Basic Details of the Team and Problem Statement

PS Code: PS06(1)

Problem Statement Title: User-Friendly Online Platform That Connects Farmers Directly With Consumers

Team Name: Binary Brigade

Team Leader Name: Abhisek Yadav

Institute Code (AISHE): C-6139

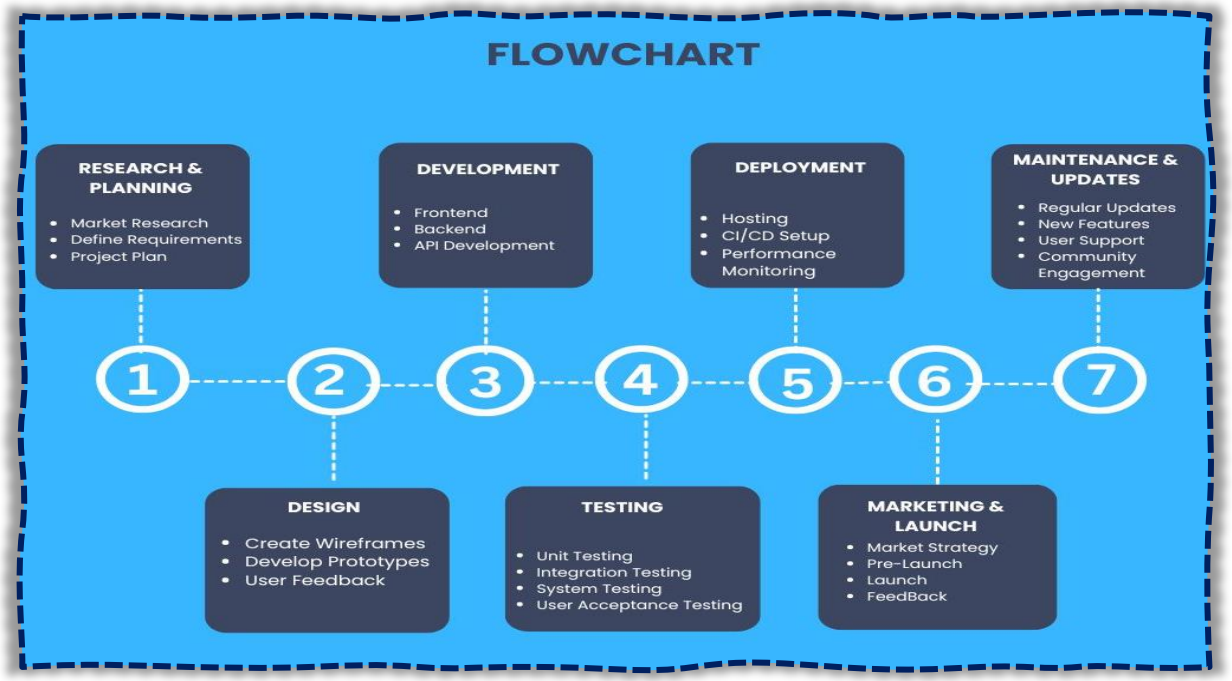
Institute Name: Netaji Subhash Engineering College

Theme Name: Agriculture

Idea/Approach Details

Our solution is an intuitive online platform bridging farmers and consumers to better enhance transparency and efficiency in the food supply chain. Some of the core features of our platform include:

- **Farmer Profile-** A place for farmers to list their produce with descriptive detail, complete with photos and background on their farming practices.
- **Price Regulation-** Helps farmers decide a reasonable and competitive price for produce.
- **Payment Processing(Online & Offline)-** Safe and easy payment processing system.
- **Consumer Benefits-** Easy search and browse, transparent product information, direct ordering and flexible delivery or pickup options, reasonable price without middleman.



TECHNOLOGY STACKS:-

- **Frontend:** HTML5,CSS3, JavaScript, React.js, Bootstrap/Tailwind CSS.
- **Backend:** Node.js, Express.js
- **Database:** MongoDB, Firebase.
- **Payment Processing:** Razor Pay API
- **Hosting and Deployment :** AWS or Render
- **Integration:** Google Maps API

Idea/Approach Details

Use Cases

Local Farmers:

Problem: Not being able to reach consumers with ease, not being in a position to handle orders with much ease.

Solution: This provides a direct channel with consumers, thus easier management of orders and their pricing.

Consumers:

Problem: Not knowing where products are from and whether they are fresh.

Solution: Platform provides origin, farming practice, and freshness information; order placement from farmers is directly possible.

Delivery Services:

Problem: The fragmentation in delivery systems.

Solution: Integration of local delivery services or a CSA model would ensure effective distribution.

Educational Institutions:

Problem: Inadequate agricultural education.

Solution: Educational information on local agriculture and sustainable practices will be included on the platform.

Dependencies:

- Local Delivery Partnerships: Integration with local delivery services or CSA models.
- Payment Gateway Integration: Reliable and secure payment processing.
- Regulatory Compliance: Adherence to local regulations for food safety/online transactions.

Showstoppers:

- Scalability Issues: website handling varying loads of traffic and transactions as it grows.
- Data Security: Protection of sensitive data, particularly payment and other personal information.
- User Adoption: Getting farmers and consumers to adopt the use of the platform and becoming regular users.

Team Member Details

Team Leader Name : ABHISHEK YADAV

Branch : B.Tech. **STREAM: ME** **Year : II**

Team Member 1 Name: SANGHITA SEAL

Branch : B.Tech. **Stream : CSBS** **Year :II**

Team Member 2 Name: ANIKET MAITY

Branch : B.Tech. **Stream : CSBS** **Year :II**

Team Member 3 Name: GOUTAM DOGRI

Branch : B.Tech. **Stream : CSBS** **Year :II**

Team Member 4 Name: DIPANU HAZRA

Branch : B.Tech. **Stream : CSBS** **Year :II**

Team Mentor: Prof. ABHISHEK SAHA

Category : Academic **Expertise :** Machine Learning ,Deep Learning **Domain Experience (in years):** 16