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## Managing a Successful Computing Project including user experience features in Community Portal

Module Project

**Module:**  Managing a Successful Computing Project

Course: : Managing a Successful Computing Project for including user experience features in an Existing Community Portal (Project Management Plan)

| | |
|---|---|
| **Start Date** | :27/10/2022 |
| **End Date** | :27/10/2022 |
| **Submission Date** | :28/10/2022 |

| | |
|---|---|
| **Learner Name** | : Chathushi Jayarathna |
| **Enrollment ID** | : |
| **Presentation Date** | : |

# Document History

| Version Number | Effective Date of release | Summary of Included Changes | Author |
|---|---|---|---|
| 1 | 4th March 2016 | First Edition | Satya CVS |
| 2 | 16th Oct 2017 | Changed for Module 6 | Shrinivas K R |

# Contents

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❑ Principles of Problem Management

– **Problem Identification**

A problem may be detected within an incident file or an analysis of an existing incident. When the motive for a prevalence or collection of incidents is uncertain, it's far most probable. In an effort to prevent future service interruptions, proactive problem detection could be very critical.

– **Problem Logging**

It is important to document troubles for later reference. Details about the problem, inclusive of its kind, description, associated occasions, category, consumer records, repute, resolution, and closure, need to be recorded. To tag recognized problems and manage them in a database, these facts are crucial.

– **Problem Investigation**

An investigation into the foundation cause of a problem additionally relies upon the severity and urgency of the problem. Commonplace investigation strategies encompass reviewing the regarded Error Database (KEDB) on the way to discover similar problems.

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❏ Principles of Problem Management

– **Resolution**

As soon as resolved and the answer is determined, it is able to be implemented the usage of a standard exchange procedure. it's also important to make sure of service recovery. With the purpose to repair the problem permanently, a new change has to be raised. Alternate control handles the assessment, planning, and execution of changes.

– **Review**

At some point at this level, it is critical to study the resolution of the problem, and its effect on the enterprise as well as perform a risk analysis. This guarantees that the problem control procedure is executed easily and always progressed for destiny. This overview is recorded as well as shared with relevant groups and people.
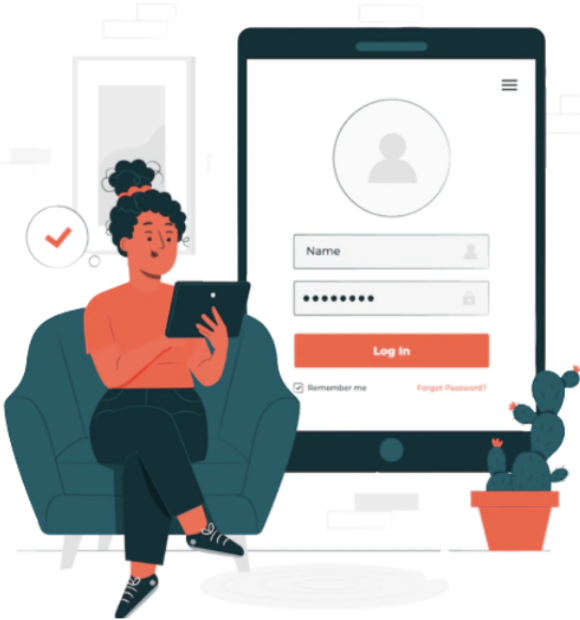
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## ❑ Problem Identification

When the user clicks on the forgot password link on login page,
the user will be redirected to the index page instead of the forgo password page

