

Development of a Progressive Web Application for the Automation of Registration and Management of Areas in a Foreign Policy and Diplomacy Club

Problem Definition

Clubs and organizations focused on foreign policy and diplomacy often face challenges in efficiently managing applicants and controlling their various operational areas. The lack of a centralized digital platform can lead to inefficiencies in the registration process, difficulties in internal communication, and disorganization in events and activities management.

Project Vision

The project aims to develop a Progressive Web Application (PWA) specifically designed for the Foreign Policy and Diplomacy Club. This platform will enable applicants to register efficiently and allow administrators to manage each area of the club centrally, enhancing communication and organizational effectiveness.

Objective

The main objective is to create a dedicated registration and management platform that provides a convenient, fast, and user-friendly interface. This application will serve as a direct channel for members and administrators, facilitating better interaction and smoother management processes.

Feature Description

1. Applicant Registration

- User-friendly interface allowing applicants to register and input their professional and academic information.
- Validation process to ensure the quality and seriousness of applicants.

2. Club Area Management

- Tools for assigning members to various areas such as events, research, and communications.
- Functionality to monitor and report the progress of each area.

3. Real-Time Communication and Notifications

- Push notifications to inform members about upcoming events, important changes, and administrative messages.
- Personalized alert system based on members' preferences and roles.

4. Personalized User Profiles

- Ability for members to create profiles, save important documents, and access a history of activities and contributions within the club.
- Customizable preferences for receiving communications and notifications.

5. Administrative Dashboard

- Interactive panel providing real-time insights into registration volume, member preferences, and management needs.
- Tools for managing events, updating club information, and monitoring member activity.

Technologies Used

1. Frontend:

- React, Angular, or Vue for a dynamic and responsive interface.
- Service workers to enhance the speed and functionality of the application.

2. Backend:

- Node.js with Express to handle registrations, user accounts, and real-time tracking.
- MongoDB or Firebase to store user profiles, registration history, and preferences.

3. PWA Features:

- Push notifications through Firebase Cloud Messaging (FCM) or OneSignal to keep users engaged.
- Manifest file to enable app installation on devices without the need for an app store.

Target Audience

The PWA is designed for applicants and members of a foreign policy and diplomacy club who value efficiency and easy access to information and activity management.

Benefits of the PWA Approach

- **Push Notifications:** Keeps users informed about events and special offers in real time.
- **Device Installation:** Allows users to install the application on their devices as if it were a native app, without the need for an app store.

Conclusions

This PWA will provide a robust and efficient platform for managing and registering in the foreign policy and diplomacy club, offering members a smooth and pleasant experience while positioning the club as a preferred choice in a competitive environment.