

Build a web app where you take 4 inputs - Source, Destination, time of the day to reach the destination and Email Address. Assume that source and destination are provided as lat/long and not as addresses(to keep things simple). The app needs to find the exact time a user needs to book an uber to be at that destination at that time. An email needs to be sent to the above email ID at this time saying "Time to book an uber!"

Example: I am in Koramangala([12.927880](#), [77.627600](#)) and need to be in Hebbal([13.035542](#), [77.597100](#)) at 8:00 PM for a meeting. The app will have to email me at 6:43 PM because the uberGO will take 9 mins to come if we book at 6:43 PM(as per uber) and it takes 68 mins to drive from Koramangala to Hebbal(as per google maps)

Assumptions:

- To keep things simple, assume that whatever the uber API and google maps API tell you is true.
- Assume that the time to arrive at the destination is within today. Don't worry about solving the use case for tomorrow etc. Assume that the time entered is IST.
- Don't worry about the case where it's already too late to book the uber. Assume that there is still some time left.
- Assume that the maximum deviation of driving times at any time of the day is 60 mins. That means, if it takes 40 mins to drive from Koramangala to Hebbal now, you can assume that it's not more than 100 mins at any time of the day.
- The cab is UberGO.

You need to use google maps API and uber API to solve this. Accuracy is the most important factor to judge this app but the second important factor is the optimization of requests to the APIs. Pinging the APIs every minute to see if you should leave now is not the best solution.

We expect the code to be production-ready, along with good design documents and well-documented API. The UI is the least important aspect - it just needs to function, it doesn't need to look beautiful.

API Keys:

- You can use the following Google Maps API key:

AIzaSyAQB4eiCnuP8RXt0xPLYmsCDqrWX4iFKGc

- Use the following API for UberGo details

https://rr1iky5f5f.execute-api.us-east-1.amazonaws.com/api/estimate/time?start_longitude=12.927880&start_latitude=77.627600

NOTE: If the estimate is -1 then no cab to book. For UberX it will be always -1 however for uberGo it will be a random second.

The bottom section of the app also needs to show the requests you are making to the APIs. Here's a wireframe, just for reference -

https://drive.google.com/file/d/0B2OqEb_mPkZ_YnIsS01yejJRYVE/view?usp=sharing

Expectations:

- Git repo link to your solution.
- We expect your code to be efficient, concise and extendable.
- We expect you to code this in the language/framework in which you are most comfortable(our backend is written in Python).
- Documentation regarding how to get things up and running.
- The UI is the least important aspect - it can be as simple as a POST request.

Nice to have:

- Host it any cloud provider of your choice - you can signup for a free account on Heroku or AWS.

E.g. [Here are steps](#) on how you can get a Django app running in Heroku in a few minutes.