

Commute Connect

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PROBLEM

The absence of an effective notification system in our ride-share application limited user engagement and transparency.

Users remained uninformed about critical updates like ride statuses, promotional offers, and other alerts, resulting in a fragmented user experience.

The challenge was to design a notification system that wouldn't bother users too much, but keep them in the loop, no matter what device they were using.

SYSTEM DESIGN

The solution was a notification system that worked in layers to give users instant updates. We used Firebase for backend services and Flutter for the frontend application.

Users could set their preferences for notifications, so they only got the ones they preferred. The design would allow the app to send notifications directly.

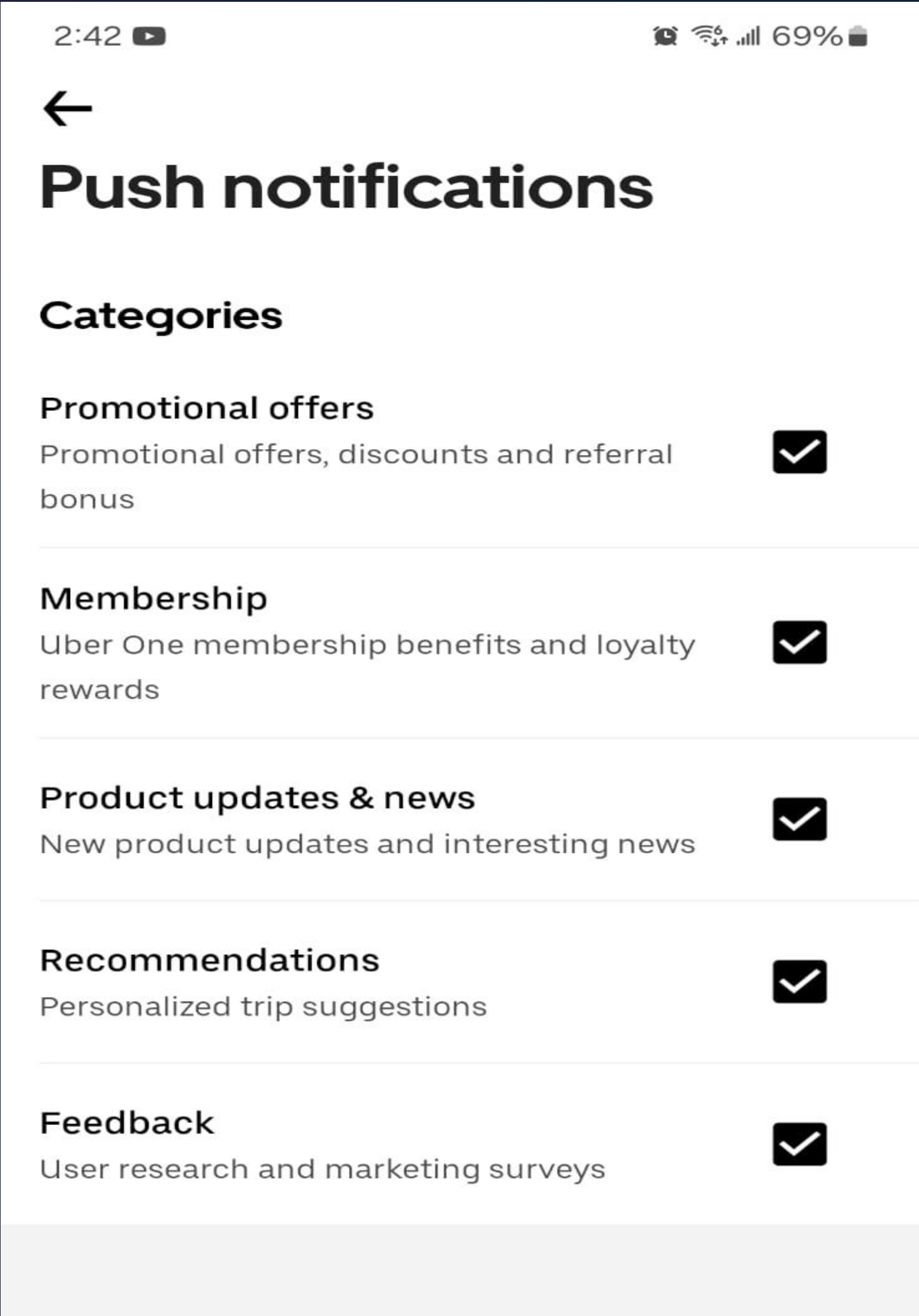


Firebase



Flutter

APP DESIGN



IMPLEMENTATION

The notification feature was built with Dart for backend logic and Flutter for the UI to maintain cohesion with the existing codebase. Simulations on notification triggers and responses within the app environment were done.

Each step, from user opt-in to message delivery, was handled with attention to privacy and user control.

Making sure the app worked on all devices and keeping up with all the changes was difficult.

REQUIREMENTS

To ensure the smooth operation of the notification system, the following were necessary:

- A reliable internet connection for real-time communication with the Firebase servers.
- Compatibility with Android and iOS devices.
- An IDE like VS Code, complete with Flutter extensions.

SUMMARY

We made a big step by creating a notification system. It's not finished yet, but we've made progress by adding important features like real-time updates and personalized notification settings. Our goal for the future is to make sure the system works well and covers everything users need. Our team is dedicated to testing it thoroughly, listening to feedback from users, and making sure it works on all devices.

ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Andres Diasvictores. I thank Andres Diasvictores for his assistance and mentorship that I received throughout the senior design project.