Road Trip Planner - An Applied Problem

Bhavneet Soni

Author’s Note

Our application targets young and tech savvy people, who rely on online information to make their decisions. Our application will have easy to use interface that would provide the users with wide range of information to help them plan their road trips all at one place.

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As discussed in the first assignment I proposed to develop an Android based application. I plan on developing an application that will help users plan for their road trips. A natural question arises what problem will the application solve, why it needs to be solved and who all will want to have an application that would solve those issues. In this paper an effort has been made to discuss why we need to solve this problem and who will be benefited by this application. During trip planning you will have to take into consideration various aspects Numerous time we have to plan a trip but are worried which route to take, where to make pit stops or are there any site seeing that can be accomplished while on route. Sometimes the trip is too long to be taken in one day and needs to be split into multiple days. On any road tip where to stay for the night is the most difficult and important decision. Choosing the place to schedule the night halt at a place takes into multiple factors, such as a decent and cheap place to stay for the night, where should we do the pit stops to have food or vehicle maintenance. Apart from that we also keep checking weather how it is on route and on destination. Add to this mix, keeping track of the trip expenses is also a big aspect and needs to be managed to have a stress-free trip. Our application will help user to keep track of the expenses and share expenses with the other members on the trip, when friends are taking the trip together they need not bother about who is paying for expenses, they can just enter the amount of expense and who paid it, app will calculate who own whom what.

To understand what are the challenges that we are proposing to solve, we need to define or give a brief outline on what are these challenges. Below is a brief outline of the various elements required for a decision-making process followed when planning for a road trip.

1. Purpose of the Trip
2. Destination
3. Time
4. Mode of transport
5. Weather
6. Where to Stop
7. Site Seeing on way
8. Expenses

Planning a trip takes lots of decision making, first decision is the road trip itself, are you just trying to get to point B from A or do you want to enjoy the journey itself. Are you taking the trip for leisure, business or emergency? Depending upon the objectives of the trip your layout, for an emergency, you would want a fastest route or Business trip you would want to take a fastest or most fuel-efficient route. On contrast if it’s a leisure trip you might want to take a more scenic view with possible sightseeing or attractions visit on the way. You might want to avoid tolls or take country side roads to enjoy and making explore the country side on your trip.

Another aspect of the trip that is based on many different factors to be accounted for deciding is the time you want to reach your destination. If you are planning a multiple day trip you might want to spread out your driving time over the days to enjoy without exerting and driving all thru the day, or you just want to reach your destination as soon as possible. It’s always difficult in choosing where to stop for the night. You would want to pick the stopping point that would match your trip objective. One might want to schedule the night stay where you get a cheaper place to stay or you might want to camp for the night. Or you want to may be swing by a big metropolitan to enjoy city life.

On top of all these there is always the factor or weather, no one likes driving in bad weather and we always check weather how’s the weather at the destination and at various points along the route. No only you would want to check the weather along the route you also must anticipate how the weather will be along the route when you get there. This is one of the most important factor influencing your decision, you might want to avoid taking a route based on the weather. Or you might want to delay or leave early to avoid bad weather.

We also want to keep in mind what time we want to reach our destination. You want to reach your destination early in the morning or late in the evening, these factors makes a significant impact on the place we choose to halt before or the time we need to leave in morning to make it in time.

Managing expenses of the trip is also one of the most important aspect of the trip. Any trip comes with inherent expense, tool, fuel, food etc. We want to keep track of the trip expenses and capture receipts for the business trip. If you are taking the trip with your friends you would want to share the expenses among friends.

These options cost in terms of your decision-making resources and cause a headache. So many times, we wish we just had an app where you feed in some of the parameters and out comes the response suggesting a trip. Not many applications are available that cater to these needs, there are individual apps that gets information about individual needs but that bring a lot of overhead for the user. Although there are many different applications which provide information about various aspects Application will allow user to access different information such as weather and road conditions, attraction and scenic routes along the way, places to stay, camp or take a quick shower and best places to eat along the route. Will also provide information about best places to take a pit stop for vehicle repairs. Application will be providing suggestions based on the user’s preferences, and making decision by pooling information from various APIs. Application will make it easier for the user taking away the hassle of juggling various applications and websites to make decisions. Furthermore, application will allow the user to team up with their friends, share trip plans, playlists and instant messaging among themselves. Users will be able to share the trip moments with others via social media applications such as Facebook, twitter and Instagram. Friends can even split the expenses for the trip via the app making it easier to manage trip expenses.

There are various applications that provide different services like weather data, maps, navigation, hotel and restaurant information individually but could not find any application which provide these in one place. I plan to provide the users with a platform where they have access to all the information at one place. Our application will capture data from different APIs and consolidate the data in one place.

Our application will target the young tech savvy people who want to go in more detail about planning and to make a thought-out approach to planning road trips. We are focused on the demography that like to have more planned trips. Application will support USA region with future scope of expanding it to other regions and countries.

References

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