

DV200 OPEN BRIEF PROPOSAL

This presentation will cover the development of ReJuicenate, a web app for personalized juice fasting plans and health guidance. I'll discuss the problem it addresses, key features, technology stack, design approach, and the impact it aims to create.

PROBLEM STATEMENT



ReJuicenate is a web application designed to address the increasing health challenges related to poor nutrition, weight management, and chronic health conditions such as asthma and heart disease. In today's fast-paced world, many individuals struggle to maintain a balanced diet and often face difficulties finding sustainable methods to manage their health and well-being. This problem is significant as it impacts the quality of life for many, potentially leading to severe health conditions if left unaddressed.

ReJuicenate aims to provide an engaging platform that empowers users to take control of their health by offering personalized juice fasting plans, nutritional guidance, and progress tracking.

TARGET AUDIENCE



The primary users of ReJuicenate are health-conscious individuals seeking alternative and natural ways to improve their wellness. This includes those who are struggling with weight management, have specific health conditions (like asthma or heart problems), or simply want to boost their energy levels and overall health. The application will particularly benefit users looking for a structured yet flexible approach to juicing as a method of detox and weight management.

Technology Stack

MERN stack due to its robustness and flexibility in creating dynamic web applications.

M

MongoDB

A NoSQL database for storing user information, juice recipes, and personalized plans in a scalable manner.

E

Express

A back-end web application framework to build the RESTful APIs that connect the front-end with the database.

R

React

A front-end JavaScript library to create a responsive and interactive user interface that allows users to manage their juice plans and track progress efficiently.

N

Node.js

A JavaScript runtime that enables fast and scalable server-side applications, facilitating CRUD operations.

Technology Stack

The MERN stack has several advantages:

- Full JavaScript Stack: MERN (MongoDB, Express, React, Node.js) uses JavaScript for both front-end and back-end development, making it easier to manage, maintain, and hire for, as the same language is used throughout the application.
- Single-Page Application (SPA) Development: With React, the MERN stack excels in building SPAs that provide a smooth and dynamic user experience. This is ideal for an interactive app like ReJuicenate, where users engage frequently with the UI.
- High Performance and Scalability: Node.js offers non-blocking I/O and event-driven architecture, making the app more efficient and scalable. This is beneficial for handling multiple users and complex operations like tracking progress or managing personalized plans.
- Flexibility and Speed of Development: The MERN stack is known for its flexibility and speed, allowing developers to quickly prototype and build full-fledged applications. It is supported by a vast ecosystem of libraries and tools that enhance development efficiency.
- RESTful API Support: With Express.js, the MERN stack makes it straightforward to set up RESTful APIs, enabling seamless communication between the client and server.
- JSON Everywhere: The use of JSON in both MongoDB (a NoSQL database) and JavaScript allows for a smooth data flow between the front-end and back-end, reducing the need for data translation and simplifying development.
- Community and Ecosystem: The MERN stack benefits from a large, active community, meaning ample resources, tutorials, and libraries are available, accelerating development and troubleshooting.



App Features

Key Features to create a community-oriented experience.

JUICE LIBRARY

- Create a comprehensive library of juice recipes categorized by health benefits (e.g., weight loss, heart health, asthma relief).
- Users can browse, filter, and search for juices based on ingredients, categories, or user ratings.

SAVE FAVOURITE JUICES

- Allow users to save their favorite juice recipes to a "Favorites" list for easy access.

USER REVIEWS AND COMMENTS

- Enable users to leave reviews, share tips, or provide comments on each juice recipe. This encourages community interaction and adds value through shared experiences.

ALLOW USERS TO CREATE AND SHARE JUICES

- Allow users to create their own juice recipes, share them with the community, and get feedback. This can lead to a rich, user-generated content ecosystem.

BOOKMARK AND NOTE-TAKING

- Users can bookmark juices and add personal notes (e.g., "Tried this on a Monday morning – felt energized!"). This allows for a personalized experience without needing full-scale customization.

ADMIN MANAGEMENT

Approve or Reject Juices:

- Admins have the ability to review newly submitted juice recipes by users.

