

Technical Test Documentation

- Github URL

Find the github url in this link: <https://github.com/ahmadirfaan/match-nearby-app-rest>

- Functional & Non-Functional Requirements

The Functional Requirements:

- Sign up & Login to the App
- Users are able to swipe left (pass) and swipe right (like) up to 10 profiles in 1 day.
- Users can purchase premium packages to unlock features.
- Profiles should not appear twice in the same day.
- Handle user preferences for swipe actions.

Non-Functional Requirements:

- Scalable backend to handle a large number of users.
- Low latency for swipe actions.
- Secure user authentication and data storage.
- Easy to maintain and extend.
- Responsive API with minimal downtime.

- Tech Stack and Reasoning

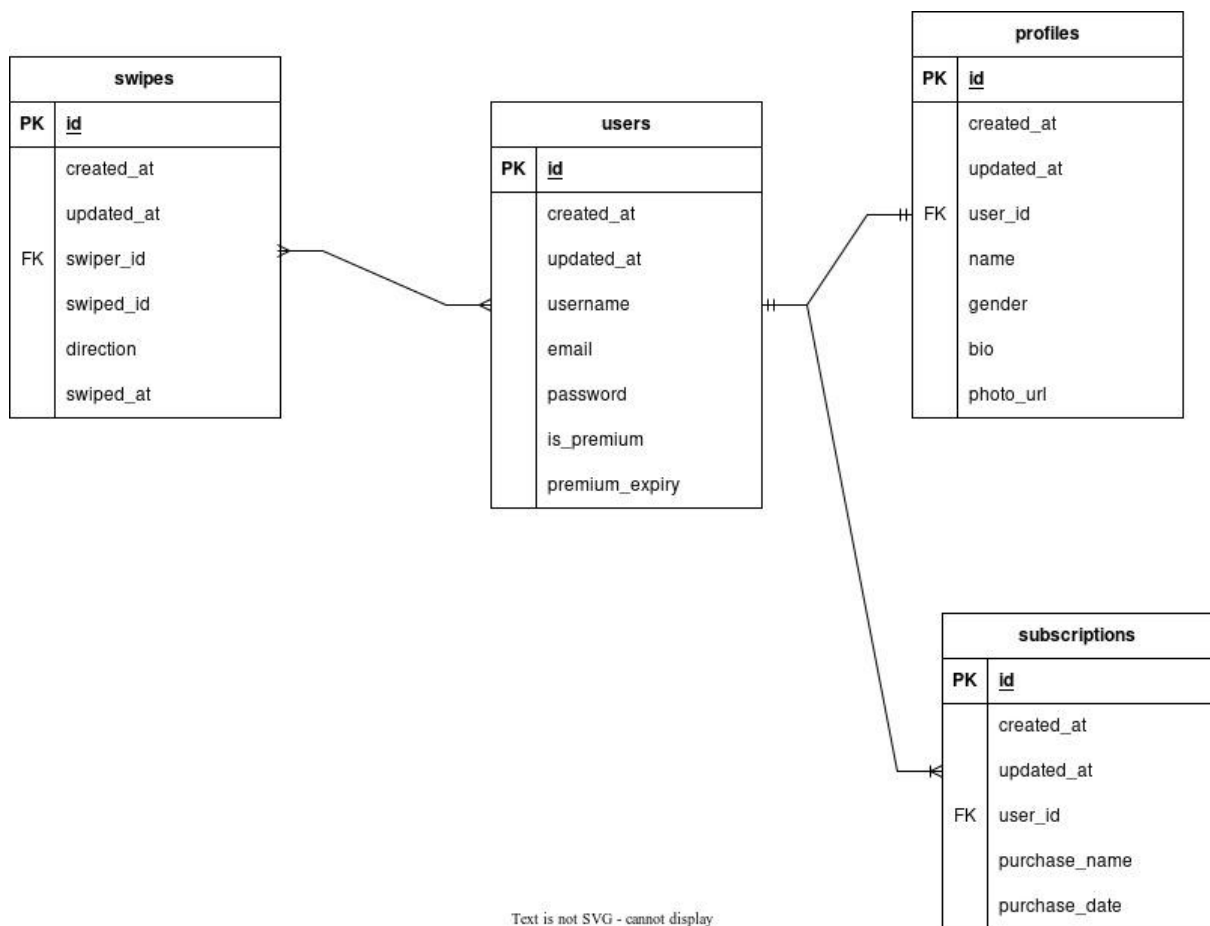
- Go (Golang): Used for backend services due to its performance and concurrency support.
- Gin: A lightweight web framework for routing and middleware support.
- PostgreSQL: Used for relational database management to handle complex queries and transactions.
- JWT: Used for authentication and authorization
- Redis: Used for caching mechanism, to store data in memory rather than disk

● Test Cases

- Test if a user can sign up and log in.
- Test if a user can swipe left and right.
- Test the daily swipe quota restriction.
- Test if the same profile doesn't appear twice in a day.
- Test if the premium feature works (e.g., no swipe quota).
- Test if API returns proper error messages for invalid requests

● System Design

ERD:



Sequence Diagram

