JOURNALSHAMIRI DOCUMENTATION.

APP

JOURNAL APP DOCUMENTATION.

- 1. Introduction
- 2. Features
- 3. Architecture Overview
- 4. Setup and Installation
- 5. Backend Django
- 6. Frontend -React Native with Typescript
- 7. Secure Storage and State Management
- 8. Authentication
- 9. API Endpoints
- 10. Conclusion

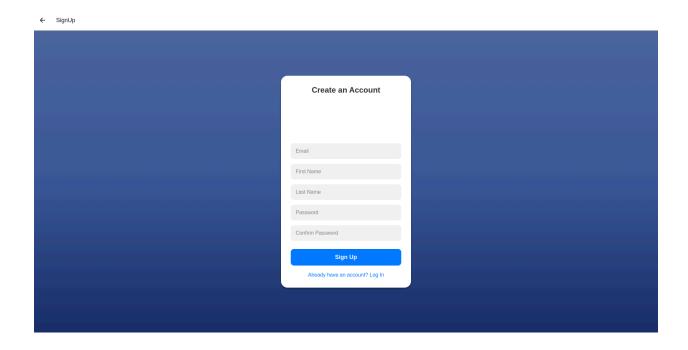
Introduction.

JournalShamiri is a cross-platform mobile application designed for users to manage their daily journal entries. The application includes features for user authentication, journal management, categorization, summary views, and user settings.

Features

- 1. User Authentication:
- Users can sign up and log in securely using JWT Authentication.
- Passwords are hashed and stored securely.

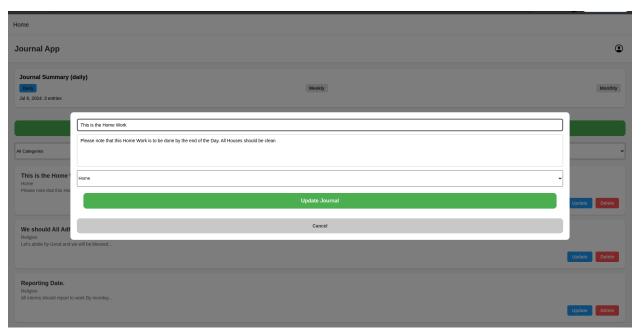


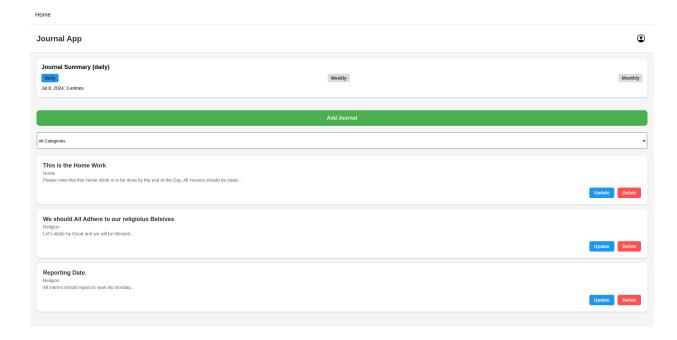


2. Journal Entry Management:

- Add new journal entries with a title, content, category. The date is autosaved in the backend.
- Edit and delete existing entries.

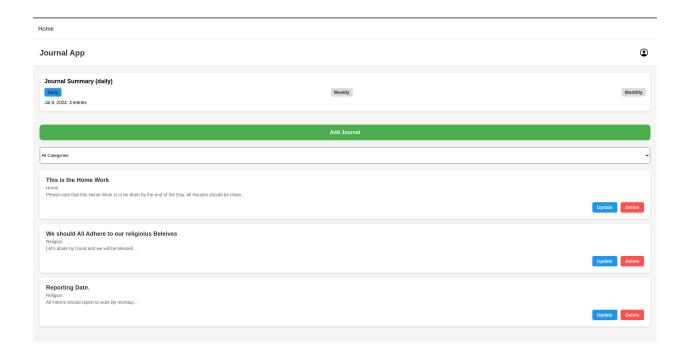






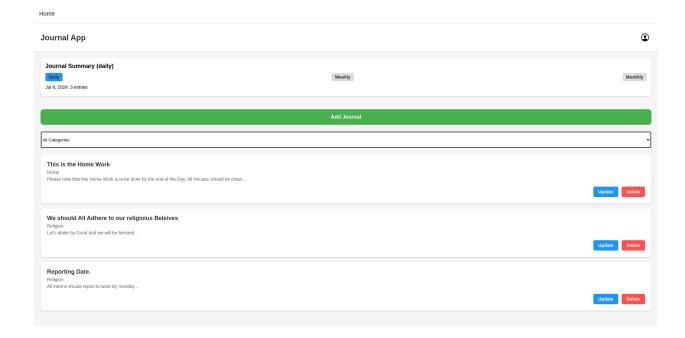
3. Journal View:

- Users can view a view a list of all their Journal Entries



4. Categorization and Summary View:

- Users can categorize their entries, for example personal, work, religion etc.
- Also the app can display a summary of Journal entries over a selected period that is daily, weekly, and montly.



6. Settings:

- Users can update their username and password.



ARCHITECTURE OVERVIEW.

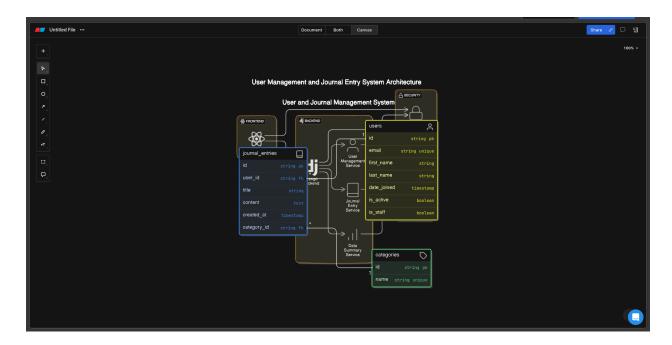
The project follows a client-server architecture:

Backend: Django REST framework with JWT authentication, PostgreSQL database.

Frontend: React Native with TypeScript for mobile development.

State Management: SecureStore and React Redux for secure storage and state management.

The following is the System Architecture



SETUP AND INSTALLATION

Prerequisites:

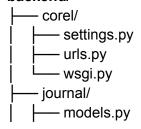
- -Django==4.1.13
- Django REST Framework

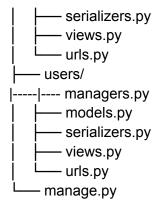
Key dependancies:

- `django rest framework-jwt` for JWT authentication
- - `psycopg2` for PostgreSQL database connection

Project Structure.

backend/





Backend Setup:

1. Clone the repository:

git clone https://github.com/Roy-Murithi/JournalShamiri.git cd JournalShamiri

2. Create a virtual environment and install dependencies:

python -m venv venv source venv/bin/activate pip install -r requirements.txt

3. Set up the PostgreSQL database:

CREATE DATABASE journal;

4. Apply migrations:

python manage.py migrate

5. python manage.py createsuperuser

python manage.py createsuperuser

6. Run the development server:

python manage.py runserver

Frontend Implementation

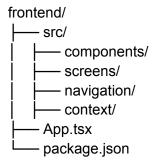
React Native Setup

React Native version: X.X.XTypeScript version: X.X.X

Key Dependencies

- `@react-navigation/native` for navigation
- `@reduxjs/toolkit` for state management
- `expo-secure-store` for secure storage

Project Structure



Frontend Setup

- 1. Navigate to the frontend directory:
- cd journalFrontend

cd ../frontend

- 2. Install dependencies:
- npm install
- 3. Run the React Native application:
- Npx expo start

SECURE STORAGE AND STATE MANAGEMENT:

SecureStore: Used to securely store JWT tokens. **React Redux**: Used for managing global state.

AUTHENTICATION

- JWT (JSON Web Token) authentication is implemented using 'django rest framework-jwt'.
- Tokens are stored securely on the client-side using Expo's SecureStore.

API ENDPOINTS

- \'api/auth/signup/\` (POST): User registration
- \'api/auth/login/\` (POST): User login
- `/api/journal/entries/` (GET, POST): List and create journal entries
- `/api/journal/entries/<id>/` (GET, PUT, DELETE): Retrieve, update, and delete specific entries
- `/api/journal/categories/` (GET, POST): List and create categories
- \api/journal/summary/\ (GET): Get summary of entries
- `/api/users/profile/` (GET, PUT): Retrieve and update user profile

CONCLUSION

JournalShamiri provides a seamless experience for managing journal entries with secure authentication and efficient data management. The use of Django and React Native ensures a robust and scalable application.