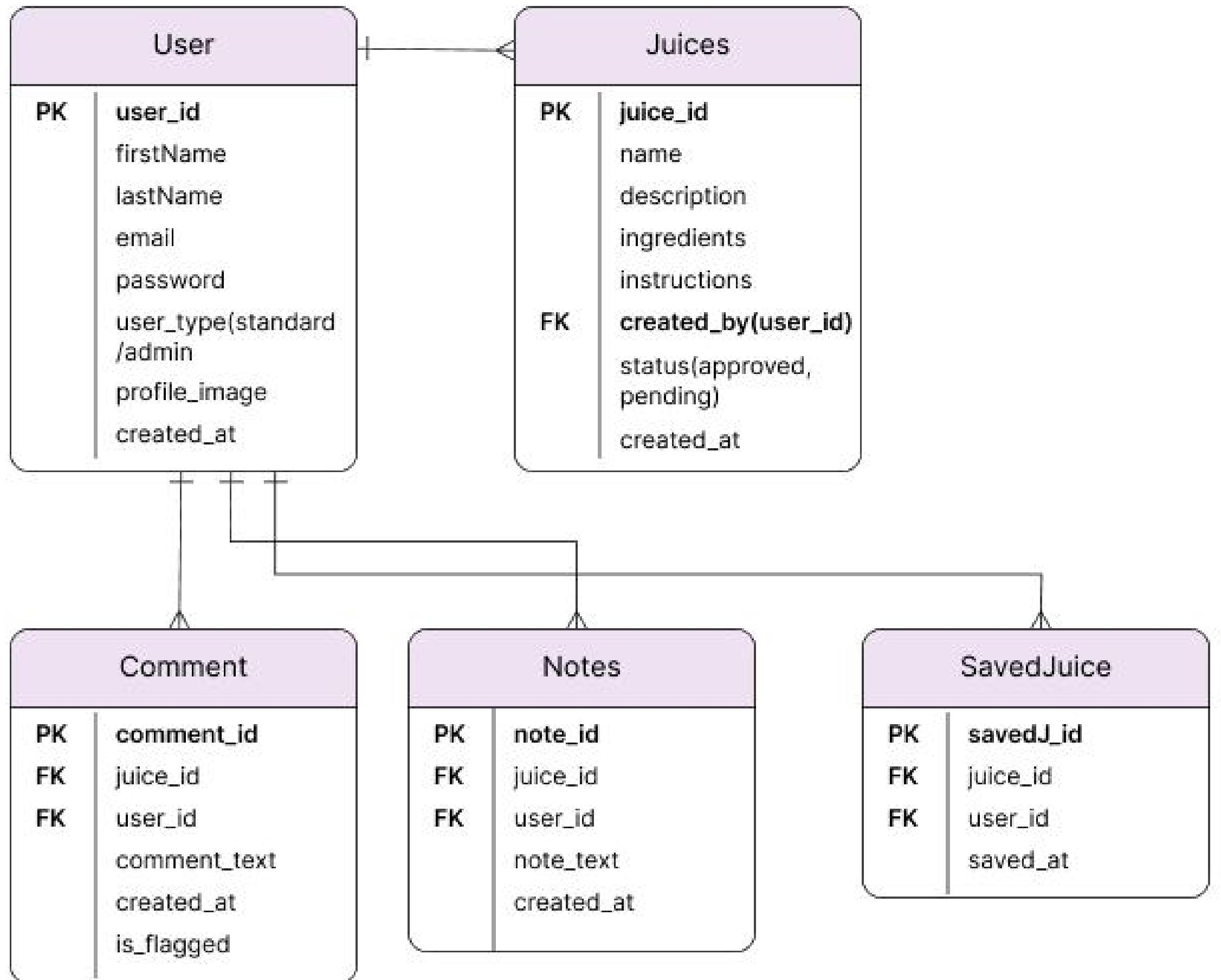
Manage Flagged Comments and Content:

- A dedicated section where admins can see comments or juices flagged by users for inappropriate content, misinformation, or spam.

Edit or Remove Content:

- Directly edit any juice recipe for accuracy or to comply with community standards.

