

# Requirement

Develop a **Java/Kotlin Spring Boot application with a frontend** application to manage todos. The submitted solution should have the following capabilities:

1. Authenticate/Login with Github OAuth API (Scope: gist)
2. Create a new project.
3. Within a project:
  - a. Manage todos - Add, Edit, Update and Mark as complete.
  - b. Export the project summary as gist (Github).
4. Export as gist
  - a. Generate the project summary in markdown format and export the content as a secret gist.
5. The exported gist should be in the following format:
  - a. File name as <Project title>.md (Markdown)
  - b. Project title as heading.
  - c. Summary: No. of pending todos / Total todos.
  - d. Section1: Task list of pending todos (with an open checkbox).
  - e. Section2: Task list of completed todos (with a checked box).
  - f. See the attached sample on expectations.

## Expectations

1. Selected schema/representation should atleast have the following items:
  - a. **Project**: Unique Id, Title, Created Date, List of Todos.
  - b. **Todo**: Unique Id, Description, Status, Created Date, Updated Date.
2. Application should request users to login with the **Github OAuth API with gist scope**. (This is required to write gists on a user's behalf.)
3. Application should **NOT** allow any users to proceed without authentication. On successful login, the user should be redirected to the home page.
4. Home page should have provisions to:
  - a. Create a new project.
  - b. List all projects.
  - c. View a project.
5. Create/View project should provide a detailed project view with the following details:
  - a. Project title. (Editable)
  - b. List all todos with description, date and completion status.
  - c. Actions to Add/Update/Remove a todo.
  - d. Mark a todo as pending or complete.
  - e. Action to export summary as a secret gist.
6. Once exported as gist, the user should be able to find it on Github. (Acceptance/Verification)
7. Proper code conventions and style guide (package, names, indentation etc).
8. Secret gist template/format, assuming `Project1` having a total of 5 todos, out of which 2 are completed:

 project1.md

# Project1

Summary: 2/5 todos completed

## Pending

- ☐ task one
- ☐ task three
- ☐ task four

## Completed

- ☒ task two
- ☒ task five

## Bonus Points

1. Using a decent frontend framework or styling guide to represent data. Eg. React/Angular/Vue with Bootstrap or Tailwind CSS.

## Constraints

1. Submission should happen in not more than **2 weeks** from the date of receiving the problem.
2. The application should have a frontend user experience, and not API only.
3. Store all the details in a database of choice (RDBMS or Non-RDBMS) and show these on a webpage.
4. Integrate with Github gists API.  
<https://docs.github.com/en/free-pro-team@latest/rest/reference/gists>
5. Do not use any existing feature/capability libraries for integrating with github. However, you can use OAuth 2.0 libraries of choice.
6. You can use any HTTP library (WebClient, RestTemplate, Apache, OkHttp, ...) to fetch the data.
7. Code should have proper README on how to setup, run and test for a reviewer.
8. Minimum 80% code coverage using any testing library.

## Delivery

1. Host your code in Github **private** repository and invite [careers@hatio.in](mailto:careers@hatio.in) as a collaborator. [[Help](#)]
2. Optionally host your solution on a publicly accessible web server.