

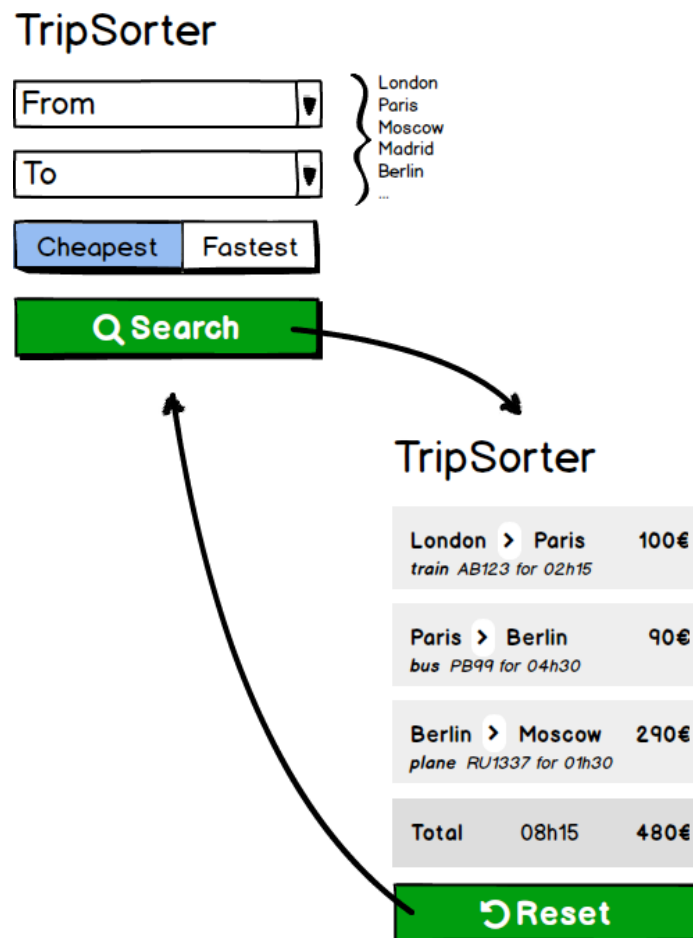
A travel agency wants to create a simple Web App to help their customers find the cheapest or fastest way to travel from a city to another.

You are asked to create a simple Web App that will find the complete continuous path to go from a city to another, considering different sorting types (cheapest or fastest).

The travel agency has an existing API that will provide you all the available transportation deals.

You will find the API response in the JSON file “response.json” attached to this test. You don’t need to code a server-side API, your Web App should instead load “response.json” as if it was an API response.

Your project manager provided you the following mockup as a briefing:



The mockup shows a web application titled "TripSorter". It features a search form with two dropdown menus labeled "From" and "To", both with a list of cities (London, Paris, Moscow, Madrid, Berlin, ...) to their right. Below these are two buttons: "Cheapest" (highlighted in blue) and "Fastest". A green "Search" button with a magnifying glass icon is positioned below the sorting buttons. An arrow points from the "Search" button to a results table. The results table is titled "TripSorter" and contains the following data:

London > Paris	100€
train AB123 for 02h15	
Paris > Berlin	90€
bus PB99 for 04h30	
Berlin > Moscow	290€
plane RU1337 for 01h30	
Total	08h15 480€

At the bottom of the results table is a green "Reset" button with a circular arrow icon. An arrow points from the "Reset" button back to the "Search" button, indicating a feedback loop.

The client provided you the following API documentation for one deal:

```
{
  "transport": "train",
  "departure": "London",
  "arrival": "Amsterdam",
  "duration": {
    "h": "03",
    "m": "30"
  },
  "cost": 160,
  "discount": 50,
  "reference": "TLA0330"
}
```

transport	train, bus, car
departure	departure city's name in English
arrival	arrival city's name in English
duration.h	trip's duration hours
duration.m	trip's duration minutes
cost	cost not discounted, this is the base price
discount	discount in % to apply to the base price
reference	deal unique reference number

This task is designed to give us an idea of:

- your ability to deliver an appropriate, simple solution to a given problem.
- how you structure your code.
- your understanding of JS functional programming.
- your complete frontend skills (**JS**, **HTML** and **CSS**).
- the efficiency of your pathfinding algorithm.
- how you select frameworks / third party libraries to help you solve a given problem.

Bonus:

- Feel free to implement any improvements that would showcase your UI/UX skills.