

Backend System: Student in a range

Relevel
by Unacademy



Educator Introduction (5 min)

- Greet Students
- Enquire students if they have revised previous class content

Concept to be covered in class:

Problem Statement -

Relevel is expanding globally. So, they have to travel worldwide a lot to open new offices where the students and teacher can interact in real-time, which will benefit both. The only remaining issue is "Where should they buy the new offices '?

Albert Einstein suggested creating an app that can show the population density of students in a particular area. If it is high, Relevel will buy offices in that area.

Follow the standard naming conventions and comment on the code well to easily understand. We are looking for a basic working prototype, so make your assumptions accordingly and pace yourself.

Problem Requisite

- The candidate should make sure GIT, NodeJS, and MySQL are already installed on their system before starting the development.

User Stories

Problem 1 (Estimated Time to complete ~2 Hours)

Story-1 (Define data model)

Create a clear data model for Student and pointSchema. Create mongoDB schema, for example, should be included in your code base.

- Add Appropriate validations and reference keys.
- Students can insert/update/search the location.
- The pointSchema will take the latitude and longitude of the location. Spend some time creating some "seed data" that covers all of the use cases you want to show.

Story-2 (Create APIs for Searching)

Your APIs should provide the following functionality to downstream consumers of the API (in a RESTful way):

- Create appropriate APIs for Relevel for searching all the student's location based on range(maximum distance).
- Display status & response code in the response.
- The successful request should return 200 response codes.
- Use an appropriate HTTP method out of GET, POST, PUT, PATCH, DELETE, etc.

Problem 1 (Estimated Time to complete ~1.5 Hours)

Story-3 (Create APIs for inserting, updating and deleting)

Your APIs should provide the following functionality to downstream consumers of the API (in a RESTful way):

- Create appropriate APIs for students adding their location, updating their location, deleting the location.
- Display status & response code in the response.
- The successful request should return 200 response codes.
- Use an appropriate HTTP method out of GET, POST, PUT, PATCH, DELETE, etc.

Solution

<https://github.com/Gtgstg/Student-in-a-range>

THANK YOU