

# What is CodeMyMobile looking for?

When it comes to software development, quality matters. CodeMyMobile is currently working on several data migrations in addition to initiatives with reporting and other intensive applications. While these projects are underway, everything must remain stable and versioned to work across all of CodeMyMobile's web and mobile applications.

One challenge is establishing conventions in the face of a large feature set and ensuring consistency, stability and testability across the entire breadth.

At its core, CodeMyMobile develops and maintains APIs written in Node. The javascript landscape is notorious for changing, but certain software development principles remain the same regardless of language.

Given a new codebase, how will you start a REST API with the above in mind?

## The Project

We want you to start an API Server & a SPA (Single Page App - using any UI framework of your choice) that could be used for a social media website. This includes modelling users and a "friend" relationship between users.

### Core Features:

1. Using a relational database (MySQL, Postgres), create the schema needed for users and to model the friend relationship
  - Keep the user model simple! Id, firstName, lastName & avatar are perfect
2. Create an API Endpoint for fetching users with basic pagination
3. Create an API Endpoint for fetching a user's friends
4. Create an API Endpoint for fetching a user's friends of friends
5. Create a SPA to use the created endpoints, and browse through users' & their friends
6. Start a README with your code

### Other requirements:

1. Document how to migrate the database to your schema, whether it is an accompanying SQL command or a migration tool.
2. It's up to you whether you use an ORM, querybuilder or raw queries, as long as the code is readable
3. Document how to test the API Endpoints, i.e. with Postman
4. Document briefly how you would write unit or integration tests.
5. Use any routing library you feel comfortable with (i.e. Express, Koa, restify)
6. Attempt to follow REST conventions

## Deliverables

The above project should not take more than a couple hours. We are looking for clean and

concise code and to continue the discussion with you after you submit the project. Please include a link to a public repo.