Networking and Mobile Integration

Client-server model: One computer acts as a server that hosts the session that other computers connect to it but as "clients". The server shares the current game states with each client.

If we want a client-server model multiplayer the project has to be in C++

The Server holds the true game state and client play with "pawns" they store on the server

    Sending calls to control inside the game

The server does not stream visuals, it replicates info about the current game to each client
    The server gives the client computers information about what is happening currently in the game and how objects should behave and how objects are moving.

    The client uses this info to simulate what is going on in the server and then portrays that on the screen.

    Unsure how to pick and choose which info gets transferred from server to client-side [need to look into that]

Star Citizen: Allows you to upgrade your ship on the website

GTA 5: you can take care of chop on your phone.

Actor Replication: process of reproducing game state info between machines [most client machines won't have replication enabled on their own machines so they just do their actions locally

While common use cases like creation, destruction, and movement can be handled automatically, all other gameplay

features do not automatically replicate by default, even when you enable replication. You must designate exactly which variables and functions you want to replicate as is appropriate to your game. Detailed information on all of the above replication features is available in the Actor Replication guide.

Several common features of Actors, Pawns, and Characters do not replicate:

- **Skeletal Mesh and Static Mesh Components**
- **Materials**
- **Animation Blueprints**
- **Particle Systems**
- **Sound Emitters**
- **Physics Objects**

Can you use C++ to make IOS App?

Yes and no you can write the general logic for the app but the UI components need to be in objective C or swift

https://forums.unrealengine.com/t/ios-to-windows-dedicated-server/121953

Found a source that says:

> **Will need somewhere to host the server**
>
> AWS is a good bet

Another one source

Need some BAT file

Another source to just download Unreal source file to host your own server **[thats how people create their own servers for GTA RP]**