

Requirements & Design Deliverables

This project is designed for students, lecturers and tutors in the university. Specifically, the students can utilize this platform to manage their project source code during the development process, which involves the management of repositories and issues. At the same time, students, lecturers and tutors can review the project submitted and give their comments, which provides the function of comment management. Besides, when the project is finalized, the lecturers can also assess them using marks. However, the project is focused on solving the source code management requests.

Since our group is scheduled to specialize in the user interface design, this deliverable report is specially prepared to handle the UI design problems.

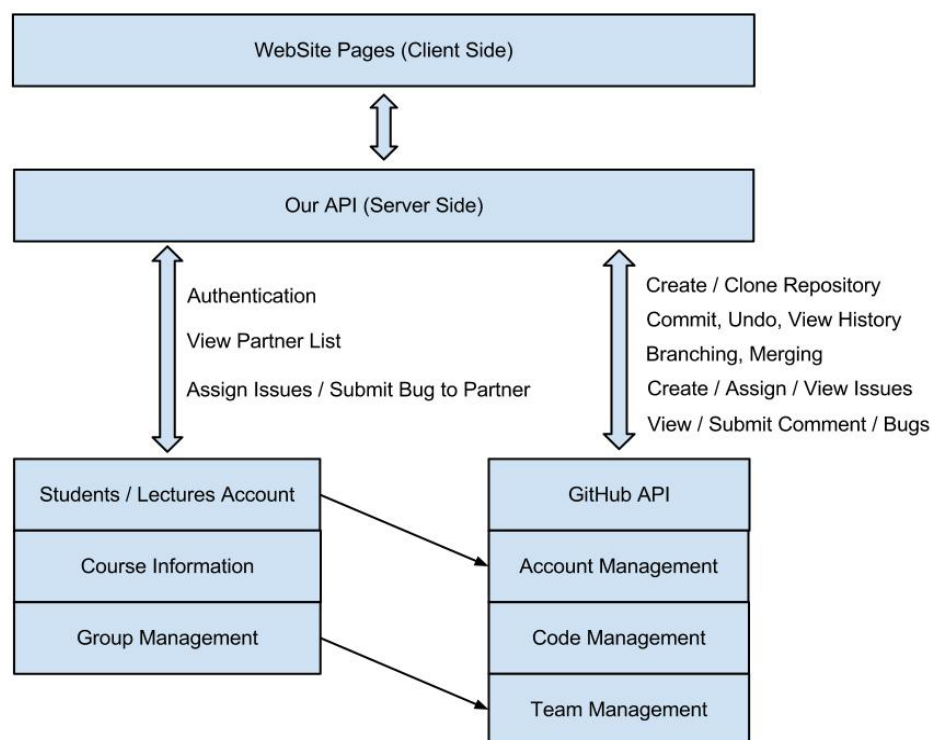
Features

Code management is the core function of this project and its major features are listed as below:

- View / Create repositories
- Commit files/ Undo commit files/ View commit history
- Branching/ Merge branches
- Create / Assign issues
- Make commons / Edit comments/ Delete comments

System Architecture

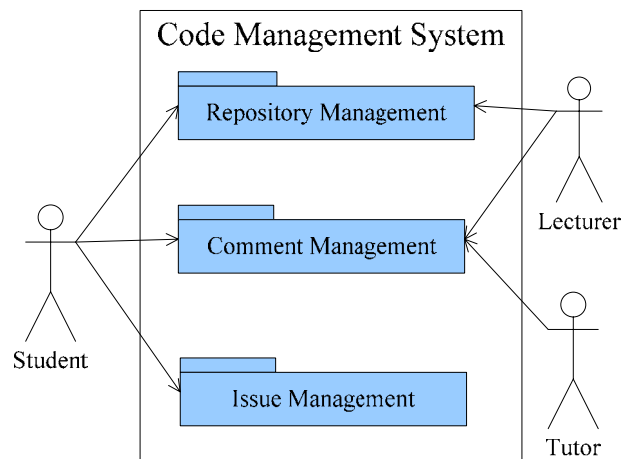
To implement all the features above, the code management platform is designed as demonstrated below:



Use Cases

The top level use cases can be divided into three main parts, namely Repository Management, Comment Management and Issue Management. Admittedly, Repository

Management is the key use cases package because it deals with most of the work concerning source code management functions.



The Repository Management includes all the operations on the repositories, which deals with the creation, review of repositories and branches as well as the commitment of files. When the students login successfully, they can choose to create their own repositories as well as the branches of the repository.

1. Create Repository

It requires the student to login and then they can choose to create their own repository.

2. View Repository

After the student login successfully, they can choose to review the details of a repository from the repository list presented, which includes viewing the branches and files under the repository.

3. Create Branch

In the repository details page, the student can review the branches list and at the same time, they can also create new branch.

4. Merge Branches

In the repository details page, the student can review the branches list and they can merge branch to trunk.

5. Commit Files

When the students are ready to commit their work, they can navigate to the commit page to submit the file.

6. Undo Commit Files

In the commit page, the student can choose to undo the last commit if they find something goes wrong with the last commit operation.

The Issue Management is designed for students to report and track problems found during the project development. There are five kinds of issues, namely bug, duplicate, enhancement, invalid and question. Moreover, one issue can have multiple type labels, which may enhance the accuracy in describing a problem encountered. However, another special kind of issue named wontfix is designed to handle those issues that need no fix.

1. Create Issue

It requires the students to login and then they can navigate to the issue page and create a specific kind (or kinds) of issue with description. Besides, during this

process, the student can also choose to assign this issue to some collaborators.

2. Assign Issue

When a student is creating an issue, the student can assign this issue to his collaborators. However, since the collaborator can be left blank by default in the create process. This function provides a complementary method afterwards.

The Comment Management is designed for students, lecturers and tutors. They can give their comments on the source code during the assessment. Specifically, each line of the source code is subject to be commented.

1. Create Comment

Not only students within the same group, lecturers and tutors are eligible to make comment on the repositories of their students. And when they login successfully, a list of the repositories is presented. When they click on one repository, the branches and source code are subject to be reviewed. If necessary, they can make a comment on any line of the source code.

2. Edit Comment

In the source code review page, students, lecturers and tutors can edit the existing comments if necessary.

3. Delete Comment

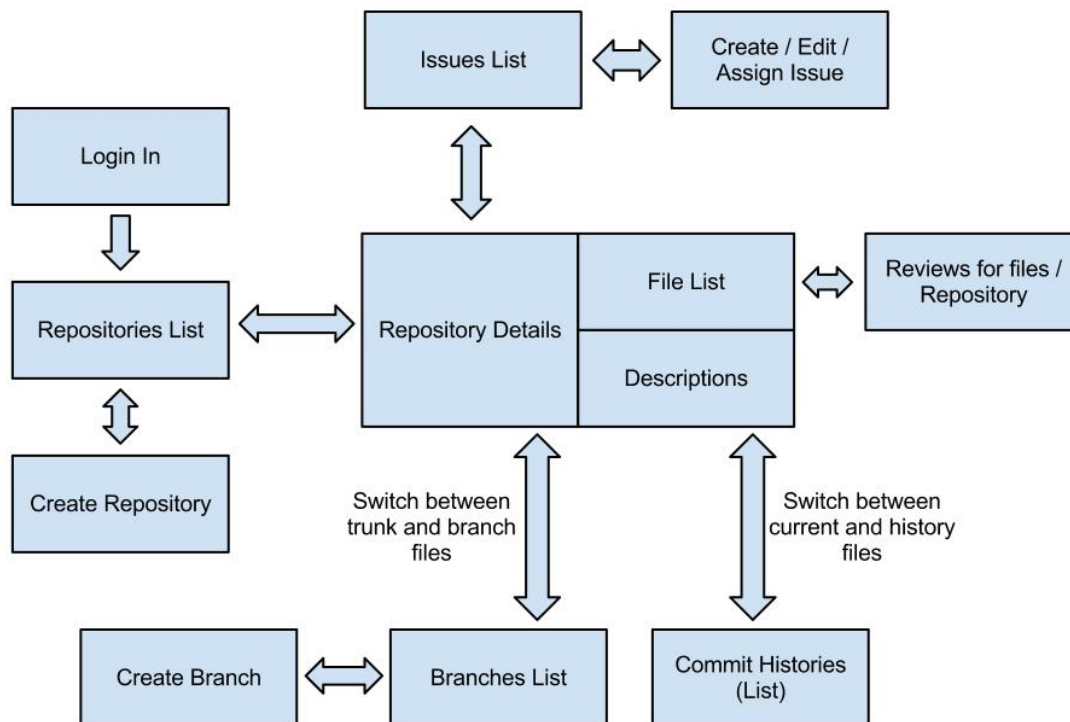
Still in the source code review page, students, lecturers and tutors can delete the existing comments if necessary.

