

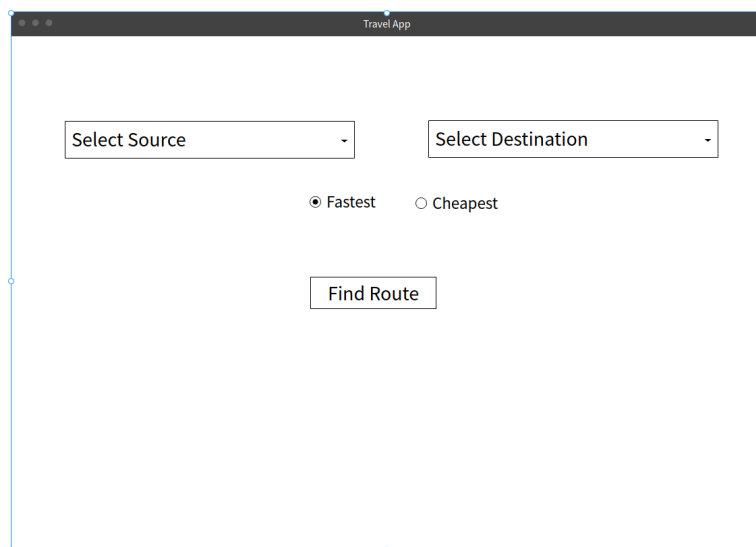
Problem Statement

Description

A travel agency wants to create a simple Web App to help their customers find the cheapest or fastest way to travel from one city to another. You are asked to create a simple Web App that will find the complete continuous path to go from one city to another, considering different sorting types (cheapest or fastest).

For example: If the user chooses his starting point as London and Destination as Moscow then the App must display the path with all cities the user must travel in order to reach the destination. The resulting list must be sorted based on user choice: Cheapest / Fastest.

Consider the following screenshot -



The screenshot shows a web application window titled "Travel App". Inside the window, there are two dropdown menus at the top: "Select Source" and "Select Destination". Below these menus are two radio buttons: "Fastest" (which is selected) and "Cheapest". At the bottom of the form is a button labeled "Find Route".

You can see that the user can select a source and a destination. Then she can select either the fastest or the cheapest radio boxes. Then, the user clicking on the Find Route button will show either the fastest route or the cheapest route depending on her selection.

Technical Requirements

Data

The data for the routes are in a JSON file that can be downloaded from [here](#). As you can see in the file, the routes are for countries in the European Union. For each route, there is an arrival, departure, duration and cost with discount keys in JSON.

You can use this JSON file to populate the select boxes above.

However, you cannot load it directly on the client side. You have to serve it via an Express API. The details are given in the “Backend” section.

Frontend

The frontend app should be built using React. You can do everything in React, no Redux needed. The data for populating the select box and finding the route should be coming from an express API described in the next section.

Backend

The backend should contain two parts -

1. A Node script that will read the above JSON file and populate a database - either MongoDB or PostgreSQL.
2. An express project that has the following endpoints
 - a. `/places` - List all the places the user can travel to and back. This endpoint should be used to populate the select boxes in the frontend.
 - b. `/find-route` - Should take *source*, *destination* and *type=cheapest/fastest* as the params. It should return the cheapest route based on those parameters.

Notes

1. You should submit a complete application where the user can input her travel plans in the source and destination fields and find the cheapest or fastest route.
2. The route should be the mode of transportation (flight/train etc) while displaying the route.
3. Mail the solution to admin@iamclearmind.com

4. Do not write mails asking for internships directly. We want people with good problem solving skills, irrespective of the background/gender/caste/creed, The only thing that matters is what you're carrying above the 2 shoulders and how you use it.

What do we do at iamclearmind.com ?

We help people invest better.

We have a product called - [cycle](#) - currently under development. You can check it out on any mobile web browser. It guides people into making better and smarter investment decisions

We have another product called deep-I. Its a super secretive product where we are using A.I to invest money into the market and it gives mind blowing results. Slowly and steadily we will release this to the public.

What will you be working on?

You will be working on one of the above two projects, mostly on MERN stack, and this internship might turn into a PPO if we find you as a person who resonates with what we are trying to achieve here at clearmind.