Idea Details

The mobile app will assess the safety and suitability of coastal tourism locations in India using real-time data from INCOIS APIs, including ocean alerts (wave height, currents, storm surges), meteorological parameters (winds, temperature), and water quality. The app will provide a suitability score for each beach based on these parameters, with a color-coded system indicating safe, cautionary, or unsuitable conditions for recreational activities. Key features will include geospatial mapping, user location awareness, and real-time notifications for nearby hazards, helping tourists make informed decisions.

Key Features:

1. **Real-Time Data Integration:** Using INCOIS APIs for ocean alerts, winds, and water quality to evaluate beach safety.
2. **Suitability Evaluation Algorithm:** A color-coded system to indicate safe or risky conditions for various beaches.
3. **User Alerts and Geospatial Mapping:** Location-based notifications and interactive maps to show real-time beach conditions.
4. **Tourist Engagement and Education:** The app can include educational content, such as safety tips for beach activities, guidelines for swimming in different ocean conditions, and information on local environmental preservation efforts, helping tourists make safer and more responsible choices.
5. **Integration with Local Services:** The app could collaborate with local businesses, such as hotels, restaurants, and tour operators, to offer tourists additional services based on beach conditions, such as suggesting indoor activities during unsafe conditions or providing real-time booking options.
6. **Community Feedback & Reporting:** The app could allow users to report on-the-ground conditions (e.g., visible pollution or water quality issues), contributing to a crowd sourced database that can help improve safety and environmental monitoring over time.

This app will enhance coastal tourism by prioritizing user safety and improving the overall tourist experience, with potential for future features like predictive analytics and crowd sourced data.