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TASK 3.1P

Design/UI Aspects

From the previous task what I learnt is SRS (Software Requirement Specifications) serves as a guide for all the departments included in order to build a software such as investors, stakeholders, front-end developers, back-end developers, and testers. It basically serves as a guide for everyone who is involved in this project.

Case Study : It is very important to plan the design of any software in advance to avoid complications at the end. When I say 'design' it doesn't only mean UI and UX but, also the LLD (Low Level System Design) and High Level System Design(HLD). In this phase of planning the developers choose who are the audience for this particular product, how much traffic is expected on our product and how many load Balancers are required in order to serve users without any latency.

User Stories :

Finding Stations: As an EV driver, I want to search for nearby charging stations so that I can quickly find a place to charge my vehicle.

Checking Availability: I want to see real-time availability of chargers so that I don't travel to an occupied station.

Use Case :

1) Users can simply turn on their location and can search for nearest EV charging Stations around them.

2) User can filter their choices based on their requirements, for instance, price filters (low-to-high), station types(fast/slow)

3) Route planning for long road trips.

4) Drivers can read and submit a review on a particular web portal for that specific EV station to help others choose the best charging stations.

5) Promotion and Marketing Strategy on web portals to earn profit(from Business model pov)

User requirements :

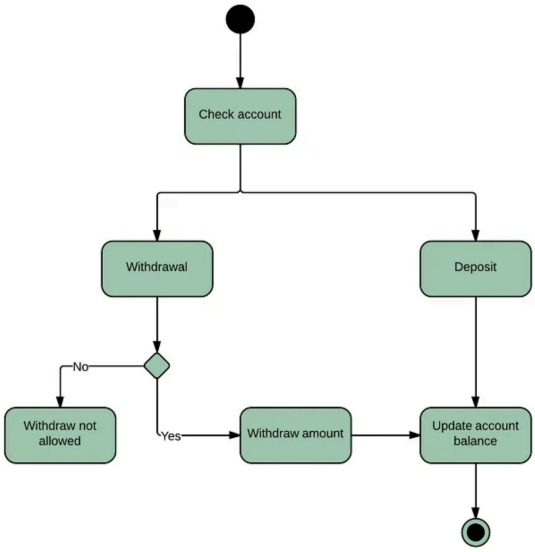
1) User Registration & Login – Users should be able to sign up, log in, and manage their accounts.

2) Users should be able to find charging stations based on Location(radius), Availability, Charging speed, connector type, and most importantly price of fuel.

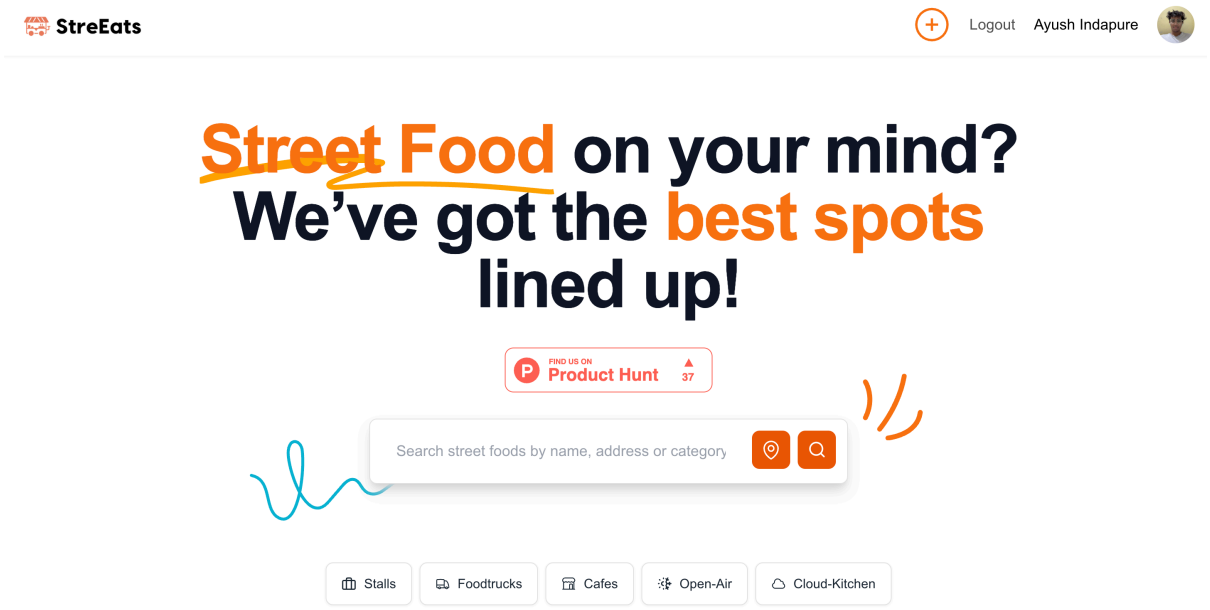
3) User Reviews & Ratings – Users should be able to rate and review charging stations.

