

Project Proposal

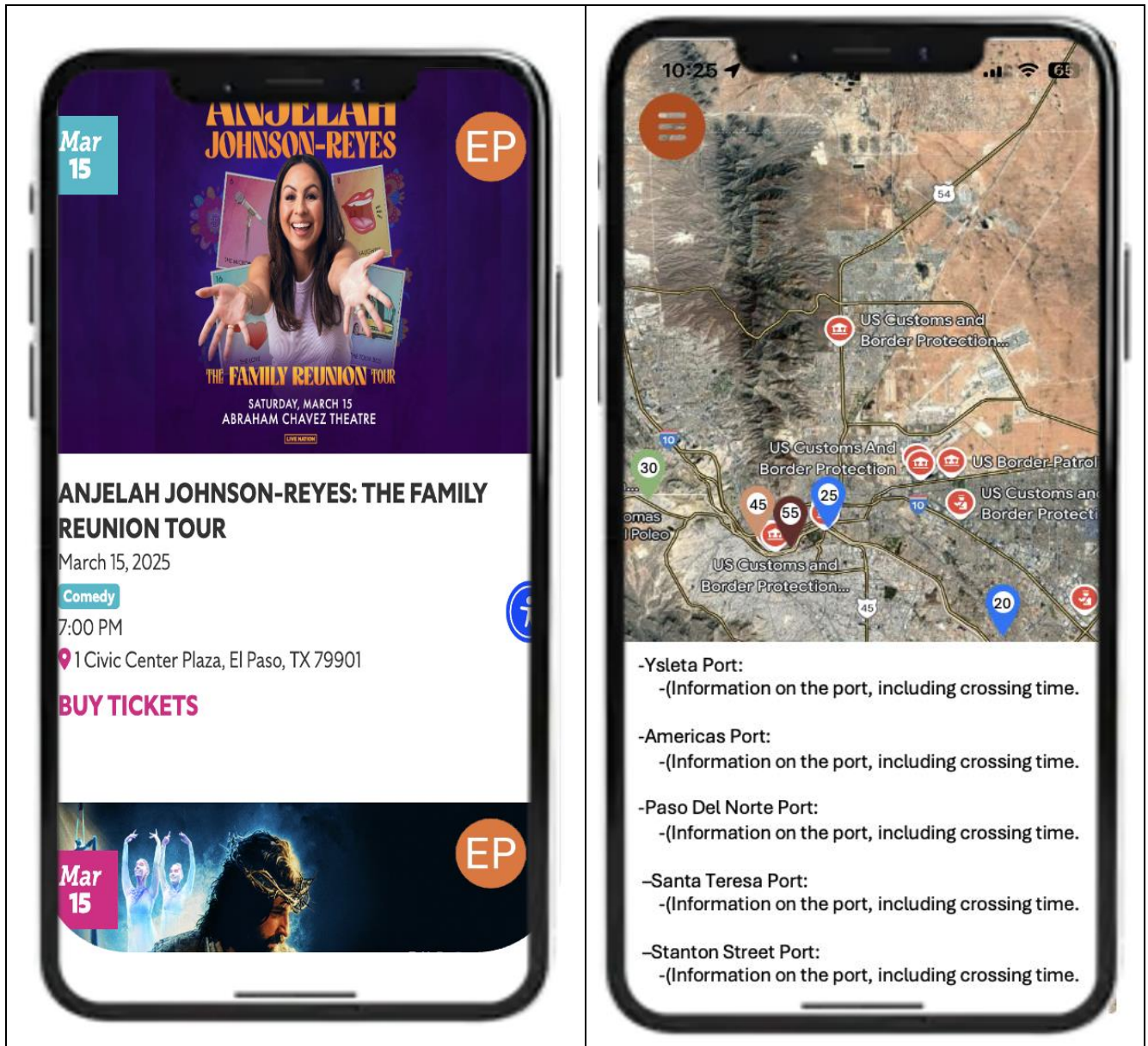
- **Title:**
 - Border Buddy Application

- **Contact Info:**
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- **Description:**
 - Border Buddy is a mobile application designed to assist residents and travelers in the El Paso-Juárez region. It provides real-time information about all ports of entry, including wait times, lane availability, and operational hours. Additionally, the app features a local events section showcasing weekly events happening in both El Paso and Juárez, fostering cross-border community engagement.

- **Key Features/ Requirements:**
 - **Interactive Map of Ports of Entry**
 - Display all El Paso-Juárez ports of entry.
 - Show real-time wait times, lane status (Ready Lane, SENTRI, pedestrian, cargo), and hours of operation.
 - Clickable markers for each port with detailed info.
 - **Local Events Calendar**
 - Weekly listing of events for El Paso and Juárez.
 - Categorized by type (music, food, sports, cultural).
 - Integration with device calendar for event reminders.
 - **Language Support**
 - Bilingual (English & Spanish) interface.
 - **Push Notifications**
 - Notifications for significant delays at ports or major local events.

- **Sample Screens:**



- **Flutter Features To Be Used/Learned:**

- Google Maps Flutter Plugin
- HTTP Package/ Rest API
- Firebase Cloud Messaging
- Calendar Integration Plugin
- Localization Support

- Animations
- Responsive Design(for mobile apps)

- **Development Plan and Schedule:**

- Set up main flutter environment, basic structure and UI framework.
- Implement the Ports of Entry Map using Google Maps integration.
- Integrate real-time border wait time API, display info on the map pins.
- Design UI for local events and dummy data.
- Integrate real events using an API or backend database.
- Add Bilingual Support, possible settings page.
- Implement Notifications.
- Add system calendar integration for event details.
- Test on devices, fix bugs and improve UI.
- Final debugging, refactoring and documentation.