

**CS253 Course Project** 

Supervised Learners

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The product, Campus Craves primarily aims to digitize all the canteens throughout IITK Campus, making ordering during peak hours hassle-free.

#### Intended Audience

**IITK Canteen Owners and Campus community** 

Buyer: Those who'll buy product/services i.e. the campus residents.

Seller: Those who sell products/services i.e. the Canteen Owners

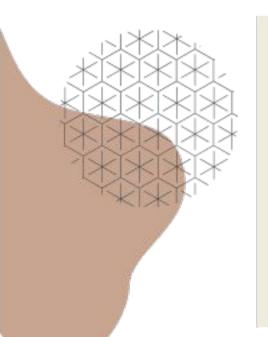




# **Major Requirements**

#### Seller

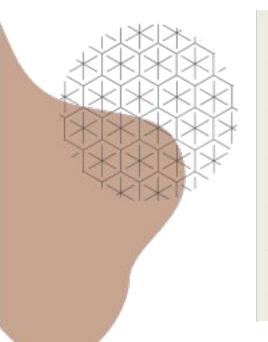
- Create a seller account / store.
- Add/delete/modify categories in catalog.
- Add/delete/modify products/services in categories.
- Update the inventory if an item in/out of stock.
- View the list of orders placed/in-process
- Order Status: Confirmed/Delivered/Cancelled

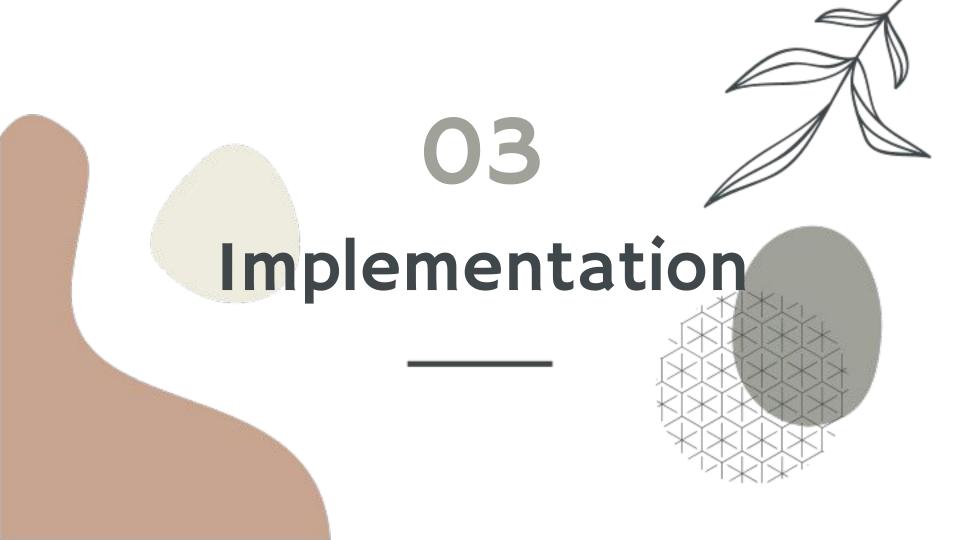


# **Major Requirements**

#### Buyer

- Sign in/sign up to the account via email.
- Check status of previous orders
- Add/delete/modify personal details.
- Update the cart and manage the quantities.
- View the list of orders
- Order Status: Confirmed/Delivered/Cancelled





## **Three Tier Architecture**

#### Presentation Tier

React based web application that users directly interact with.

#### Logic Tier

Python code that translates user actions to functionality.

## Data Tier

Database that holds the data used in the applications.

### Frontend

#### React JS

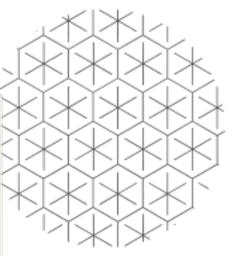
Javascript framework that makes the website dynamic.

#### Tailwind CSS

A utility-first CSS framework designed to simplify and expedite web development by providing a set of predefined classes

## **Backend**

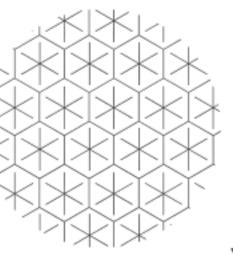
Backend is implemented in Python. We used Django, an open-sourced python based framework used to create web services on top of python.





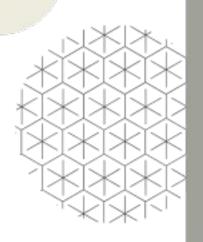
## **Database**

We have used SQLite3, a lightweight, file-based relational database bundled with Django. Django ORM stands for **Django Object-Relational Mapping**, it simplifies development and requires minimal setup.





## **OTP Service**



#### SendGrid

We use SendGrid's SMTP servers to send our OTPs to users via email.

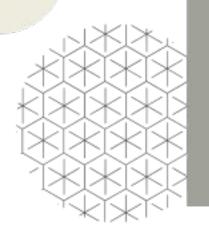


## Authentication and Authorization

Authentication: stored the email and password in our database. The password uses cryptographic techniques of hashing and salting to prevent the data being exposed in case of data leaks. Authorization: we have made use of JWT (Json Web Token)



# Development & Version Control Environment



#### <u>Git</u>

Used as our version control system

#### **GitHub**

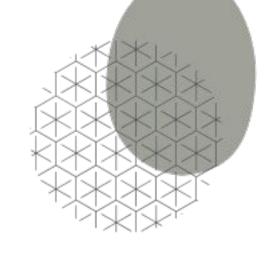
Used to manage our repositories and collaborators



# 05

# Future Development

Plans \_\_\_\_



# **Future Development Plans**

- Adding an online real payment option.
- Deploying a corresponding mobile app.
- Customer Reviews and Ratings.
- Possibility of using other languages in the future.



# Our Leanings

- Full-stack development using React, Django, and SQLite
- Use version control (Git/GitHub) for collaboration
- Time management across multiple project components
- Communication strategies that worked well
- How you resolved conflicting ideas or approaches

# Acknowledgement

We would like to thank the Instructor of the course, **Dr. Indranil Saha**, for teaching us Software Development and Operations concepts.

We would also like to thank the TA in-charge, Mr. Ashish Singh, for guiding us throughout the process of making this software.

