

Application Developer Interview

Pre-Interview Format

1. You are given 3 days to implement the given user requirement or scenarios
2. You must have a gitlab.com account. Signing up is free. Create an account if you don't have one and create a private repository and a branch to upload your code to satisfy the user requirement.
3. It's an open book test. You have to use the following stack for the implementation.

| Layer | Technology | Description |
|------------|---------------------------------|--|
| Front-End | Angular 14 or later, HTML5, CSS | To provide web UI for timesheet application. You only need to provide the UI for timesheet management . The rest of the data such as user , and status can be managed directly inside the database tables. |
| Back-End | Spring Boot | To provide REST API's to create, read, update and delete timesheet records from database |
| Database | MySQL | To contain tables for user , task , status and timesheet . You can create views or stored procedures as an added bonus. You will be assessed on your understanding of RDBMS Sql queries, joins and constraints |
| Repository | Gitlab | You will need to demo how you perform basic git operations such as clone, branch, commit and push |

Interview Format

1. You will need to walk through your implementation.
2. You will be given around 30mins to do a minor change like adding a small feature to the application.
3. You will be assessed on soft skills such as communication and attitude

Architecture Overview

1. You will create a simple Timesheet management application. It's a 3-tier application.
2. You will provide an Angular UI only for Timesheet management portion. The rest of the data such as user and status can be managed directly inside the database tables.

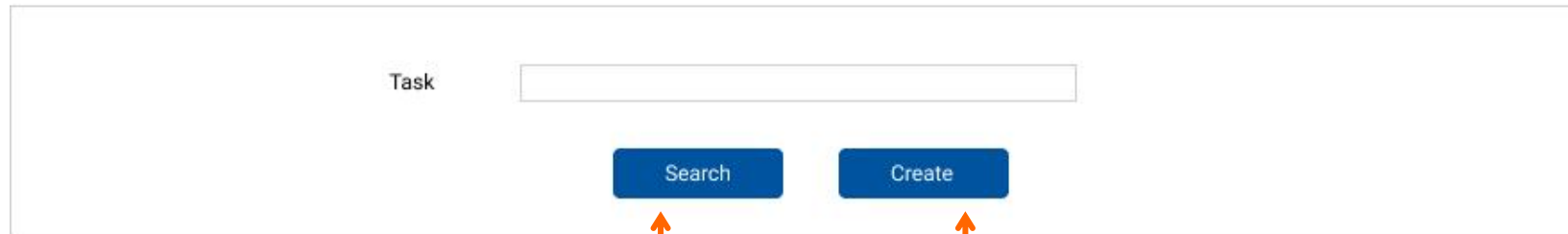


Timesheet Maintenance Screen

You need to provide 1 page to search for timesheet.

Within the same page you need to add 1 dialog box (modal) to maintain a user's timesheet

Timesheet Entries



The form contains a label 'Task' followed by a text input field. Below the input field are two blue buttons: 'Search' and 'Create'. Two orange arrows point from the text below to the 'Search' and 'Create' buttons respectively.

Clicking on button "Search" will display the search result as shown on slide 5

Clicking on button "Create" will display the a dialog box as shown on slide 6

Search Result










Timesheet Entries

Task

Search

Create

Edit Button

| Project | Task | Assigned To | From | To | Status | Delete button | |
|-----------------------|-------------------------|-----------------|------------|------------|-------------|---|---|
| Timesheet Application | Create HTML Layout | Johan Arif | 10-01-2023 | 12-01-2023 | Closed |  |  |
| Timesheet Application | Create Back-End Service | Mariam Mohammad | 13-01-2023 | 18-01-2023 | Open |  |  |
| Timesheet Application | Create Database | Johan Arif | 12-01-2023 | 12-01-2023 | In Progress |  |  |
| Timesheet Application | Create Database Tables | Mariam Mohammad | 12-01-2023 | 12-01-2023 | Open |  |  |
| Timesheet Application | Create CSS | Johan Arif | 10-01-2023 | 12-01-2023 | In Progress |  |  |
| Timesheet Application | Create Angular Code | Mariam Mohammad | 13-01-2023 | 18-01-2023 | Open |  |  |
| | | | | | | | |

Create / Edit Timesheet Entry

Timesheet Entries

Task


Timesheet Entry



Project

Task

Date From Date To

Status













Assign To 

Clicking on button "Save" will create or update a record into the database

Clicking on button "Close" will close dialog window

List of users from table user

| Status | | |
|-----------|---|---|
| Completed |  |  |
| Completed |  |  |
| Progress |  |  |
| Completed |  |  |
| Progress |  |  |
| Completed |  |  |

Expected Database Tables

| Table | Description |
|-----------|---|
| status | Lookup table for timesheet status. Available statuses are: Open - task that are not yet owned In Progress - task that is being worked on Closed - task that has been completed |
| timesheet | Store timesheet detail. You are expected to create this table and demonstrate your understanding of primary and foreign keys and link it up with status and user tables |
| user | Store list of users to assign the task to |

Upload Your Code to Gitlab.com

1. Inside your repository in Gitlab.com, create a branch called “timesheet_dev”. You will need to upload your implementation code to this repository branch.
2. From your gitlab repository members, please invite the following email addresses so that we can take a look at your source code for evaluation.
 - nazakahar@gmail.com
 - matlut@gmail.com

Thank You