

Drowsy Drivers

Medhansh Choudhury, Caroline Walczak, Danny Harn



Motivation

10-20% of large truck and bus crashes involve a tired driver.

Due to long hours driving, truck drivers may feel fatigued, which could cause a fatal car crash. Talking with others has been known to help fight drowsiness, but truck drivers may have trouble finding someone to call for such long periods of time.

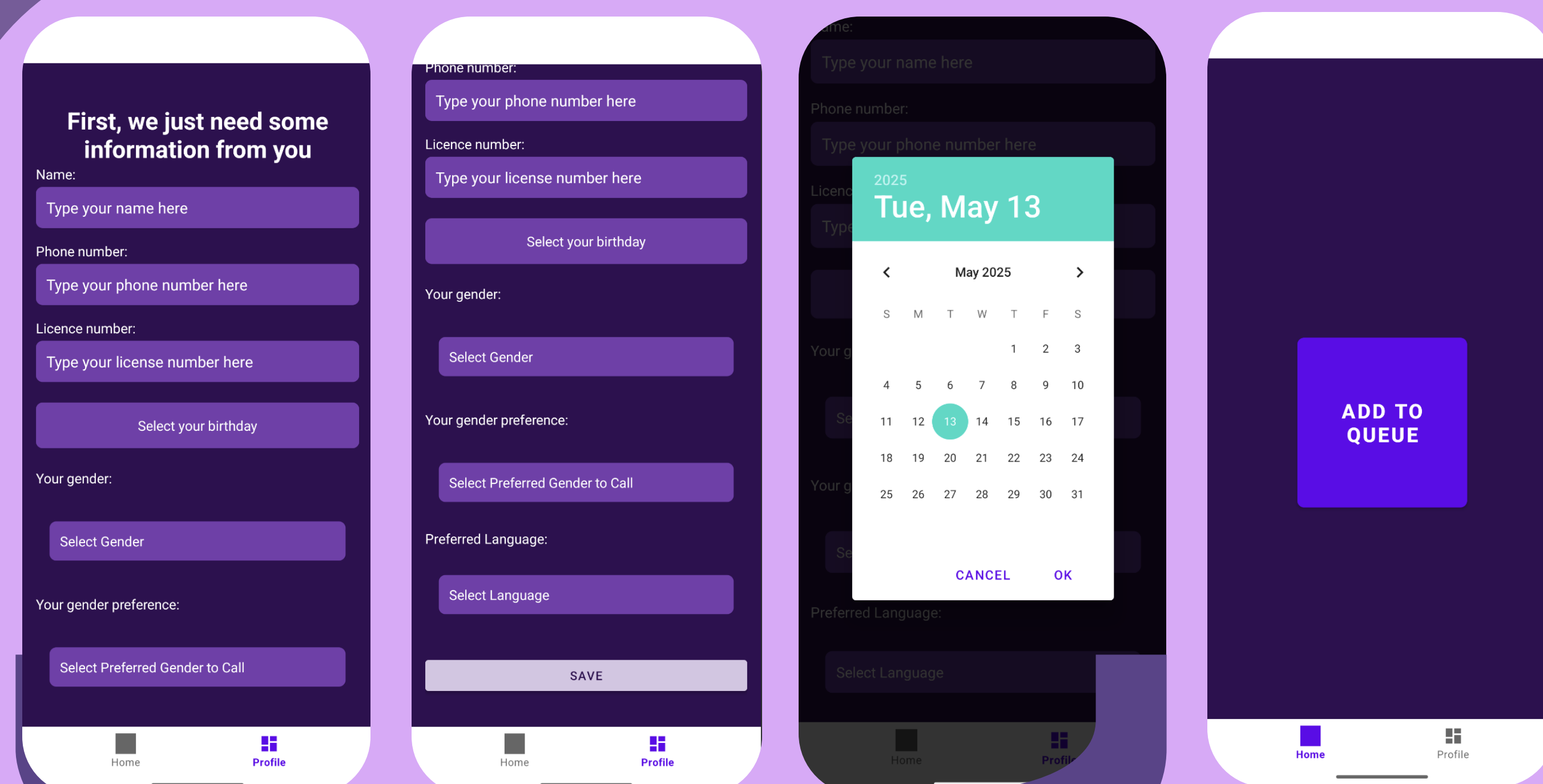
App

To prevent individuals from feeling drowsy, we intend to engage them in conversation.

