Client-server:

-set of services and associated servers, clients access and use the services
-set of servers that offer services to other components
-set of clients that call on the services offered by servers

-network that allows the clients to access these services

Why client-server?

As a dating app, UTDGO should ensure that client devices have consistent and reliable source of data and functionality. Also, it' really significant to hold a number of user data with compatibility and security, so it has be to robust and scalable in order to match a lot of profiles in a flawless without outflows. Client-server has centralized management structure, so it's easier to deploy updates, manage data, and enforce security policies. Centralized control allows better security measures since it's easier to control access to resources in single server than across multiple peer system. And as clients add more resources and requests, tasks can be distributed by adding multiple servers, which means that this architectural pattern can hold the scalability. Furthermore, this pattern allow clients, app users, access server resources remotely from different location and interact with server on different platform.

Compatibility server:

- collect the score between users
- record and display compatibility score

Login server:

- check login system: allow or deny login and access system
- create new account
- authenticate if it's existing user
- query the forgotten password or ID

Messaging server:

- send and reply message between user
- store the messaging history

Profile management server:

- display the personal info on user's profile
- update and remove the information depending on the request

Matching server:

- request& accept mingling interaction
- inform to user if the matching is accepted or rejected
- record the matching history

Geolocation server:

- calculate the distance between user
- \rightarrow display and classify the user matches followed by living distance (bind users who lives nearby each other)

[multiple users of UTDGO] Client 1 Client 2 Client 3 Client 4 Make requests online application server: HTTPS Accept request& reply Possible Profile servers: Compatibility Login Messaging Matching Geolocation Management Server Server Server Server Server Server Database