

Application Name: Extreme Share (File Sharing app)

Short Brief:

This is a peer-to-peer file transferring application for android. This can be used to send and receive pictures, music, and more without an internet connection. It has another feature that the connected devices can stream music, videos, and photos without downloading them.

System Flow:

Receiver:

- The user clicks on the Receive button. Then the user receives a dialog for wifi hotspot connection permission.
- The user should wait until the receiver gets discovered and if discovered then another user sends the request for connection establishment.
- Then the files are transferred in chunks and on completion of the transfer, the user can exit the connection.
- If any failure occurred during the transfer, it can be re-transmitted.

Sender:

- The user clicks on the Send button. Then an activity opens which contains all files by category.
- The user selects the files to be sent and clicks on the transfer button.
- Accept all required permissions and wait for connection establishment with the receiver.
- The files are sent to the receiver in chunks and disconnect the connection after the transfer is complete.

Stream:

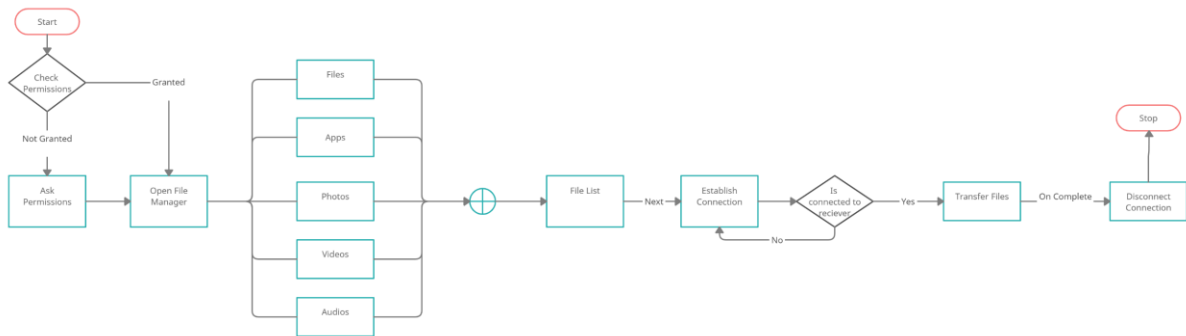
- The connection is established between receiver and sender.
- Now receiver/sender can access and stream audio, video, and more with each other.

Used Components:

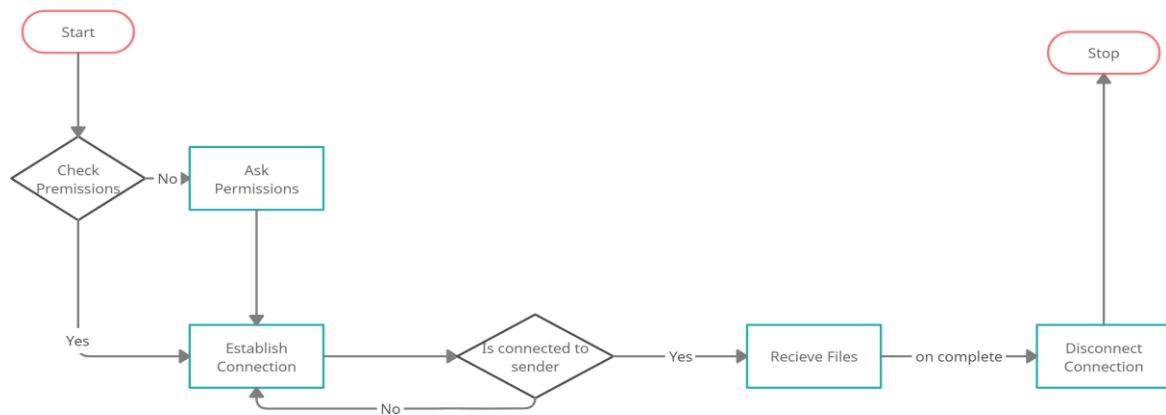
- DI(Dagger-Hilt)
- Navigation Components
- ViewModel
- Databinding
- Clean Architecture
- Tablayout and ViewPager 2

System Design Diagrams:

Receiver:



Sender:



Stream:

