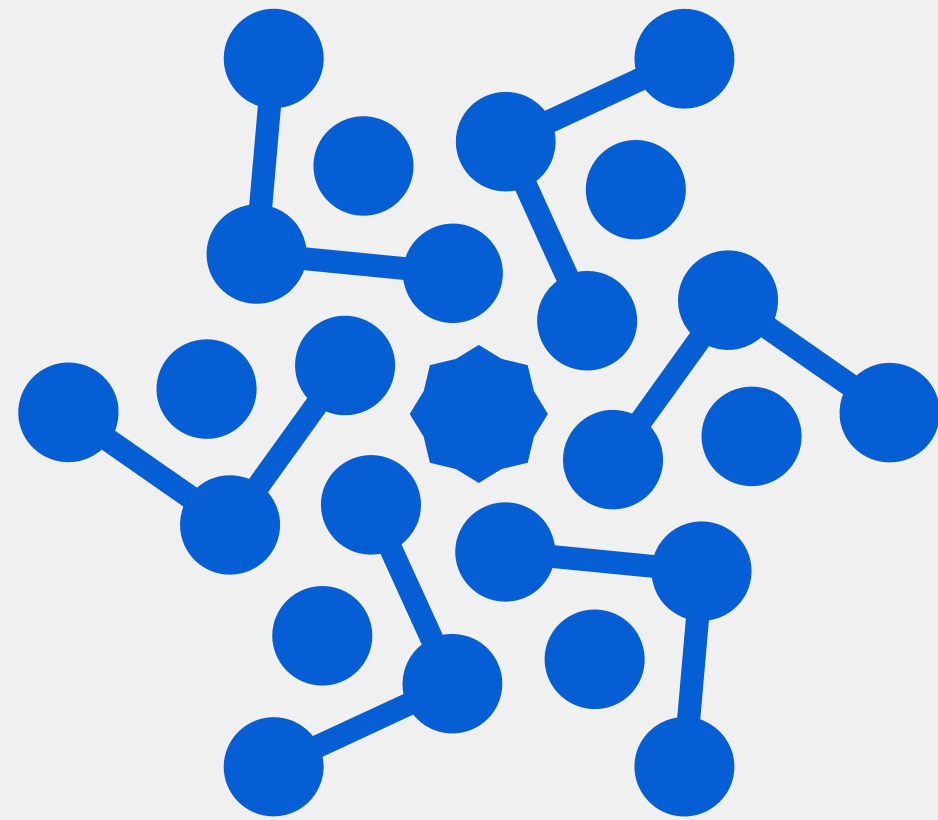


SYNCROS

SEAMLESS SHARING



Project #: 230810

Workshop: Games and Machine
Learning

Students: Neta Elyakim, Avi Maya

Lecturer: Dr. Uri Globus

A little story

Imagine your'e at the end of a lecture in college

Now imagine that summarizing the lecture is not your best skill.

On the other hand - it is your friend's best skill, who just happened to sit next to you in class.

The lecture is almost over and you won't be near the computer today, but you have to get the summarize of the lecture today because you have a test tomorrow (we'll talk about why it is bad practice to start studying for a test only 1 day before in another time..)

The internet connection is bad so the **fastest** and **easiest** solution is to transfer the file from your friends tablet to yours, but you have to do this quick because the next lecture is coming up and your friend is going home.

Oh... But you have an Android based tablet, well this is going to take a while...

The Problem

These days, Android device owners lack the apps and features for seamless and ease of use file transfer service.

Many existing file sharing apps require users to open the app and navigate to a specific screen to share files.

Also, not all of them are free (or at least not all of the app's features are free).

For individuals who regularly share files between devices that are not Apple OS based, there is a lack of options for easily and securely sharing files between devices, particularly options that are integrated within the device's share menu – like Apple's AirDrop (which only works between Apple devices).

The Solution

We thought of a solution that solves it all – meet **Syncros**.

Syncros is a simple yet effective app made to do one simple job – share files

While using bluetooth is the default notion when it comes to data sharing,
We found out that it is not easy and fast to share files using bluetooth to
perform file sharing between different Android devices.

Syncros uses WIFI-Direct – regardless of the model !



Syncros doesn't require you to open the app first before sharing, to have a Google account, a paid subscription or an internet connection - just download the app - pick a file - open the share menu - tap on Syncros and start sharing - as simple as that.

How does it work?