Pages Overview

The pages provide user interfaces for students, lecturers and tutors to interact with the backend system in managing the source code. The following pages are created to cover those interaction functions:

1. view repositories page
2. view repositories page
3. add repositories page
4. view repository detail page
5. view commit history page
6. view commit details page
7. view branches page
8. view branch detail page
9. create branch page
10. view issues page
11. create issue page
12. assign issue page
13. create review page

Page Flows



Page Definition (Layout)

View Repositories Page

When student login successfully, he can see a list of all his ongoing assignment projects by clicking his own account.

janewangunsw This is you! [Edit Your Profile](#)

Member Since Aug 15, 2012

REPOSITORIES LIST

Repositories (2) [New repository](#)

Find a repository... [All Repositories](#) [Public](#) [Private](#) [Sources](#) [Forks](#) [Mirrors](#)

9322 ★ 0 🍴 0
COMP9322
Last updated 4 days ago
all commits commits by owner 52 week participation

9323 ★ 0 🍴 0
COMP9323
Last updated 4 days ago
all commits commits by owner 52 week participation

Public Activity

- janewangunsw** uploaded a file to **janewangunsw/9323** a day ago
"Group7 9323 Doc.doc" is at [janewangunsw/9323/downloads](#)
- janewangunsw** opened **issue 1** on **janewangunsw/9323** a day ago
clarification request
- janewangunsw** added **scott-** to **janewangunsw/9322** 4 days ago
9322 is at [janewangunsw/9322](#)
- janewangunsw** created repository **9322** 4 days ago
COMP9322
- janewangunsw** created repository **6714** 4 days ago
COMP6714
- janewangunsw** created repository **9323** 4 days ago
COMP9323

Add Repository Page

Student can create a new repository by clicking the button **New repository**.

janewangunsw This is you! [Edit Your Profile](#)

Member Since Aug 15, 2012

0 followers 0 starred repos 0 followed users

CREATE A NEW PROJECT

Repositories (2) [New repository](#) [Public Activity](#)

Find a repository...

All Repositories Public Private Sources Forks Mirrors

9322 ★ 0 0
COMP9322
Last updated 3 days ago
52 week participation

9323 ★ 0 0
COMP9323
Last updated 3 days ago
52 week participation

Public Activity

- janewangunsw** added **scott--** to **janewangunsw/9322** 3 days ago
9322 is at **janewangunsw/9322**
- janewangunsw** created repository **9322** 3 days ago
COMP9322
- janewangunsw** created repository **6714** 3 days ago
COMP6714
- janewangunsw** created repository **9323** 3 days ago
COMP9323
- janewangunsw** commented on **janewangunsw/Code-Management** 3 days ago
Comment in 231199624e:
world
- janewangunsw** pushed to master at **janewangunsw/Code-Management** 3 days ago
2311996 Update .gitignore

Repository Detail Page

Click the assignment title and enter the detail page with file list and a description.

janewangunsw / 9322 [Pull Request](#) [Watch](#) [Star](#) [Fork](#)

Code **Network** **Pull Requests** **Issues** **Wiki** **Graphs** **Admin**

COMP9322 — [Read more](#)

[Clone in Windows](#) [ZIP](#) [HTTP](#) [SSH](#) [Git Read-Only](#) <https://github.com/janewangunsw/9322.git> [Read+Write access](#)

[branch: master](#) **Files** **Commits** **Branches** **Tags** **Downloads**

Latest commit to the **master** branch

Initial commit
janewangunsw authored 3 days ago [commit edc2a9cdfc](#)

9322 /

name	age	message	history
README.md	3 days ago	Initial commit [janewangunsw]	

README.md

9322
COMP9322

CONTENT

View Commit history Page

This page lists all history changes

The screenshot shows the GitHub interface for the repository **szha246 / COMP9323**. The **Commits** tab is selected, displaying a list of commits. A red box highlights the commit history list, and a red arrow points to it with the text "All the history changes".

