

Bug Tracker V2

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- ▶ Brief introduction and the motivation
- ▶ Example of using the application
- ▶ Challenges and interesting points of the implementation
- ▶ Conclusion

What is a bug tracker?

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It is an application used for managing projects with each project having 'issues' which can be information that describes a task.

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The issues are generally displayed in a To-Do list or in other formats.

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The implementation of a Bug Tracker that can be used in a multitude of situations and is compatible with mobile devices.

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Why would anyone use this application?

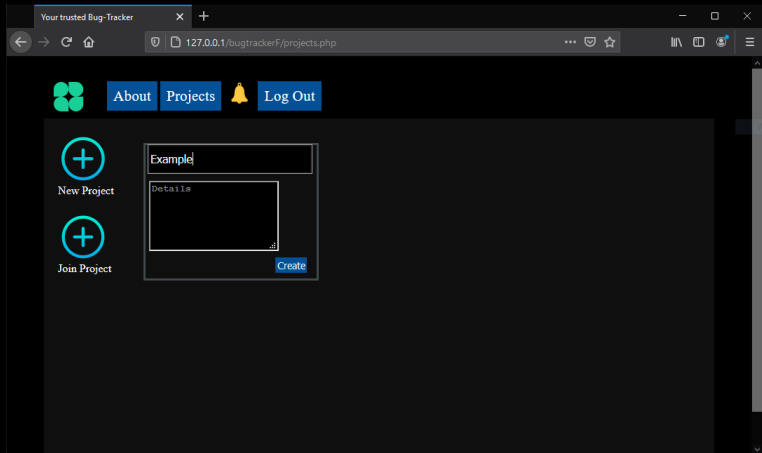
What is the goal?

The implementation of a Bug Tracker that can be used in a multitude of situations and is compatible with mobile devices.

Why would anyone use this application?

This application could be used by companies that want their own bug-tracker that they could deploy on their local network such that if there is no internet connection or some specific service is offline no work-flows are affected.

User 1 with the role Project Manager :



User 1 with the role Project Manager :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12

About Projects Todo Log Out

Backlog To Do In Progress Testing Completed

+ Project Ids

Man

Issue Priority:
Medium

Change how projects are selected such that the project join code is not visible.
Write any updates below:

Create

User 1 with the role Project Manager :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

+

Manage Project

Selected Issue:

Project Ids

View Issue Info Delete Issue Edit Issue Move Issue

Project Ids

Issue Priority:

Medium

Deadline (day-month-year):

16-06-2021

Change how projects are selected such that the project join code is not visible.

Apply

User 1 with the role Project Manager :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

About Projects Todo Log Out

Backlog To Do In Progress Testing Completed

Project Ids

+ Manage Project

Selected Issue:

Project Ids

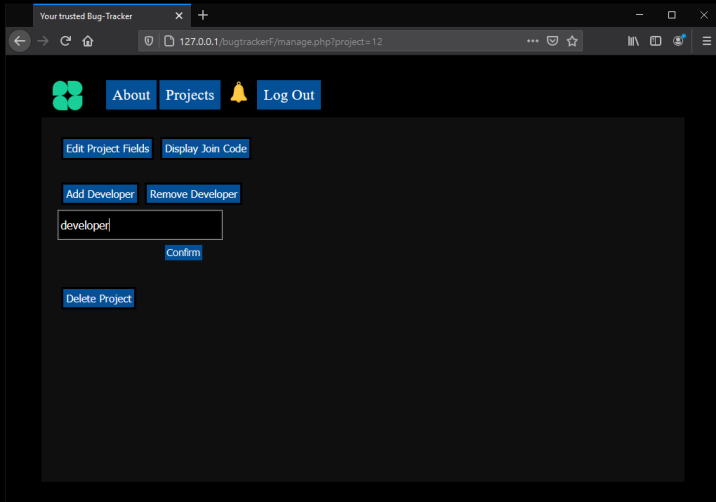
View Issue Info Delete Issue Edit Issue Postpone Issue Assign Issue

Status: Waiting Created by: manager Developed by: None Deadline: 16-06-2021

Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

User 1 with the role Project Manager :



