✓ **Client/Server Architectural Pattern :**
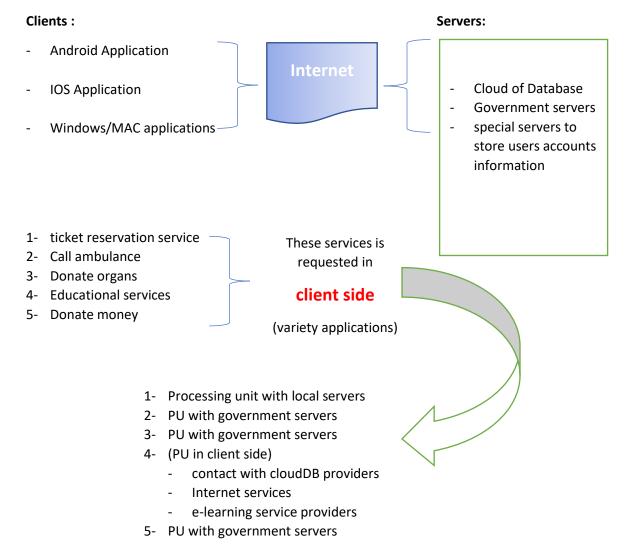
Since the system is a service system for all citizens in Saudi Arabia, I would like to choose the client/server pattern in order to provide services by linking several applications that act as a client with different types of servers, and the choice of this pattern came from our desire to allow the development of the system and open the way for the addition of partial systems in the future in addition to offer adding new servers and the possibility of communication between any partial system (client) and any service provider in the system.

It should be noted here that the pattern of repository can also be used, but the nature of the system developed under the Corona pandemic takes a healthy and social curve, i.e. the majority of the citizen's life matters, and therefore the system is ready to deal with any service provided online from all over the world in relation to the system's policy and objectives.

Clients :

- Android Application

- IOS Application

- Windows/MAC applications

Servers:

Internet

- Cloud of Database
- Government servers
- special servers to store users accounts information

1- ticket reservation service
2- Call ambulance
3- Donate organs
4- Educational services
5- Donate money

These services is requested in

client side

(variety applications)

1- Processing unit with local servers
2- PU with government servers
3- PU with government servers
4- (PU in client side)
   - contact with cloudDB providers
   - Internet services
   - e-learning service providers
5- PU with government servers

Non-Functional Requirements :
1- Spaces requirement is Taked into account in **Client side**
2- Performance requirement is Taked into account in **Server side** **(special servers)**

✖ **Layered Architectural Pattern**

The efficiency and availability are important non-functional requirement in this system ,because that I can not think about layered pattern .

This pattern may waste a lot of time during interlayeral serial communications, which may undermine the efficiency requirement and may miss availability at critical times such as an ambulance service request.

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