4) Must ensure secure authentication, encrypted payments, and protection of user data while using credentials.

5) App Wallet for users avoiding them to pay from any third party service provider.

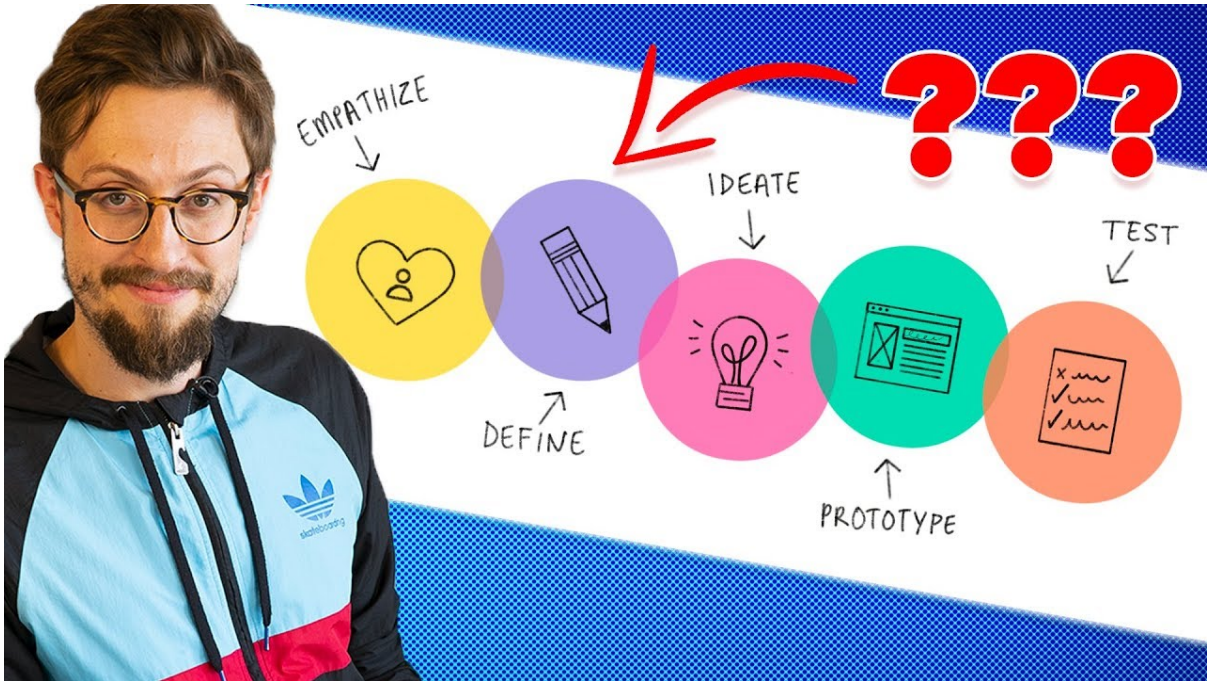


The design would look somewhat similar to the above image by just replacing it with the above discussed filters.



References :

https://medium.com/interviewnoodle/system-design-uml-activity-diagram-27a4fb9d33c9



https://medium.com/@karan99/system-design-uber-33593137a4fe