

Stumble

Introduction

- ✚ Golang, one of reliable, simple and efficient language has been used for creating this dating app where a user can like as many users as he/she wants.
- ✚ Golang is basically built for programs related to networking and infrastructure.
- ✚ Because of its quick performance characteristic, it has been used by most of the developers.
- ✚ On considering the development of an app like dating app, it makes things easier.
- ✚ Attributes of users: id- type: int, Name-type: string, location-type: float, gender-type: string(optional), email-type: string(optional)
- ✚ JSON (JavaScript Object Notation) has been used for storing and transporting data. It has been used so that data can be sent from server to web page.

Procedure

- ✚ Initially database model is created in RDBMS(SQLite) for this stumble (dating app) using Golang's ORM, a library for Golang for dealing with relational databases. It acts as a broker between us the developers and the underlying database technology.
- ✚ Once the model is created, user's JSON file which contains id, name, location, gender, email and likes file are imported in the database using SQL server
- ✚ In order to acquire all the matches, an endpoint has been created which communicates back and forth with the network.
- ✚ Here 'GET','POST','PUT' HTTP requests has been implemented.
- ✚ User input for user x and distance k which is 1D coordinate system has been acquired and created an endpoint to retrieve all the users within distance k. This has been accomplished by reading the file as a byte array and unmarshal is performed. Then putting it in for loop and checking the required conditions if satisfied result is displayed.
- ✚ Similarly, user input of type string is acquired and created an endpoint for acquiring all the users which have this string in their name. Using strings.Contains it is checked whether the given string is substring of the users name through iteration.

Golang

- ✚ Go really shines when it comes to infrastructure. User using go will feel the ease of acquiring the task since as a user I felt the same. It was faster.
- ✚ Basically, it is popular for server-based application. It is relatively easy to write high performing applications.
- ✚ It is open-source programming language and it was released publicly in 2012.

Implementation

main.go

- ✚ Inside main.go all the required packages like fmt,log,net/http, encoding/json ,etc.. has been imported.
- ✚ And type struct for user and likes has been defined. Within this main.go file 2 distinct functions has been defined. A 'handleRequest' function for matching the URL path hit with a defined function and a 'main' function for kicking off the API.

User.go

- ✚ Inside user.go file also all the necessary packages like github.com/jinzhu/gorm, _github.com/jinzhu/gorm/dialects/sqlite, strings, math has been imported.
- ✚ Within this user.go file 7 distinct functions has been defined.
initialMigration, AllUsers, NewUser, Query, Like, Distance, UpdateUser.

Summary

Hence, by making use of SQLite(RDBMS), Golang ORM, HTTP Requests, encoding/json, endpoint creation, importing all required packages, and by making use of one of the reliable, efficient, easy to understand, high-performance, faster Golang this dating app has been achieved.