete Project	Not implemented	Delete the project and clear the related data from the database
Get Project	Fetch project by calling Confluence API	Retrieve project from the database
Get Meeting Minutes	Not implemented	Show the titles and links of relevant meeting minutes

Github

- Get Git Individual Contribution
- Get Git Commit Count
- Get Git Code Metrics

Jira

Function	Previous	Current
View Individual Contribution	Similar function exists that returns queries in real time	Caches and returns relevant individual ticket count
View Project Process History	Not Implemented	Caches and returns relevant ticket history
Setup Github and Jira URL	Not Implemented	Stores URLs in database

Soft Skills Learned in the Whole Process(Add more here)

- Communication Skills
    - Meeting Management: Use a practical and efficient tool **When2meet** to manage the group meeting
- Web service deployment skill
- Valuable experience about Agile process