PourPal - Specification Draft

Team Members: Toma Ionut-Adrian, Shehab Abedalrahman

General Description

This web application aims to solve the problem of making platonic friends as an adult (18+). It helps users connect by allowing them to create and join casual, group-based social events (called 'Hangouts') at local venues like bars, pubs, and coffee shops.

Registration (for User)

A new user needs to register for a single 'User' account. Registration requires a unique email address, a password, their first name, and a mandatory confirmation that they are 18 years of age or older.

Logged-in User: Profile & Hangout Creation

A logged-in user can manage their basic profile. A profile should contain their first name, profile picture, and a short bio (e.g., 'My Vibe').

A logged-in user can create a new 'Hangout.' A Hangout must contain:

• Title
• Venue/Location (e.g., via a location search API)
• Date & Time
• Maximum Group Size (e.g., 2–5 people)
• Brief description

The user who creates the Hangout is automatically added as the first participant.

Additionally, there might be a separate place where users can find listed bars in the area, from which they can get discounts or offers by showing that they came through this web app.

Logged-in User: Browsing & Joining Hangouts

A logged-in user can see a list of all upcoming Hangouts. This list should be filterable by criteria such as 'Soonest' and 'Nearest.'

A logged-in user can click on any Hangout to see its full details, including the description and the profiles of users who have already joined.

From the details page, a user can join a Hangout (if it is not full) by clicking 'Count Me In!'. A user can also leave a Hangout they previously joined.

Once a user joins a Hangout, they gain access to a temporary, group-only chat for that specific event. This chat is meant for coordination (e.g., 'See you at 7!', 'I'm running 5 mins late').

A logged-in user can also see a list of 'My Hangouts' — events they have joined or created — separated into 'Upcoming' and 'Past.'

There is also an option to add someone as your connection/friend.

After the Hangout, you can leave a comment on each participant's profile.

A report button will be available for flagging shady accounts.

A Privacy Policy will be included to ensure user trust and compliance.

Since it is an 18+ web app, there will be an age verification system (even if not fully implemented, the functionality will exist).

These are the main ideas of PourPal functionalities. More may be added during development.

Technical Approach

Frontend (React.js)
The frontend will be a single-page application (SPA) built using React.js. It will handle all UI rendering and user-facing state management.

Key points:

• React Router will manage navigation (e.g., /login, /hangouts, /hangouts/123)
• `axios` or native `fetch` will handle API requests to the Django backend
• React components will be used for forms, lists, chat windows, and profile pages
• Node.js will be used as the development environment for package management and local hosting

Backend (Django)
The backend will be built using the Django REST Framework (DRF). It will manage all business logic, authentication, and database interactions.

Key points:

• Django will handle user registration and authentication, likely using httpOnly cookies for secure sessions
• The backend will provide CRUD (Create, Read, Update, Delete) API endpoints for Hangouts, User Profiles, and Chat Messages
• Real-time chat functionality will be implemented using Django Channels
• Django Admin panel will be used for moderation (e.g., handling reports, banning users)
• PostgreSQL will serve as the database, ensuring strong integration with Django