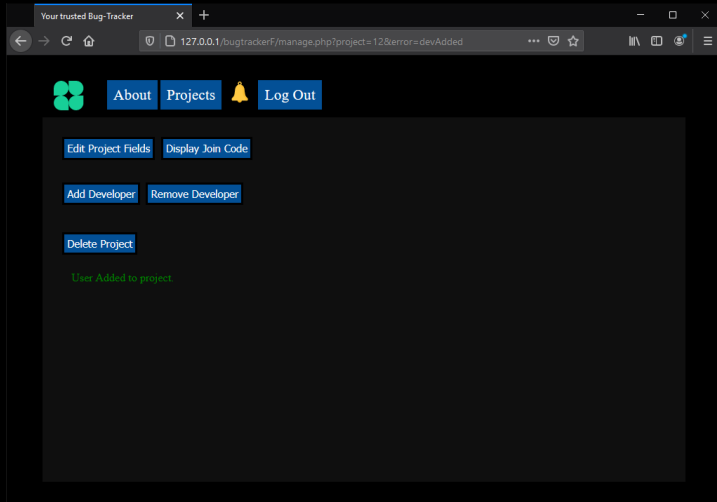
The screenshot shows a web browser window with the title "Your trusted Bug-Tracker". The address bar displays the URL "127.0.0.1/bugtrackerf/manage.php?project=12". The browser's toolbar includes navigation buttons (back, forward, refresh, home), a security icon, a star for bookmarks, and a menu icon.

The application interface has a dark background. At the top, there is a navigation bar with a logo (four green circles) and four buttons: "About", "Projects", a bell icon for notifications, and "Log Out".

Below the navigation bar, there is a main content area with several buttons and a text input field:

- Buttons: "Edit Project Fields", "Display Join Code", "Add Developer", "Remove Developer", "Confirm", and "Delete Project".
- Text Input: A text box containing the word "developer".

User 1 with the role Project Manager :



User 1 with the role Project Manager :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

About Projects Todo Log Out

Backlog To Do In Progress Testing Completed

Project Ids

+ Manage Project

Selected Issue:

Project Ids

View Issue Info Delete Issue Edit Issue Postpone Issue Assign Issue

Select a developer:

developer

Are you sure you want to assign the issue moving it to In Progress?

Yes No

User 1 with the role Project Manager :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

About Projects Todo Log Out

Backlog To Do In Progress Testing Completed

Project Ids

+ Manage Project

Selected Issue:

Project Ids

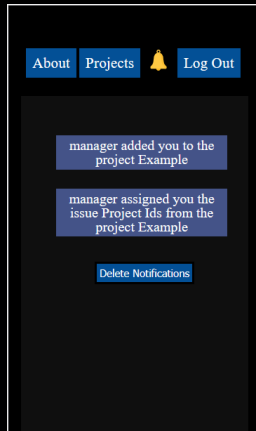
View Issue Info Delete Issue Edit Issue Assign Issue Abandon Mark as Completed

Status In Progress Created by manager Developed by developer Deadline 16-06-2021

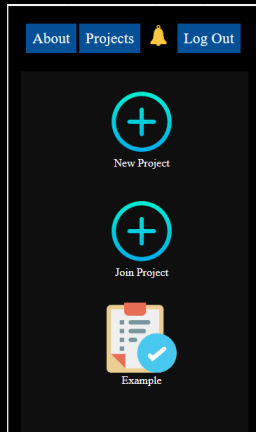
Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

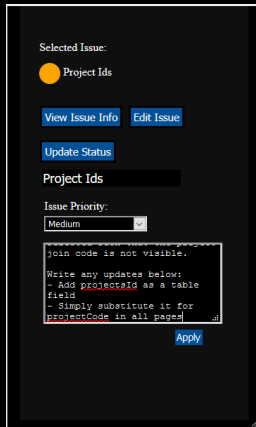
User 2 with the role Developer :



User 2 with the role Developer :



User 2 with the role Developer :



The screenshot shows a web application interface for a user with the role 'Developer'. The interface is dark-themed. At the top, it says 'Selected Issue:'. Below this, there is a yellow circle icon followed by the text 'Project Ids'. There are three buttons: 'View Issue Info', 'Edit Issue', and 'Update Status'. Below these buttons, the text 'Project Ids' is displayed next to a redacted area. Underneath, 'Issue Priority:' is shown with a dropdown menu set to 'Medium'. A text area contains the following text: 'join code is not visible.', 'Write any updates below:', '- Add projectId as a table field', and '- Simply substitute it for projectCode in all pages'. An 'Apply' button is at the bottom right of the text area.