# 2. Problem Management Example
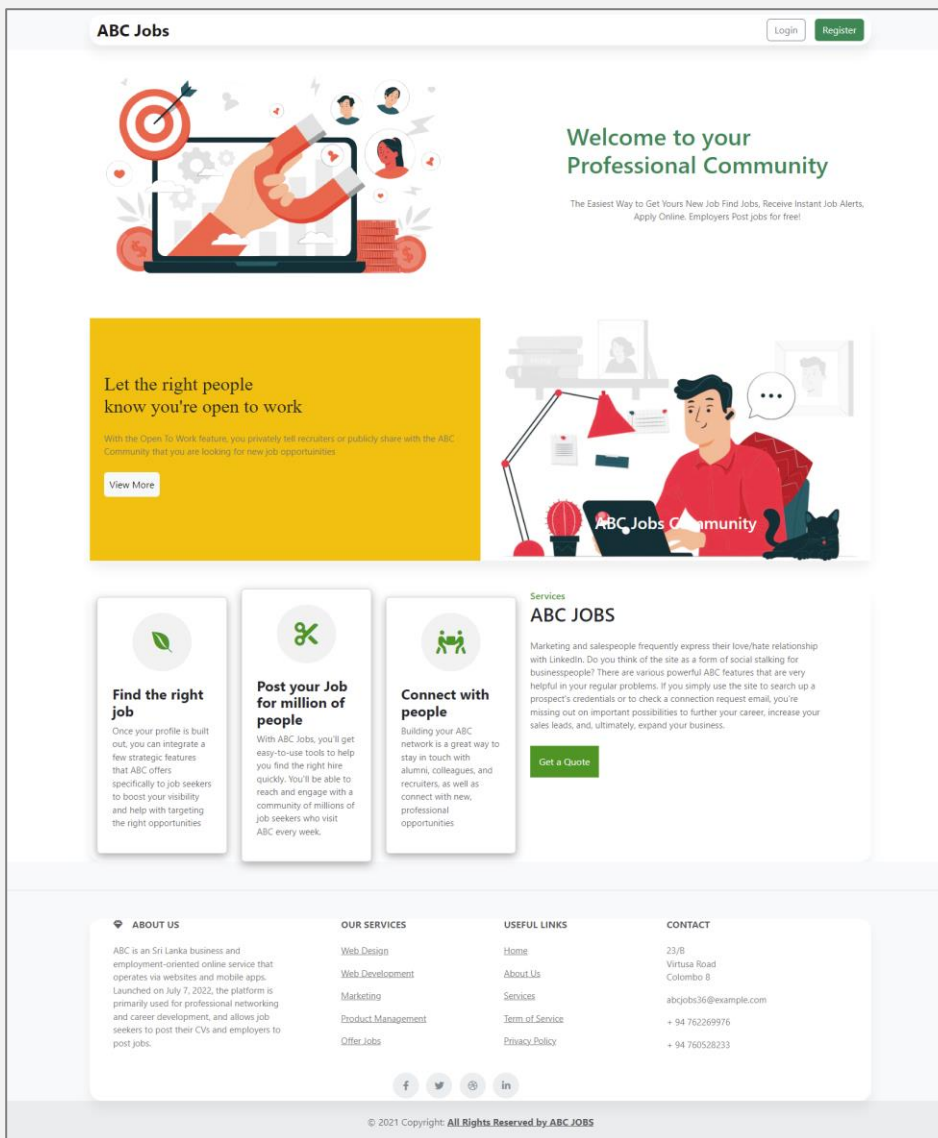
☐ **Problem Investigation**
It likely because mapping mentioned in the controller was wrong

☐ **Problem Logging**

| No | Class | Problem |
|----|-------|---------|
| 01 | MainContr oller.java | Wrong Mapping "@RequestMapping("/forgotpassform") public String index() { return "index"; }" |

☐ **Resolution**
Change the path in MainController.java as

```
@RequestMapping("/forgotpassform")
    public String forgotpassform() {
        return "forgotpassform";

    }
```

