

Team Name: Binary Brothers

Problem Area: Purveying Poor

Solution Name: Digitizing Ration

Problem Statement:

Despite introducing ration cards, the process of availing daily use commodities by the needy hasn't been efficient and has many problems left to be solved.

Some of these include:

- Dependence on a Fixed Ration Dealer Shop and the Inability to Avail Ration from Other Shops.
- Transportation and Stock Availability Problems.
- Malpractices and Corruption by the Ration Dealer Shop.

Solution:

As a part of Digital India, the Government could also initialize the process of digitizing the Ration Card by ensuring all its services are available on the internet.

This service is accessible on the browser or an app where they can place an order of the required commodities and the nearest center with enough stock fulfills the order by delivering it door-to-door.

Solution:

Achieve Independence on Fixed Ration

Dealer Shop: It means that the system automatically assigns the order to the nearby center with available rations. It also ensures that the user can easily reallocate without worrying about the documentation changes.

Provide Efficient, Trackable

Transportation to eliminate individualized transportation and difficulties related to transporting large quantities of commodities.

Creating a more transparent and effective solution by **Eliminating the Intermediary Entities.**

Thought Process:

The real world implementation of our project involves the cooperation of the government and the public as well as requires intensive development workforce and time. However, to demonstrate the concept, we are aiming at creating a prototype for the client and server side browser-based applications through which the solution can be implemented.

It was important to consider that, while digitization often refers to converting physical objects into a virtual entity, it also needs to take into account the functionalities of that object and how it could also be digitized.

While this meant that the Aadhar Card can now be used for identification and authentication for other services, for the Ration Card, it means that there should be a way to avail and track rations from anywhere, online.

Aim:

As stated before, creation of a working prototype with certain assumptions in place is the first goal that we have ascertained.

As a result, things of relatively lesser importance which do not directly affect the idea or in any way whatsoever helps explain the idea better have been dealt with temporary solutions.

However, every iteration aims at improving the design, adding functionalities and expanding the idea getting closer to the Ideal Ration Card system.

Progress:







For the creation of an end-to-end implementation of the solution, it requires us to develop a server-side centralized dashboard to receive, track and process order requests after a successful conceptualization of its user interface. This entire process has been completed.

Alongside, the creation of a client-side application that can be accessed on any smartphone with internet connectivity is required and a detailed UI/UX design needs to be carved out. For the majority of the user states, the UI has been successfully designed and the corresponding code has been developed.

Progress:

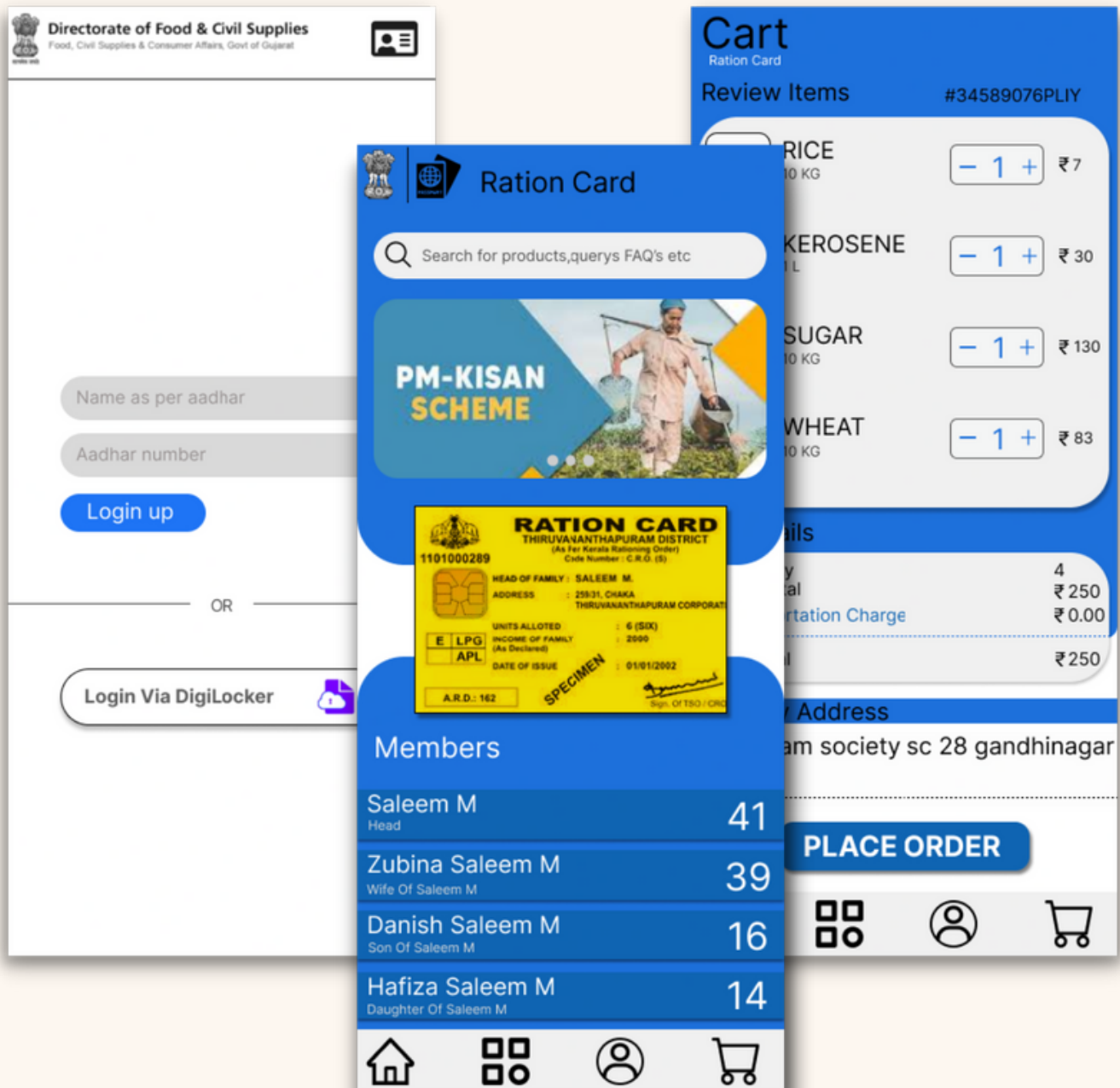
Digitizing the Ration Card

Gantt Chart

PROCESS	PHASE 1	PHASE 2	PHASE 3
Planning			
Wireframing			
Design Process			
Front-end development			
Back-end development			
Deployment			

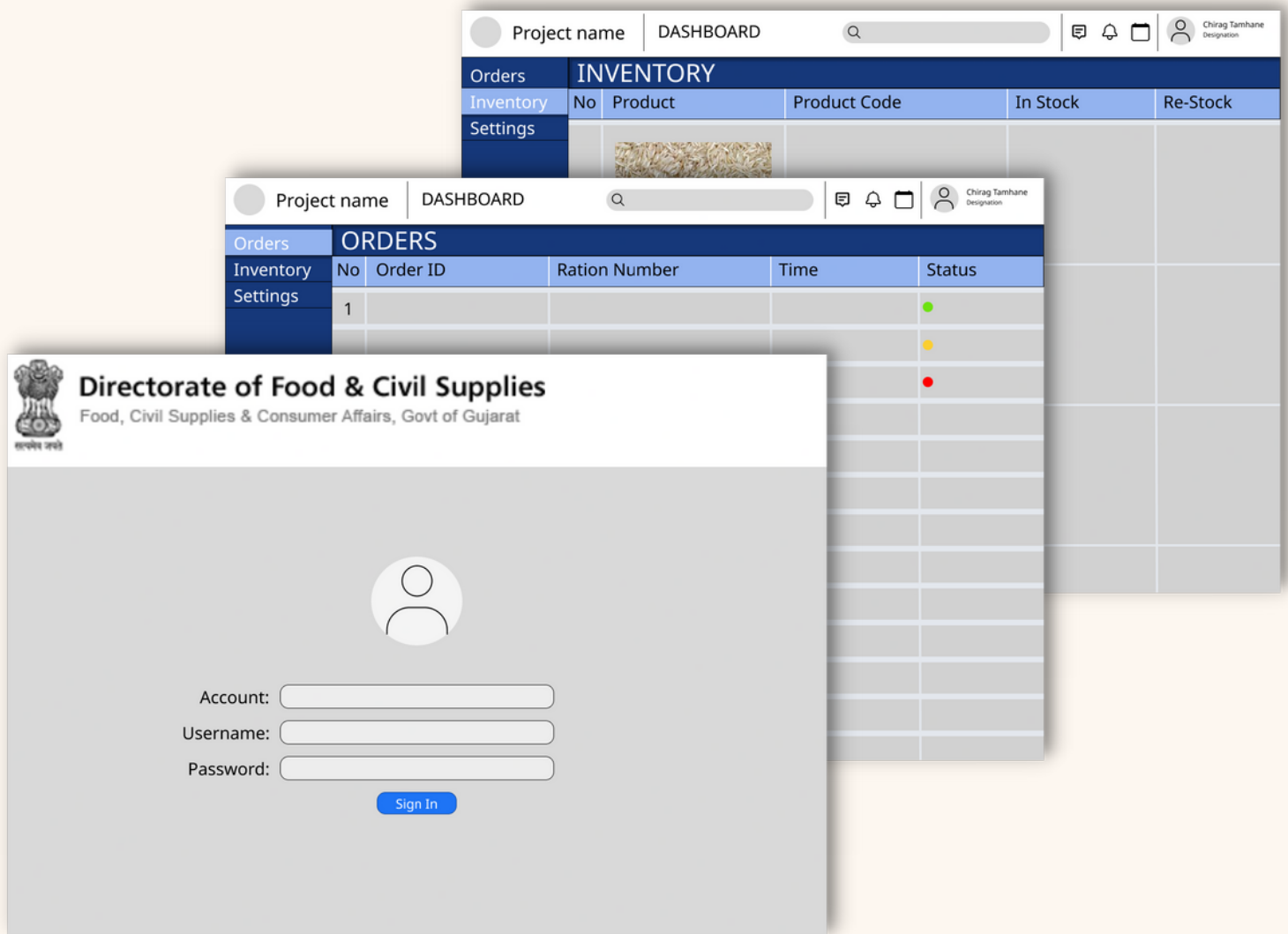
It also involves creation of multiple relations, often interlinked, to store project vital information. There is also a need to process database queries on the backend. All required relations have been created with test data for experimentation and demonstration purposes. Its backend implementation with PHP has also been tested and now awaits the completion of the frontend before careful integration can be initiated.

High Fidelity Mockups



Client-Side Application

High Fidelity Mockups



Server-Side Application