Commit history details:

- Aug 15, 2012**
- Update README.md** (7e89702aac) - szha246 authored August 15, 2012. [Browse code](#)
- Initial commit** (60d5aed7b0) - szha246 authored August 15, 2012. [Browse code](#)

View Commit Detail Page

This page show the details of the particular commit.

The screenshot shows the GitHub interface for the repository **janewangunsw / 9322**. The **Commits** tab is selected, displaying the details of the **Initial commit** (edc2a9c). A red circle highlights the text "Showing 1 changed file with 4 additions and 0 deletions.".

Commit details:

- Initial commit** (edc2a9c) - janewangunsw authored 4 days ago. [Browse code](#)
- Showing 1 changed file with 4 additions and 0 deletions. [Show Diff Stats](#)

Diff view for README.md:

```
@@ -0,0 +1,4 @@
1 +9322
2 +====
3 +
4 +COMP9322
\ No newline at end of file
```

0 notes on commit edc2a9c. [Show line notes below](#)

Write | Preview | [Comment on this commit](#)

Tip: You can also add notes to lines in a file. Hover to the left of a line to make a note.

View Branches Page

Here is a branch list. View branch files by click switch button.

Type Branch Name Add

Name 1 Switch

Name 2 Switch

Name 3 Switch

Name 4 Switch

View Branch Detail Page / Merge Branch

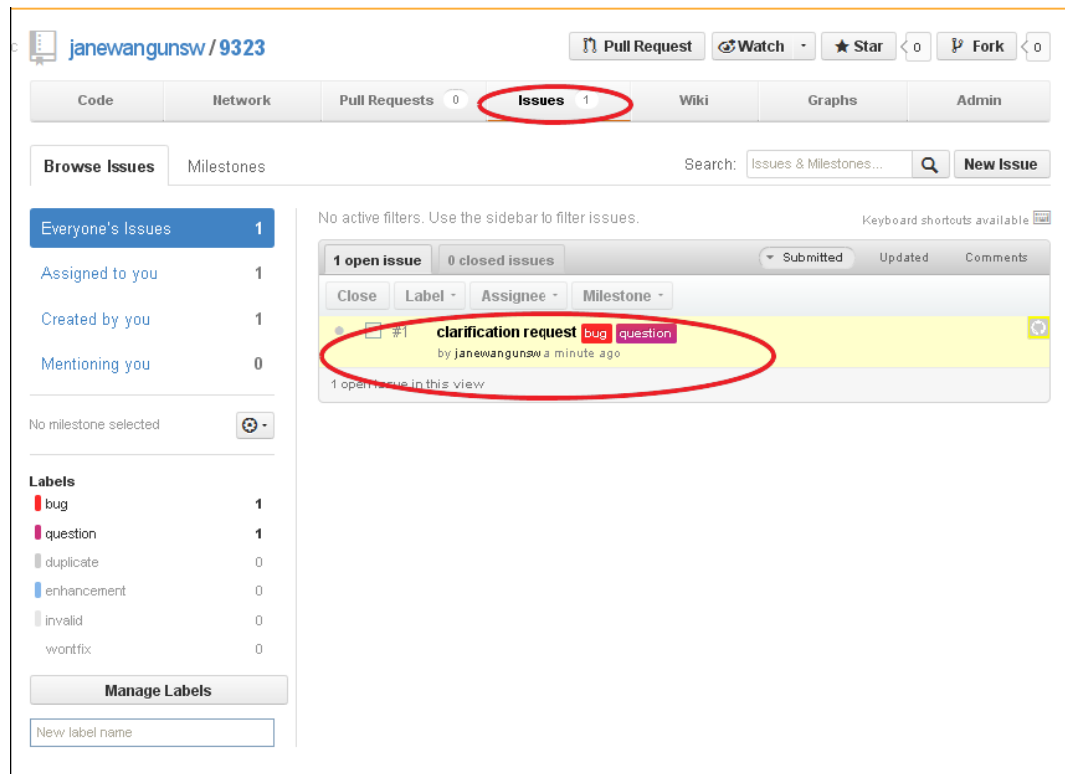
Users can view a repository with branch and trunk files.