❑ Tools, Process & Techniques

✓ **Problem Identification**

Techniques = Issue Tracking System

Tool = Excel Sheet

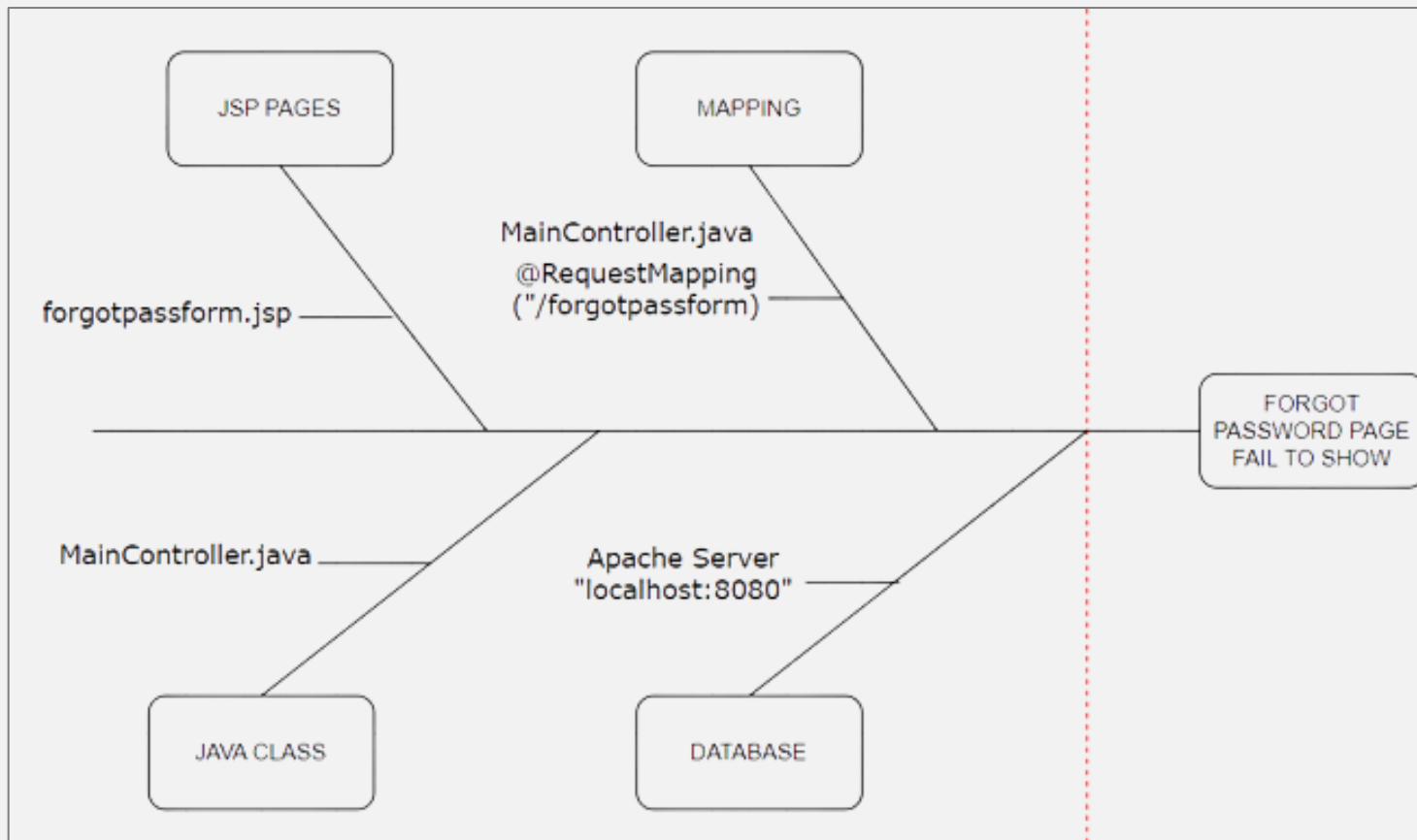Using an Excel sheet to make a tracking document template is an important tool for problem identification.

Process:

- Receive a problem report
- Verify the problem
- Logging the problem issue
- Resolving the problem
- When it's resolved, it will be remarked as resolved in the issue tracking system

| Issue Identification and Tracking Document | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Created By:** | | | Chathushi | | Last Update By: Chathushi | | | | | |
| **Date Created:** | | | 19 October 2022 | | Last Revision Date: October 2022 | | | | | |
| **Issue No.** | Issue Description | Issue Type | Identified By | Date Identified | Issue Assigned To | Target Resolution Date | Priority | Status | Date Resolved | Resolution Description |
| **1** | Thank you, page is not showing, | Technical Issues | Software Tester Team | 19 October 2022 | Software Development Team | 20 October 2022 | Low | Resolved | 19 October 2022 | Correcting the letters from code in MainController |
| **2** | When the user clicks on forgot password link on login page, the user will be redirected to the index page instead of forgot password page | Technical Issues | Software Tester Team | 19 October 2022 | Software Development Team | 20 October 2022 | Medium | Resolved | 19 October 2022 | Correcting the code in MainController.java |
| **3** | User registration data is not stored in database | Technical Issues | Software Tester Team | 19 October 2022 | Software Development Team | 22 October 2022 | High | Resolved | 21 October 2022 | Correcting the code in controller and dao class |

✓ **Problem Investigation**

    Techniques = Root Cause Analysis

    Tool = Fish Bone

    The Fishbone is an excellent visualization tool for discovering multiple root cause. It shaped like the skeleton of a fish, with the head on the right side being the effect of the problem and the possible causes shown as fish spine on the left

    Process:

- Define the problem statement
- Find the root cause
- Fix the root cause
- Finalize solution

✓ **Problem Resolution**

Techniques = Known Error Database

Tool = Excel Sheet

Using an Excel sheet to make a tracking document template is an important tool for problem identification.