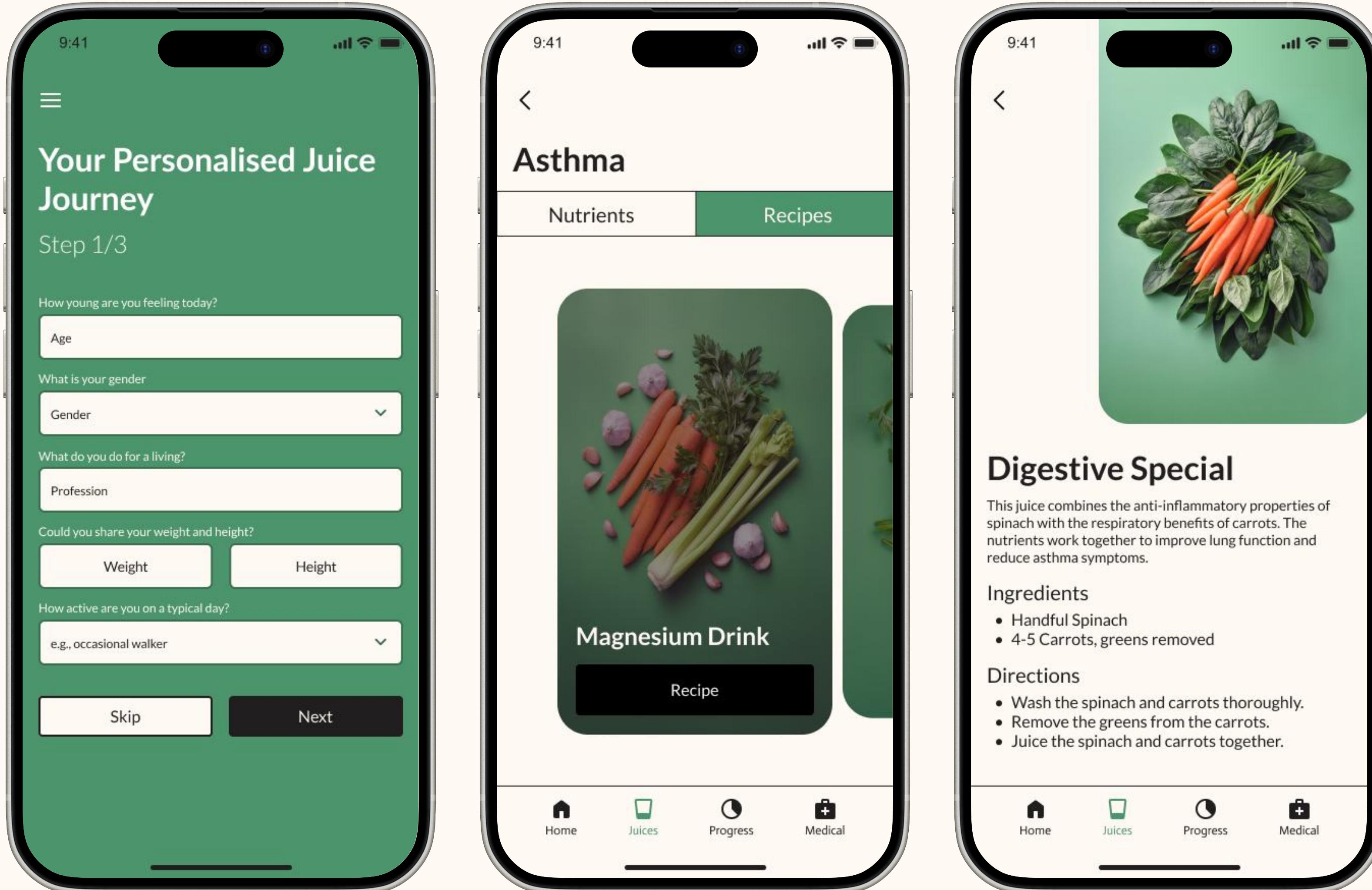
Database Design



ER Diagram

Use this slide to highlight a visual, like a concept, photo, or video. You can also use the visual to support whatever you're communicating here.

