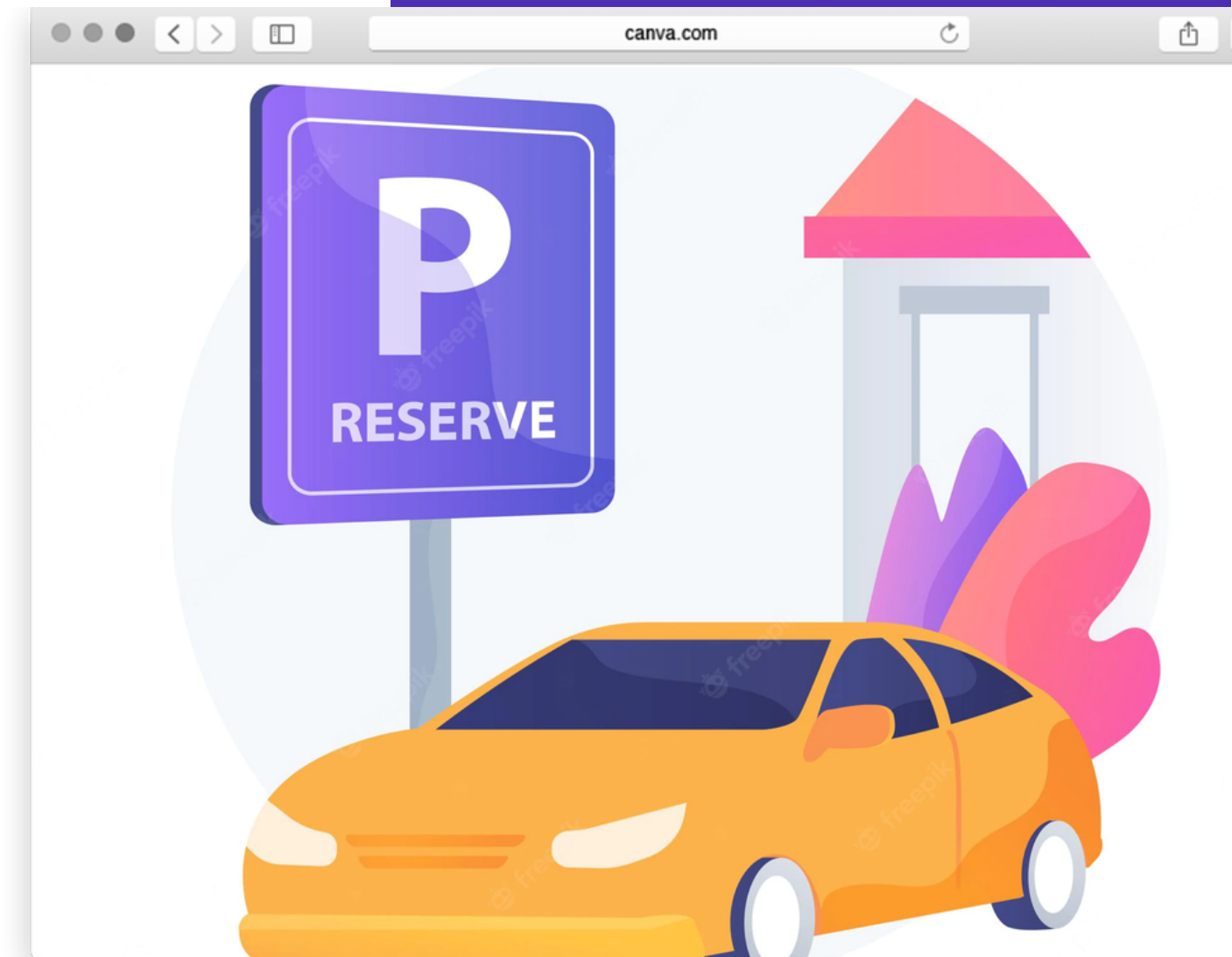# Book My Spot

Parking space management you have never imagined before

Team Name: sudo_su
Team Nomenclature: HSB7_PS_4

Meet the Team

Alok Joshi

Team Lead

Adity Krudunkar
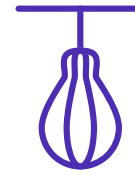
Backend Developer

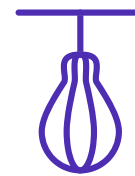**Abhinav Belhekar**

Frontend Developer

Problem Statement

Parking vehicles is a big issue nowadays. To resolve this problem, develop an Application for **Smart Parking** (in software **companies, shopping malls**, etc.)
This mobile app should **show the layout of the parking spaces and the availability of parking spots** to help manage the parking efficiently
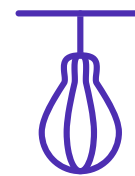
Problem 1

Finding a nearby available parking spot immediately without time delay and headache

Problem 2

Advance reservation of parking spots is difficult

Problem 3

The realtime changes may result in inefficient resource usage

Tech Stack

Flutter

FastAPI

SQL,
SQLAlchemy

Azure

FRONTEND

BACKEND

DEPLOYMENT

Implementation Details

BookMySpot Application

- Facilitate the realtime layout of parking location
- Scheduling of immediate and advance reservations for parking spots
- Uses Material UI to give asthetic looks

FAST API Backend

- Hosted on Azure and made using Fast API
- authentication service & user management
- Parking Spot Reservation

We have created a platform where people will get the parking spot automatically without requiring them to physically look for one, with a robust backend written in FAST API our solution is easy to implement.

Day 1 Progress

- Designed the Database and the UI Designs
- Learnt Deployment on Azure with Azure App Services
- Learnt SQLAlchemy for fast and time effective ways to create, update, and design databases.
- Implemented automation scripts for database migrations.
- Finalised the endpoints for the API Server.
- Deployed the MYSQL Server on Azure

Day 2 Progress

- **Experimental Slot booking algorithm implemented**
- Successfully tested and integrated the login and registration Web APIs with the mobile application
- Successfully tested and integrated the Web APIs to get User
- Successfully tested and partially integrated the parking slot booking web APIs.

Thanks