Process:

- Adding known error records
- Create a known error record with the symptoms and resolution details
- Accessing known error records
- Search KEDB and apply fix
- Deleting known error records
- Permanent solution implemented

❑ **Investigate the problem**

We narrow the problem causes into the Controller and Security Configuration class

❑ **Diagnose the problem**

•Identify the root of the problem by removing the error (Debugging)

Step 1 – Set Breakpoints
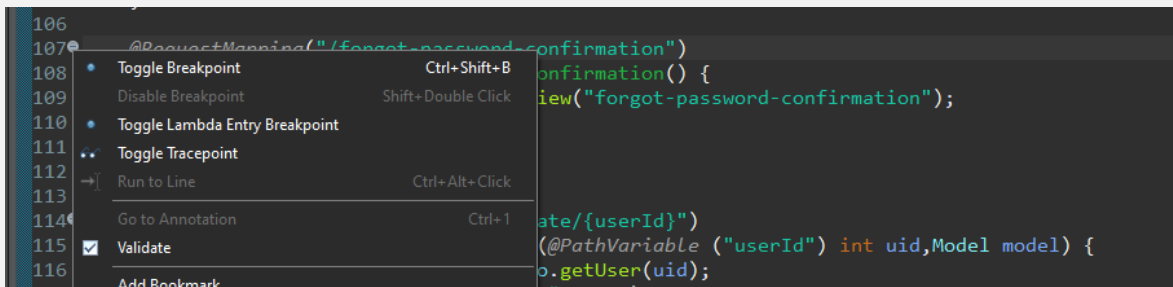


*Figure 10:Screenshot of debugging in eclipse step 1*



Breakpoint: A blue circle should then appear next to the line:
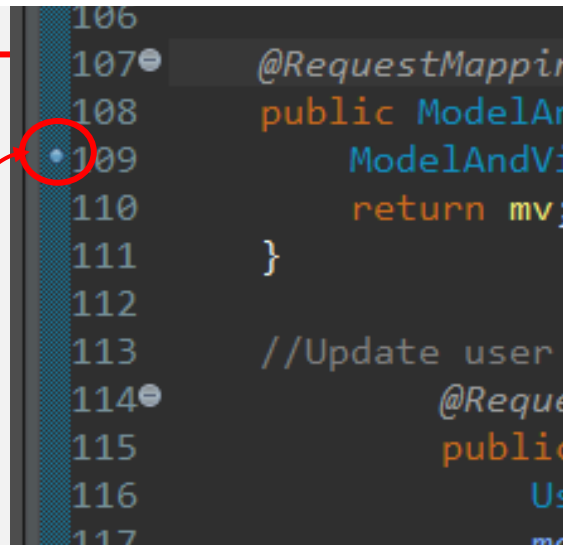
**Step 2** – Start the program in Debug mode
(Right click on project→Debug as→Debug as server)
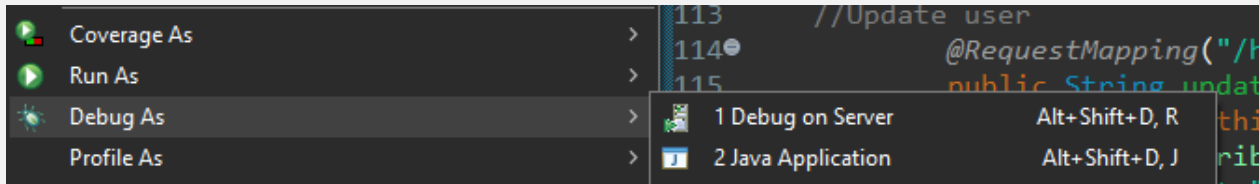