UI Designs



User Interface and Experience

The UI will be designed with a focus on bright, welcoming colors and intuitive navigation. The UX will cater to users looking for a friendly, non-intimidating experience. Key design considerations include ease of use, accessibility, and visual appeal to motivate users throughout their health journey.

Security Considerations

To ensure the security of user data:

01

INPUT VALIDATION

All input will be validated to prevent SQL injection and XSS attacks.

02

AUTHENTICATION AND AUTHORISATION

JWT tokens will be used for user authentication, with role-based access controls for different features.

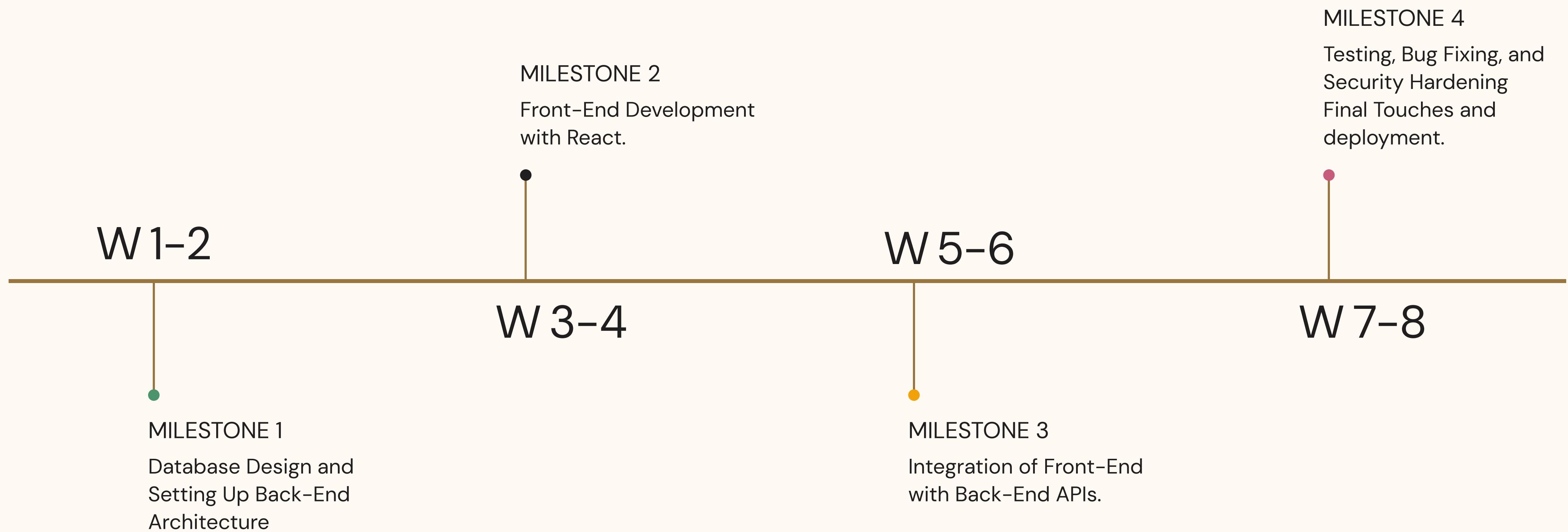
03

DATA ENCRYPTION

Sensitive data will be encrypted to prevent unauthorized access.

Project Timeline

Project Milestones from Week 1 - 8



Challenges and Risks

Risk #1 Data Security

Handling sensitive user health data securely; mitigation through robust encryption and validation mechanisms.

Risk #2 Scalability

Ensuring the application can handle a growing user base; solved by optimizing queries and using scalable cloud infrastructure.

Risk #3 User Engagement

Keeping users motivated to use the app continuously; addressed by incorporating gamification elements and regular updates.

THANK YOU!

ReJuicenate

ReJuicenate has the potential to significantly impact how individuals manage their health and wellness by providing a personalized, natural approach to weight management and holistic health. This project not only addresses an important real-world issue but also empowers users to take control of their well-being through an engaging digital platform.

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