Selected Issue:

Project Ids

View Issue Info Edit Issue

Update Status

Project Ids

Issue Priority:

Medium

join code is not visible.


Write any updates below:


- Add projectId as a table field
- Simply substitute it for projectCode in all pages

Apply


User 2 with the role Developer :

[About](#) [Projects](#) [Kanban](#) [Log Out](#)

Title	Place	Deadline
 Project Ids	Testing	16-06-2021



Selected Issue:

 Project Ids

[View Issue Info](#) [Edit Issue](#)

Status Testing	Created by manager	Developed by developer
Deadline 16-06-2021		

User 1 with the role Project Manager :

Browser: Your trusted Bug-Tracker | 127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

Backlog	To Do	In Progress	Testing	Completed
				<div>● Project Ids</div>

Manage Project

Selected Issue:

● Project Ids

[View Issue Info](#) [Delete Issue](#) [Edit Issue](#) [Back to Backlog](#)

Status	Created by	Developed by	Deadline	Completed At
Completed	manager	developer	16-06-2021	30-05-2021

Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

- Add projectid as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode

User 1 with the role Project Manager :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

Backlog

Project Ids

To Do

In Progress

Testing

Completed

Manage Project

Selected Issue:

Project Ids

[View Issue Info](#) [Delete Issue](#) [Edit Issue](#) [Move Issue](#)

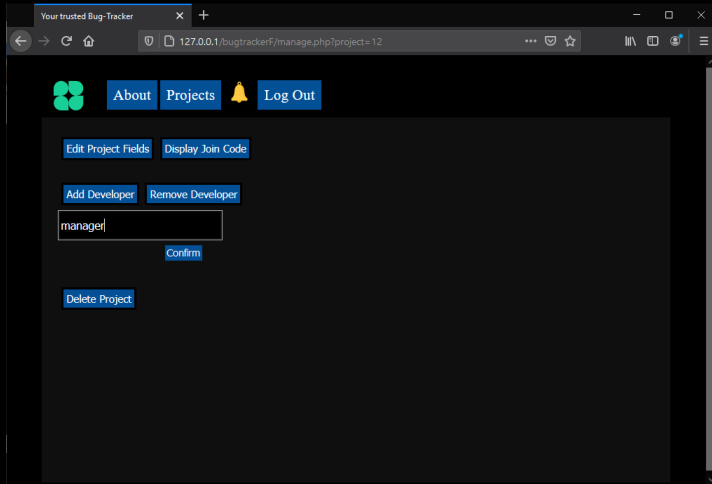
Status	Created by	Developed by	Deadline
Completed	manager	developer	16-06-2021

Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

- Add projectid as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode

User 1 with the role Project Manager :



User 1 with both roles :

The screenshot shows a web application titled "Your trusted Bug-Tracker" with a Kanban board. The board has five columns: Backlog, To Do, In Progress, Testing, and Completed. A single issue, "Project Ids", is in the "To Do" column. Below the board, a sidebar contains a "Manage Project" button. The main panel displays details for the selected issue "Project Ids", including buttons for "View Issue Info", "Delete Issue", "Edit Issue", "Update Status", "Postpone Issue", and "Assign Issue". It also shows a table with issue details and a section for update instructions.

Backlog	To Do	In Progress	Testing	Completed
	<div>● Project Ids</div>			

Manage Project

Selected Issue:

● Project Ids

View Issue Info

Delete Issue

Edit Issue

Update Status

Postpone Issue

Assign Issue

Status	Created by	Developed by	Deadline
Completed	manager	developer	16-06-2021

Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

- Add projectsId as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode

User 1 with both roles :

The screenshot shows a web browser window with the title "Your trusted Bug-Tracker". The address bar displays the URL "127.0.0.1/bugtrackerf/kanban.php?project=128&selectedIssue=18". The main content area features a Kanban board with five columns: "Backlog", "To Do", "In Progress", "Testing", and "Completed". A single card titled "Project Ids" is in the "In Progress" column. Below the board, a sidebar on the left contains a "Manage Project" button. The main panel below the board shows the details for the selected issue "Project Ids". It includes buttons for "View Issue Info", "Delete Issue", "Edit Issue", "Update Status", "Assign Issue", "Abandon", and "Mark as Completed". The issue details show it is in the "In Progress" status, created and developed by "manager", with a deadline of "16-06-2021". A "Details:" section explains that the project join code is not visible and provides instructions on how to update the code by adding a new field and substituting it in the code.