**Step 3** – Showing debugger details in the console
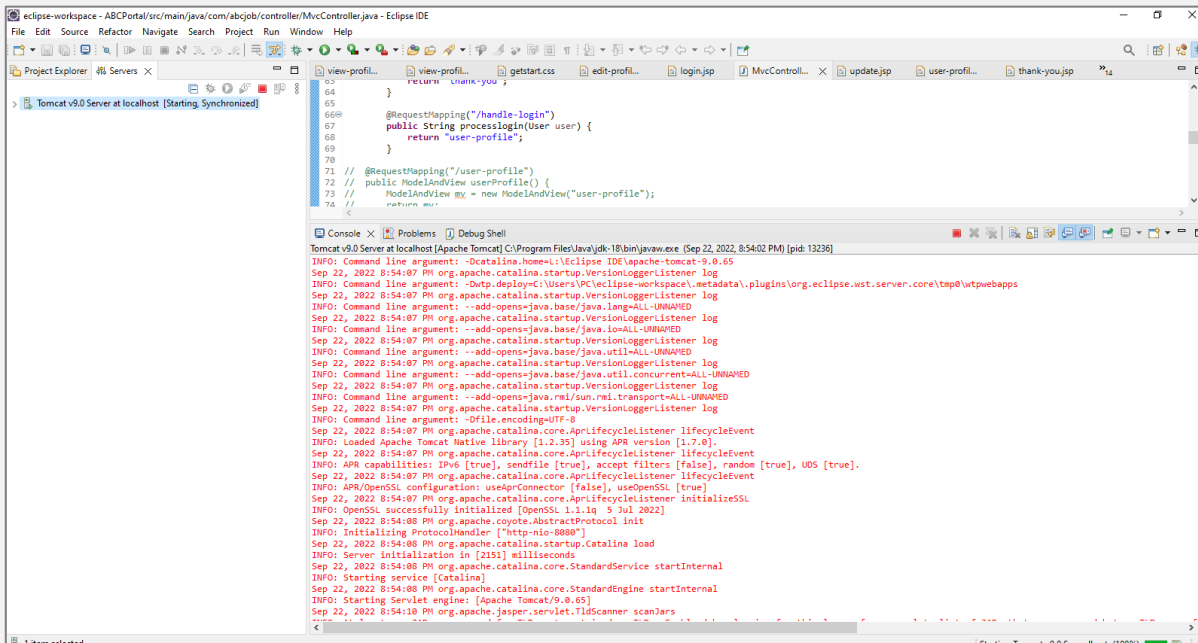
**Step 4** - Controlling the program execution

The call stack indicates the parts of the program which can be currently executed and the way they
each other. The present-day stack is displayed inside the Debug view
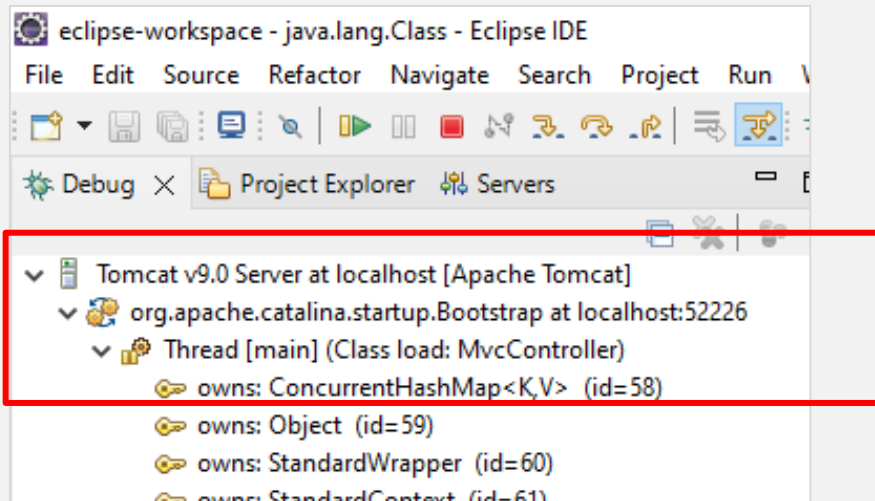
**Step 5** - Breakpoints view and deactivating breakpoints



(x)= Variables  °o Breakpoints ⊠

☐ ♪ MyModelAddon [entry] - init(IEclipseContext)

