AIM:- To build and integrate REST APIs using Spring framework(s).

Group Call Time:- 7.30 pm IST (Monday, Wednesday, Friday).

Mode of Call:- Zoom Calls & Meetings

Deadline: - 7-10 Days.

There are two types of tasks for the interns-

- 1. Build REST APIs to demonstrate it using Web App.
- 2. Build an Android app using given screens & integrate given APIs correspondingly.

You can choose either of them and build upon it in order to complete this phase of the internship.

Basic intro to task:-

You would need a basic knowledge of the following:-

- An IDE (preference as follow { IntelliJ / Android Studio > Eclipse > Netbeans)
- Java
- MySQL
- WAMP server / XAMPP server
- Maven
- Spring MVC
- Spring Boot
- Spring Hibernate
- Postman

Search out for tutorials/video tutorials and learn about them before starting building your main application which you have to demonstrate.

1) For Building REST APIs to demonstrate it using Web App.

Once you are done with learning, build REST APIs of your own idea to show CRUD features using those REST API's. I.e Suppose you need to have details of students. So build 4 API endpoints with which you can

- 1. Insert data
- 2. retrieve data
- 3. update data
- 4. delete data

Build at least 3 such sets of APIs.

if you are having time before the deadline ends.you can try to build frontend and integrate those REST API's with it as well **(Optional)**

2) For Building an Android app using given screens & integrate given APIs correspondingly.

Develop an app with reference to the screens (Link:- $\frac{https://goo.gl/UqwBmt}{https://goo.gl/YtkSxC})$ Integrate the already built REST API's (Link to documentation:- $\frac{https://goo.gl/YtkSxC}{https://goo.gl/YtkSxC})$ The screens are selected so that the app should be CRUDable.

That is you should be able to:-

- 1. Insert data
- 2. retrieve data
- 3. update data
- 4. delete data

You need to understand how and why REST APIs are used .. so don't skip Learning about Frameworks.

Some resources:-

Tutorial for Spring framework:- https://goo.gl/NJX4TC
Online tutorial for building REST APIs using Spring:- https://goo.gl/iRMCqr
Video tutorials for integrating REST APIs with an android app:- https://goo.gl/gYQeTU, https://goo.gl/UkXer8

You can follow other tutorials as well these are just for references.

Do more focus on learning part rather than aesthetic features of your app.

Have a happy learning:)