File List	Commit Time	Message
File 1	Time 1	Description 1

Merge this Branch with Trunk

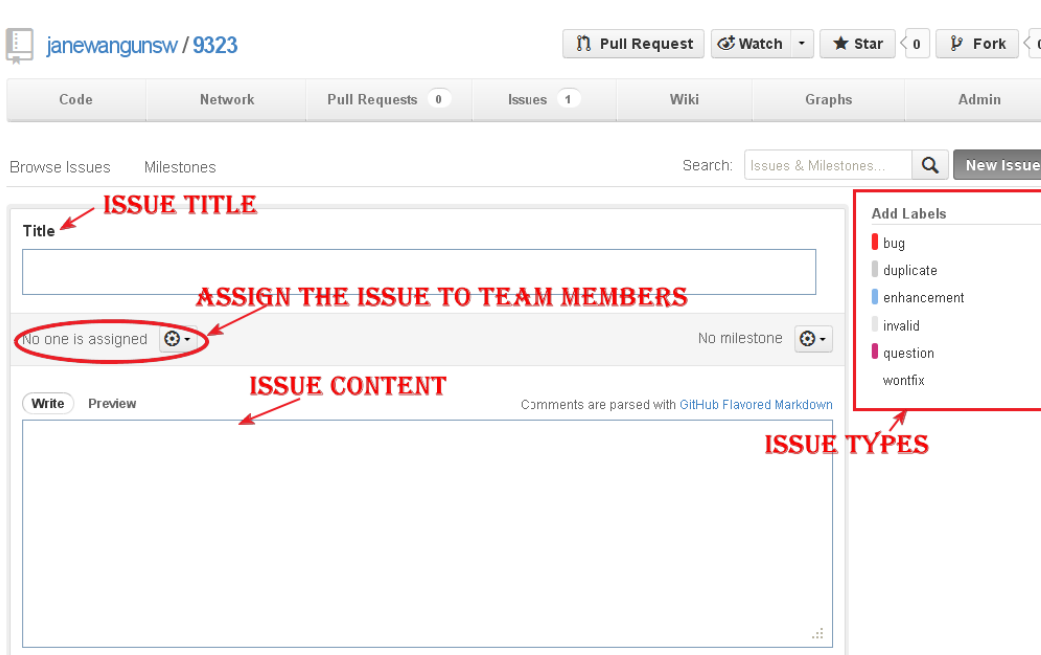
View Issues Page

Student can view issues by selecting **Issues**.



Create Issues page

Student can view issues by selecting **Issues** and the button of **New Issue**.



Assign issues

Student can assign issues by selecting **Assign someone to this issue**.

The screenshot shows the GitHub repository page for `janewangunsw / 9323`. The 'Issues' tab is selected, showing a search bar and a 'New Issue' button. A dropdown menu is open over the 'Assign' button, displaying the text 'Assign someone to this issue' (circled in red). Below this, there is a 'Clear assignee' option and a list of users. The user 'janewangunsw' is selected, indicated by a checkmark and a blue highlight (also circled in red). The right sidebar shows 'Add Labels' with options like 'bug', 'duplicate', 'enhancement', 'invalid', 'question', and 'won't fix'.

Create Review Page

This page is to create comment.

The screenshot shows the GitHub repository page for `janewangunsw / 9322`. The 'Commits' tab is selected, showing a commit by `janewangunsw` with the message 'Initial commit'. The commit details show 4 additions and 0 deletions in the file `README.md`. A diff view is shown with the following changes:

```
@@ -0,0 +1,4 @@
1 +9322
2 +====
3 +
4 +COMP9322
\ No newline at end of file
```

Below the diff, there is a section for '1 note on commit edc2a9c'. A comment by `janewangunsw` is shown: 'This is a perfect way to design this function. Go ahead!'. Below the comment, there is a text input field for writing a new comment, with the text 'WRITE DOWN YOUR COMMENT HERE' in red. A red arrow points to the input field. The input field has a 'Write' button and a 'Preview' button. The right sidebar shows 'Show Diff Stats' and 'Show line notes below'.