☑ ♪ PlaygroundPart [access and modification] - text2

Deactivated

Click to delete one or all breakpoints

☐ Hit count: [         ]   ⦿ Suspend thread  ◯ Suspend VM  ☑ Entry  ☐ Exit

☐ Conditional  ⦿ Suspend when 'true'  ⦿ Suspend when value changes
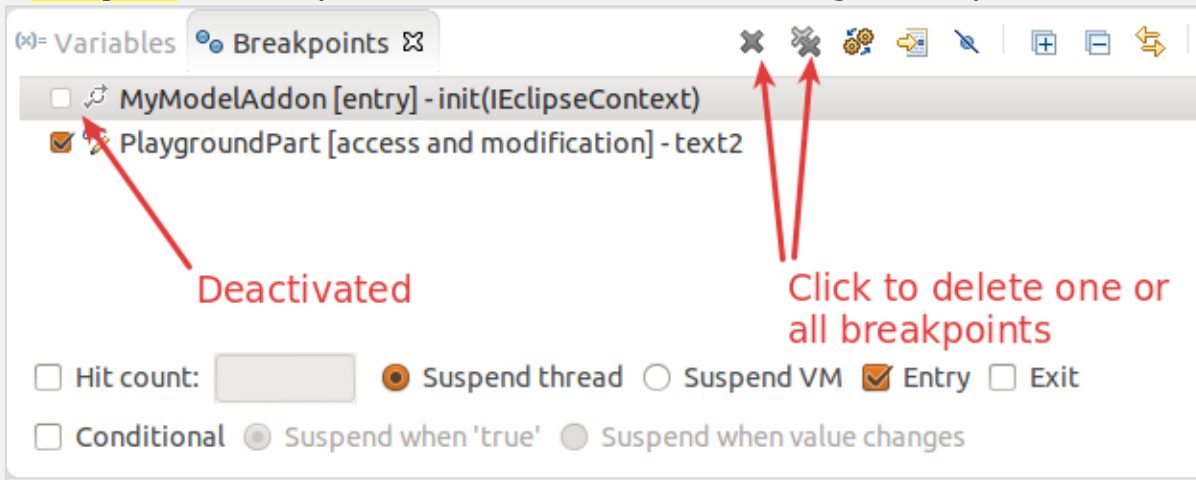
**Step 6** -Evaluating variables in the debugger

The variables view shows fields and nearby variables from the contemporary executing stack



| Name | Value |
| --- | --- |
| ⟼ validateUserSettings() returned | true |
| ⊙ args | String[0] (id=15) |
| ⊙ connection | ServerConnection (id=35) |
| ⊙ userSettings | true |

