# Brief:

The purpose of this microservice is to serve User Authentication and Logic APIs. It functions as the entry point for the entire application, where all auth tokens are generated (though ideally this logic should be moved to the API gateway where auth tokens can be validated before requests are rerouted).

User authentication APIs are served under the Axum route group `/api/v1/auth`, while business logic-related APIs are served under `/api/v1/user`.
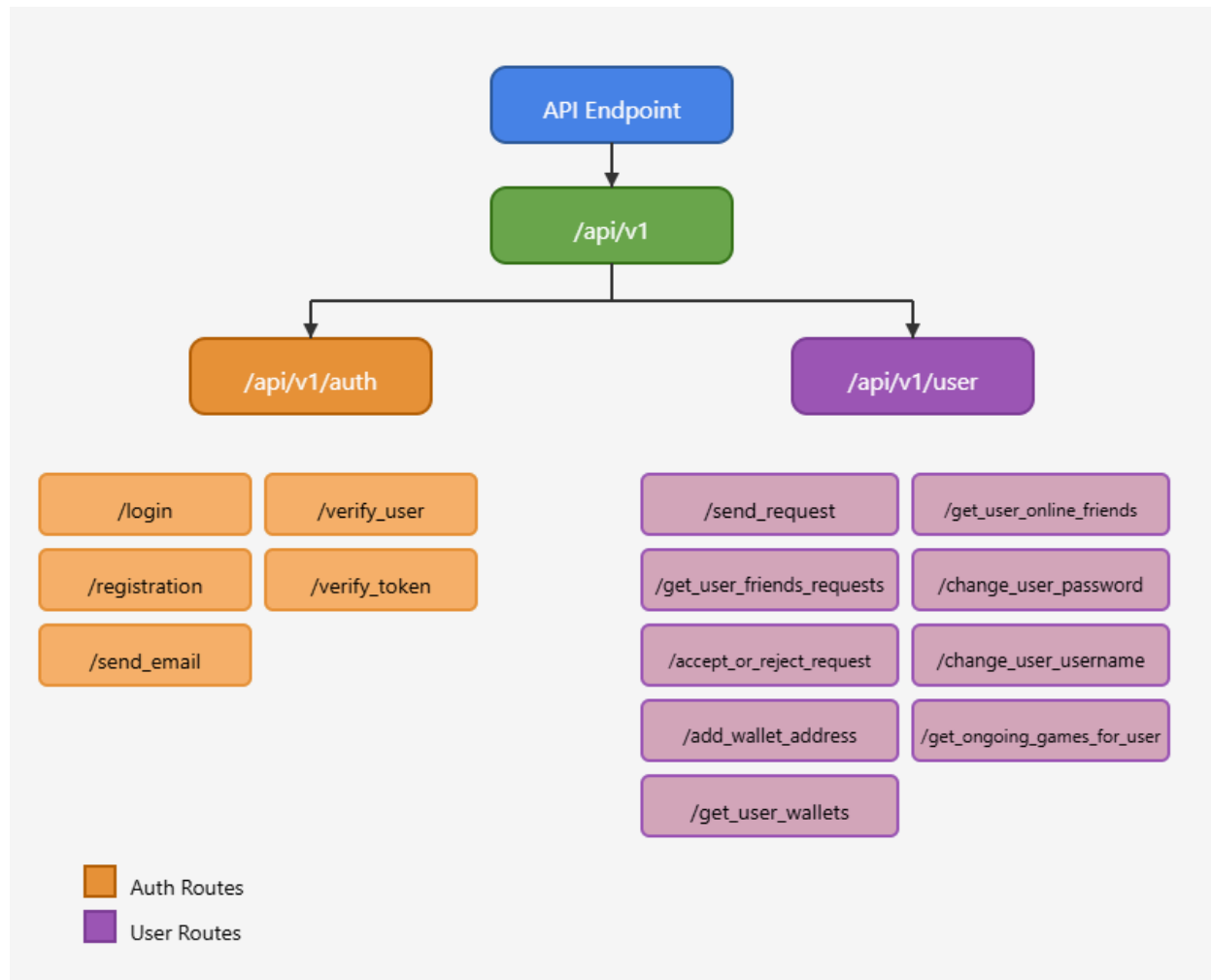
User Auth APIs (`/api/v1/auth`):

- `/login`
  - Users can use this API route to log in to their Desktop/Mobile Client.
- `/registration`
  - Users can use this API route to create a new account. Once registered, users are redirected to a verification screen to verify their email.
- `/send_email`
  - This API generates a random verification code and sends it to the user's registered email. The generated code is valid for 15 minutes.
- `/verify_user`
  - This API validates whether the user-entered verification code is correct. If correct, the registered email is verified; otherwise, the user can re-enter the code or request a new one.
- `/verify_token`
  - Each time a client (Desktop or Mobile) is opened, a token saved on the client side is fetched and verified. Tokens are valid for 7 days and return user details to be stored in the client's state while the user is using the application.

User Logic APIs (`/api/v1/user`):

- `/send_request`
  - Sends a friend request to another user by their username. These requests are stored in the PostgreSQL database and can be either accepted or rejected by the recipient.
- `/get_user_friends_requests`
  - Retrieves current friend requests for the user that have not yet been accepted or rejected.
- `/accept_or_reject_request`
  - Users can accept or reject friend requests. If rejected, the request is deleted from the database. If accepted, a new friend list record is created in the database and the request is removed.
- `/get_user_online_friends`
  - Used to retrieve a list of a user's currently online friends. This is utilized when a user wants to invite any of their online friends to a lobby.
- `/change_user_password`
  - This API allows users to change their existing password.
- `/change_user_username`

- ○ Allows users to change their existing username. This operation only succeeds if the new username is not already in use.
- **/get_ongoing_games_for_user**
  - ○ This API returns all ongoing games being played by the user's friends. Users can decide to spectate any ongoing matches. For staked matches, users can also place bets before the time limit expires.