- Minimum Value Product
 - Queue that pairs users and automatically have them call each other
 - The queue is based on information from the user so they are paired up with people they prefer to talk to

Tools/Technologies

- App coded on Android Studio
- Tools
 - Firebase
 - Android Calling Function



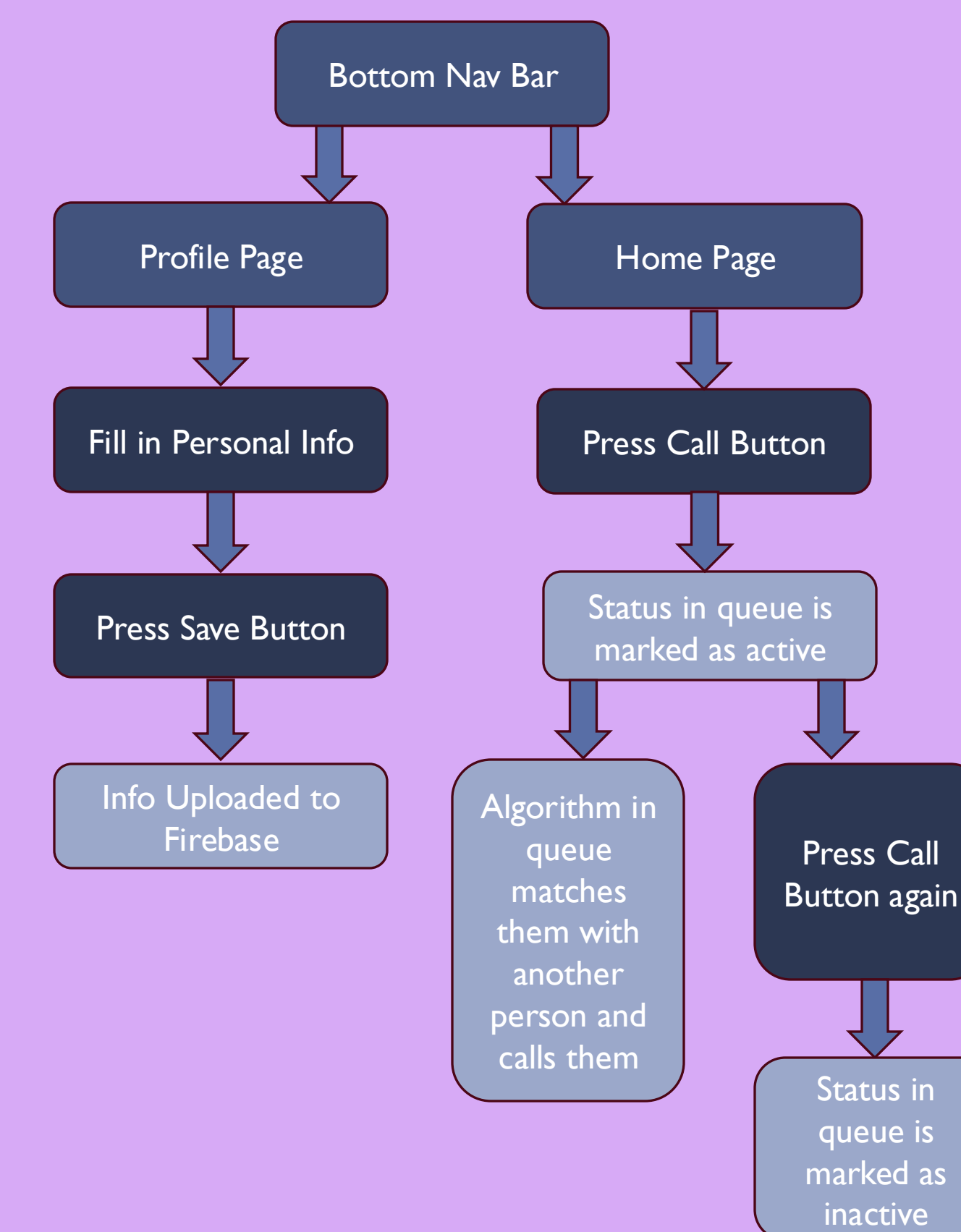
Profile Page

- Takes in data
 - Name, phone number, license, birthday, gender, and gender preference
- Save button sends data to firebase

Home Page

- Adds user to queue
- Queue adds user to a call once they are matched

Architecture



Algorithm

Once a user enters the queue, their profile is matched with another profile in the queue that best matches the two users' gender preferences and language based on a weighted matchmaking system.

Future Steps

- Phone number authentication
- Prevent user from being added to the queue if they have not filled out their profile information
- Authenticate License Number
- Alert system
 - If, on call, one user seems to be falling asleep, the other can trigger an alert that will ping on the other's phone in an attempt to wake them up