**Step 7** – **Use the drop-down menu to display static variables**
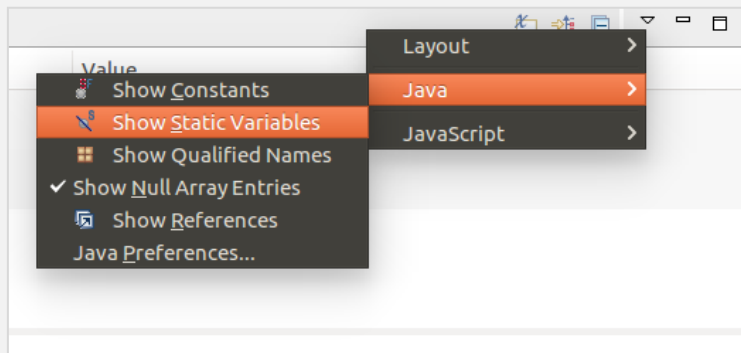


**Step 8** - Changing variable assignments in the debugger



Change value here
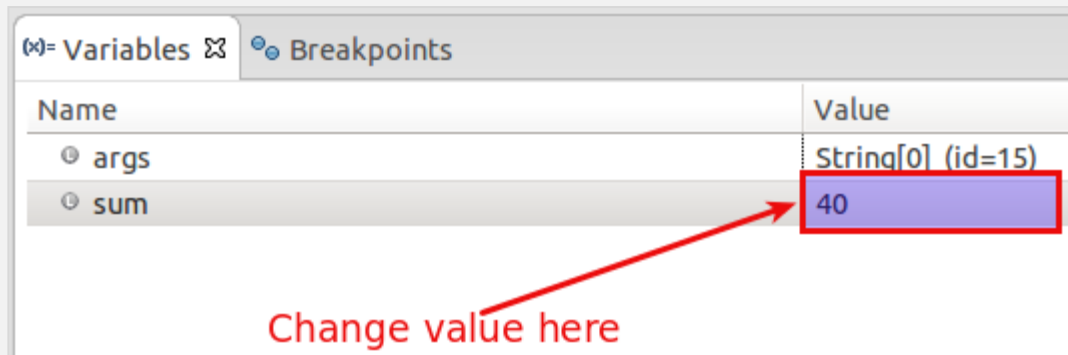
- **Step 9** -Controlling the display of the variables with detail formatter
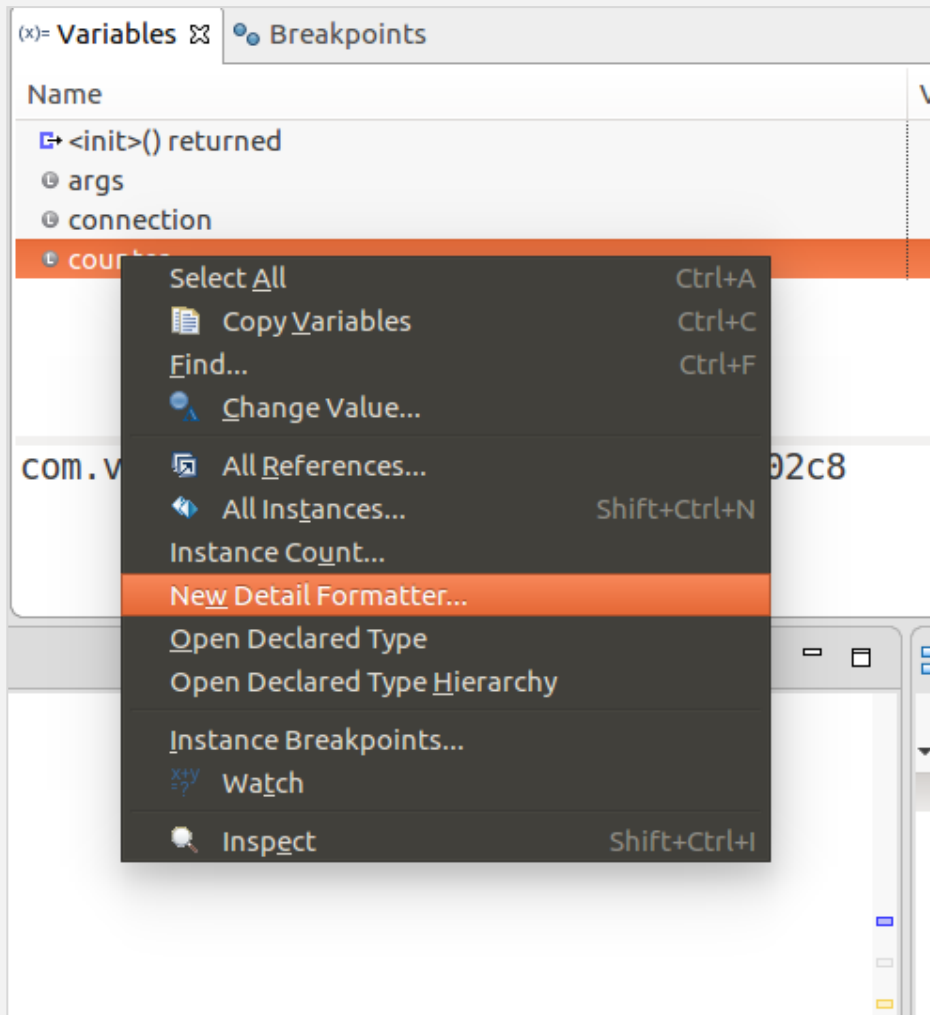
**Prioritize and Categories problems:**

**Tier 1: Low-priority issues**

Thank you, the page is not showing,.

**Tier 2: Medium priority issues**

When the user clicks on forgot password link on the login page, the user will be redirected to the index page instead of forgot password page

**Tier 3: High-Priority Issues**

User registration data is not stored in a database

Problems Categories Diagram

**Problem Priorities and Categories Diagram**

**1**

**Tier 1: Low-priority issues**

Thank you, the page is not showing,.

**2**

**Tier 2: Medium priority issues**

When the user clicks on forgot password link on the login
page, the user will be redirected to the index page
instead of forgot password
page.