Selected Issue:

Project Ids

View Issue Info Delete Issue Edit Issue Update Status

Assign Issue Abandon Mark as Completed

Status: In Progress Created by: manager Developed by: manager Deadline: 16-06-2021

Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

- Add projectsId as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode

User 1 with both roles :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

Manage Project

Selected Issue:

Project Ids

View Issue Info Delete Issue Edit Issue Update Status

Assign Issue Abandon Mark as Completed

Project Ids

Issue Priority:

Medium

Deadline (day-month-year):

16-06-2021

Change how projects are selected such that the project join code is not visible.

Write any updates below:

- Add projectid as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode
- Implement a function that converts between project id and project join code.

Apply

User 1 with both roles :

Your trusted Bug-Tracker

127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18

Backlog	To Do	In Progress	Testing	Completed
			<div>Project Ids</div>	

Selected Issue:

Project Ids

[View Issue Info](#) [Delete Issue](#) [Edit Issue](#) [Abandon](#) [Mark as Completed](#)

Status: Testing Created by: manager Developed by: manager Deadline: 16-06-2021

Details:
Change how projects are selected such that the project join code is not visible.

Write any updates below:

- Add projectId as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode
- Implement a function that converts between project id and project join code.

User 1 with both roles :

The screenshot shows a web browser window with the title 'Your trusted Bug-Tracker'. The address bar shows the URL '127.0.0.1/bugtrackerf/kanban.php?project=12&selectedIssue=18'. The main content area is divided into two sections. The top section is a Kanban board with five columns: 'Backlog', 'To Do', 'In Progress', 'Testing', and 'Completed'. The 'Completed' column contains a single card labeled 'Project Ids' with a yellow dot icon. The bottom section is a detailed view of the selected issue. It features a blue button labeled 'Manage Project' with a plus icon. Below this, the 'Selected Issue:' is displayed as 'Project Ids' with a yellow dot icon. There are four buttons: 'View Issue Info', 'Delete Issue', 'Edit Issue', and 'Back to Backlog'. A table shows the issue details:

Status	Created by	Developed by	Deadline	Completed At
Completed	manager	manager	16-06-2021	30-05-2021

Below the table, the 'Details:' section states: 'Change how projects are selected such that the project join code is not visible.' The 'Write any updates below:' section contains a list of tasks:

- Add projectId as a table field
- Simply substitute it for projectCode in all pages
- Does not work since all other functionality relies on projectCode
- Implement a function that converts between project id and project join code.

The main difficulties were encountered on the project planning stage where the team lead would have to allocate time for each feature that is to be developed, when allocating time like this, if you ignore outside factors like other projects or school work it can become a mess.

In the planning stage it is sometimes impossible to predict how much time is needed to complete something, this is especially true with lack of experience.

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Because of this the following features had improper deadlines

- ▶ Project Selection Overhaul
- ▶ Dynamic Roles
- ▶ Responsive Design
- ▶ Notifications Feature

An interesting aspect of the implementation is reusing and abstracting existing elements while maintaining the integrity of the website while minimizing code duplication.

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Some examples of reusing elements:

- ▶ The main menu is contained a file that is included on all other visible pages.
- ▶ Both the Kanban and To-do formats have the same issue options because they both include the same file.
- ▶ All Confirmation dialogs and some forms are defined as functions and reused in multiple pages.

A PHP specific problem arises when you try to reuse functionality on two or more pages and that is knowing where to return.

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This is solved like so:

- ▶ Somehow get the name of the current page

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- ▶ When confirming an action send the name of the current page to the controller (connection between database and interface)

A PHP specific problem arises when you try to reuse functionality on two or more pages and that is knowing where to return.

This is solved like so:

- ▶ Somehow get the name of the current page
- ▶ When confirming an action send the name of the current page to the controller (connection between database and interface)
- ▶ At the end of the action simply use that name to return the user to the proper page.

In conclusion one can never truly complete a complex project and so there are no finished applications only abandoned ones.