

Internship Assignment : PWA Development for IRCTC PNR Status Checker

Objective: Create a Progressive Web Application (PWA) that allows users to search for Indian Railway PNR numbers, retrieve their current status online, and store the last status for offline access. Additionally, implement a feature to display a list of the last 10 searched PNR numbers, and handle errors gracefully, incorporate features such as storing and displaying five important train details.

Requirements:

1. PNR Status Search:

- Integrate with the IRCTC API for retrieving real-time PNR status.
- Provide a smooth and mobile-friendly user interface for entering and submitting PNR numbers.
- Display the current status of the PNR including details like train name, departure/arrival stations, and seat information.

2. Train Details:

- Allow users to save and view details of five important trains, including station codes and timings.

3. Offline Mode:

- Implement offline functionality to store the last retrieved PNR status locally.
- When the user is offline, show the last known status of the PNR.

4. Search History:

- Maintain a list of the last 10 searched PNR numbers.
- Display this list in a user-friendly way, allowing users to easily recheck previous PNR statuses.

5. Error Handling:

- Implement robust error handling for scenarios such as expired or invalid PNR numbers.
- Provide clear and informative error messages to guide the user in case of issues.

6. Smooth UI:

- Design a visually appealing and intuitive user interface.
- Ensure seamless interactions and transitions to enhance the overall user experience.

7. Mobile-Friendly:

- Optimize the application layout for various screen sizes, particularly focusing on mobile devices.

8. Documentation:

- Provide detailed documentation on how to set up the development environment, run the application, and any additional considerations for deployment.

Submission:

- Submit the source code in your own github repo along with necessary configuration files.
- Include documentation in markdown format.
- Share a github repo link for review.

Evaluation Criteria:

- **Functionality:** Does the application perform the required tasks accurately?

- User Interface: Is the UI intuitive, visually appealing, and mobile-friendly?
- Offline Support: How well does the application handle offline scenarios?
- Error Handling: Are errors handled gracefully, providing meaningful feedback?
- Code Quality: Is the code well-organized, readable, and follows best practices?
- Documentation: Is the documentation comprehensive and easy to follow?

Note:

- The use of modern web development technologies and best practices is encouraged.
- Respect all legal and ethical considerations, especially in using third-party APIs.
- Feel free to reach out for clarification or guidance during the development process.

Good luck!

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