**3**

**Tier 3: High-Priority Issues**

User registration data is not stored in a database
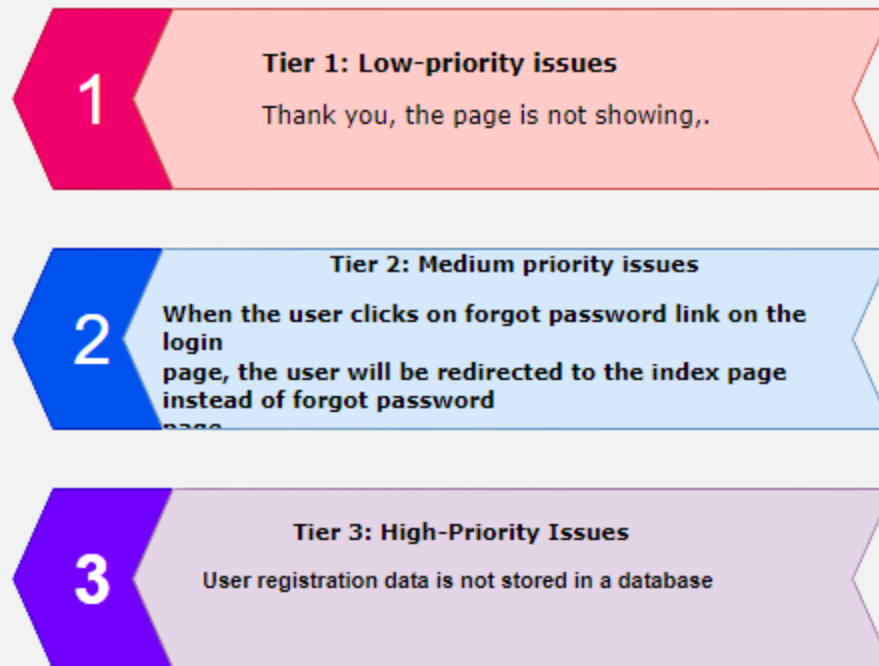
**1. Problem Management Solution**

Solution for forgot password page display data failure

- Using the fishbone tool, we discover the root cause (root cause analysis)
- Test the code once more
- Add the problem to regarded error database
- Debug the code using breakpoints
- Thinking of the solution for the root cause
- Regulate the root cause problem
- After rerunning the application on debug mode
- If the problem is resolved, update the known error database

# 6. Problem Management Solution

## Before fixing the Issue

# 6. Problem Management Solution

**After fixing the Issue**

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| Issue No. | Issue Description | Issue Type | Root Cause | Workaround | Status | Date Resolved |
|---|---|---|---|---|---|---|
| 1 | Thank you, page is not showing, | Technical Issues | In getmapping method or uppercase lowercase mis correction | Correcting the letters from code in MainController. java | Resolved | 19 October 2022 |
| 2 | When the user clicks on forgot password link on login page, the user will be redirected to the index page instead of forgot password page | Technical Issues | Wrong mapping in MainController. java class | Correcting the code in MainController. java | Resolved | 19 October 2022 |
| 3 | User registration data is not stored in database | Technical Issues | Dao class is not mentioned in controller class correctly | Correcting the code in controller and Dao class | Resolved | 22 October 2022 |
| 4 | Attached files not showing in bulk mails | Technical Issues | | | Incomplete | |

❑ **Apply Job**

    ❑ **Users (Software Programmer)**

    - List Job Page

    - Apply Job Functionality

    - Apply Job History

    - Search Job Functionality

    - User Job Page

    ❑ **Admin**

    - Manage Jobs

    - Manage Job Applicants

| Project Task ID | Project Task Description | Project Milestone ID |
|:---:|:---|:---:|
| 1 | Identify problems and develop issue tracking documents | 1 |
| 2 | Problem investigation and diagnosis | 1 |
| 3 | Problem prioritization | 1 |
| 4 | Problem resolution | 2 |
| 5 | Creating a known error database | 3 |

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| Project Milestone ID | Milestone Feedback received from Tutor / Learning Facilitator | Action Taken (Yes / No) |
|---|---|---|
| 1 | Creating fishbone technique with diagram.net | Yes |
| 2 | Change Testing table format | Yes |

List evidence of the project Results

📑 BDSE04-CPJ (Problem Management)-Chathushi Jayarathna-Final Project Presentation.pptx

📄 BDSE04-CPJ (Problem Management)-Chathushi Jayarathna-Final Project Report.docx

📑 BDSE04-CPJ (Test Planning)-Chathushi Jayarathna-Final Project Presentation.pptx

📄 BDSE04-CPJ (Test Planning)-Chathushi Jayarathna-Final Project Report.docx

🗜 BDSE04-CPJ-Chathushi Jayarathna-Final Project Source Code.zip

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❑ **List of Improvements**

- Making sure to document the problem management