Sender's POV

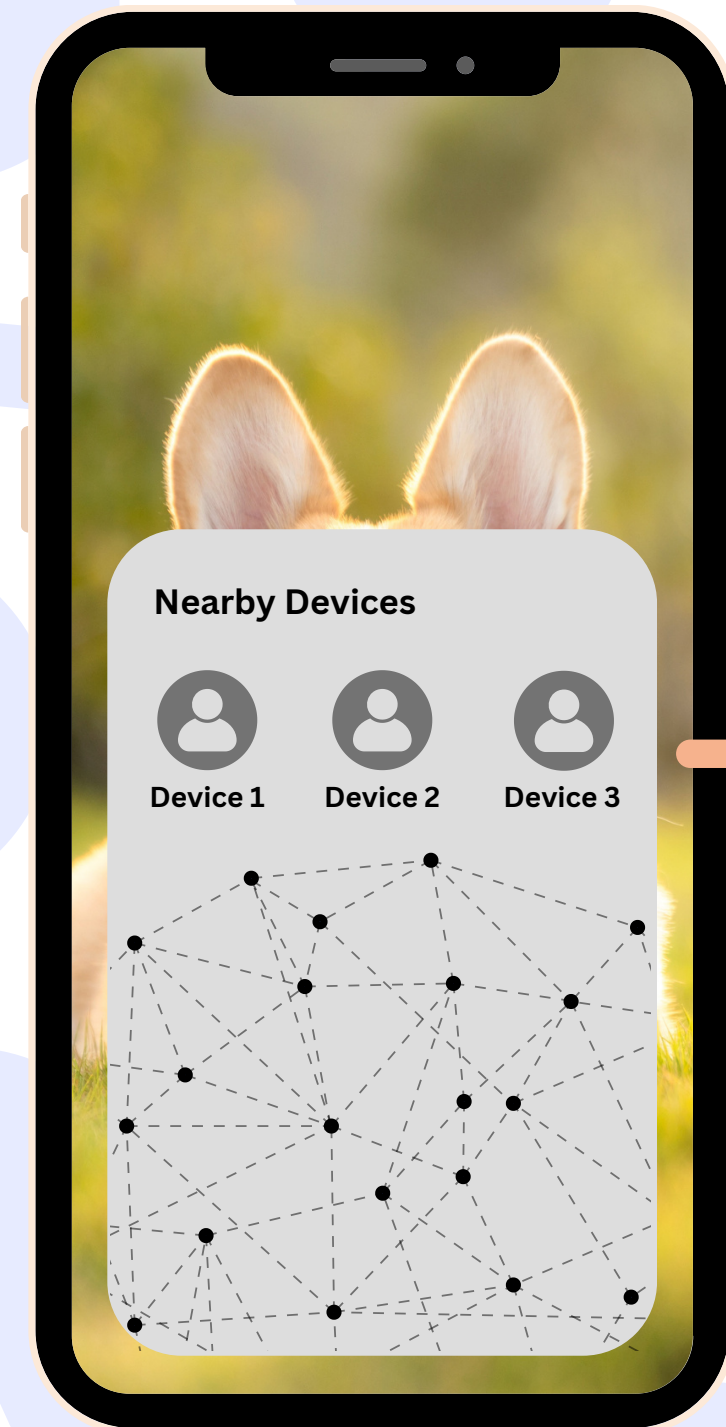
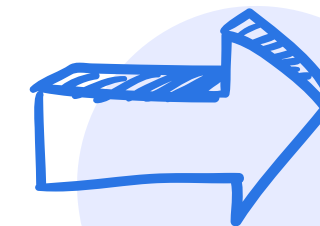
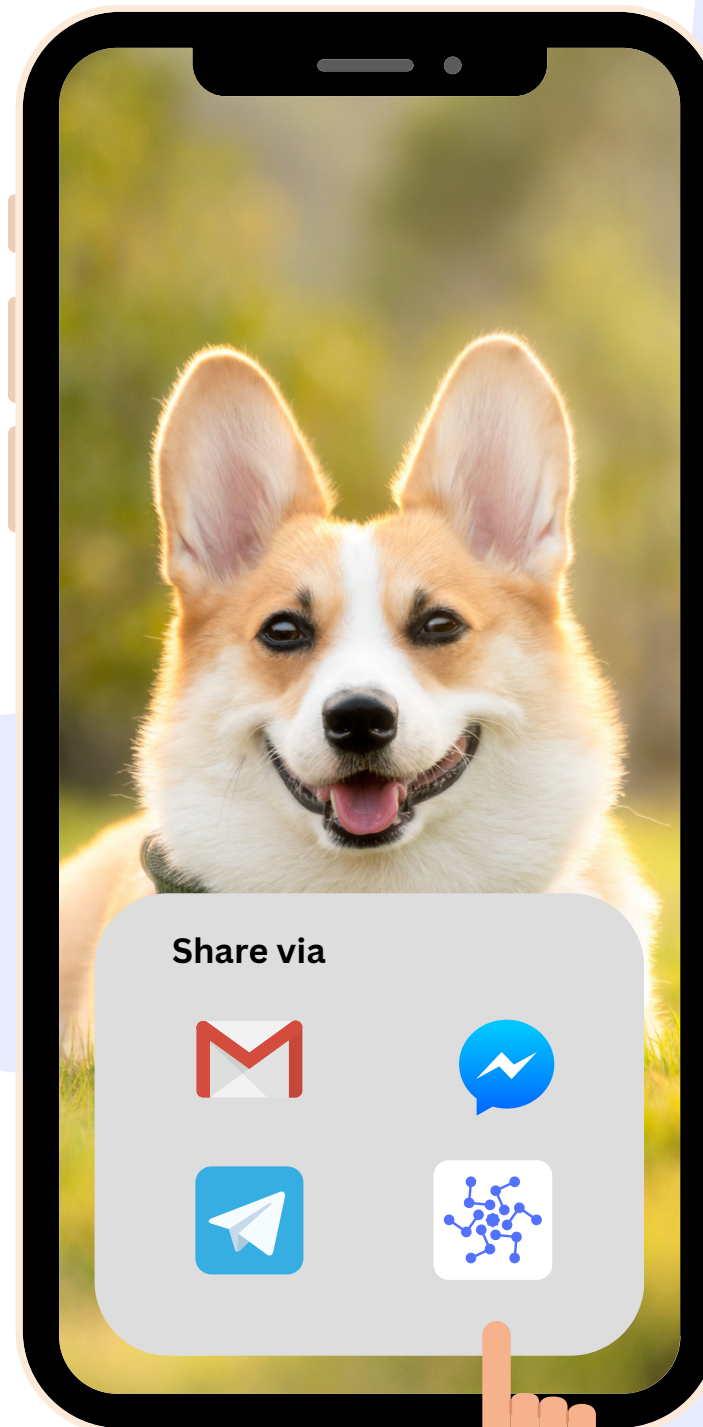
Pick a file



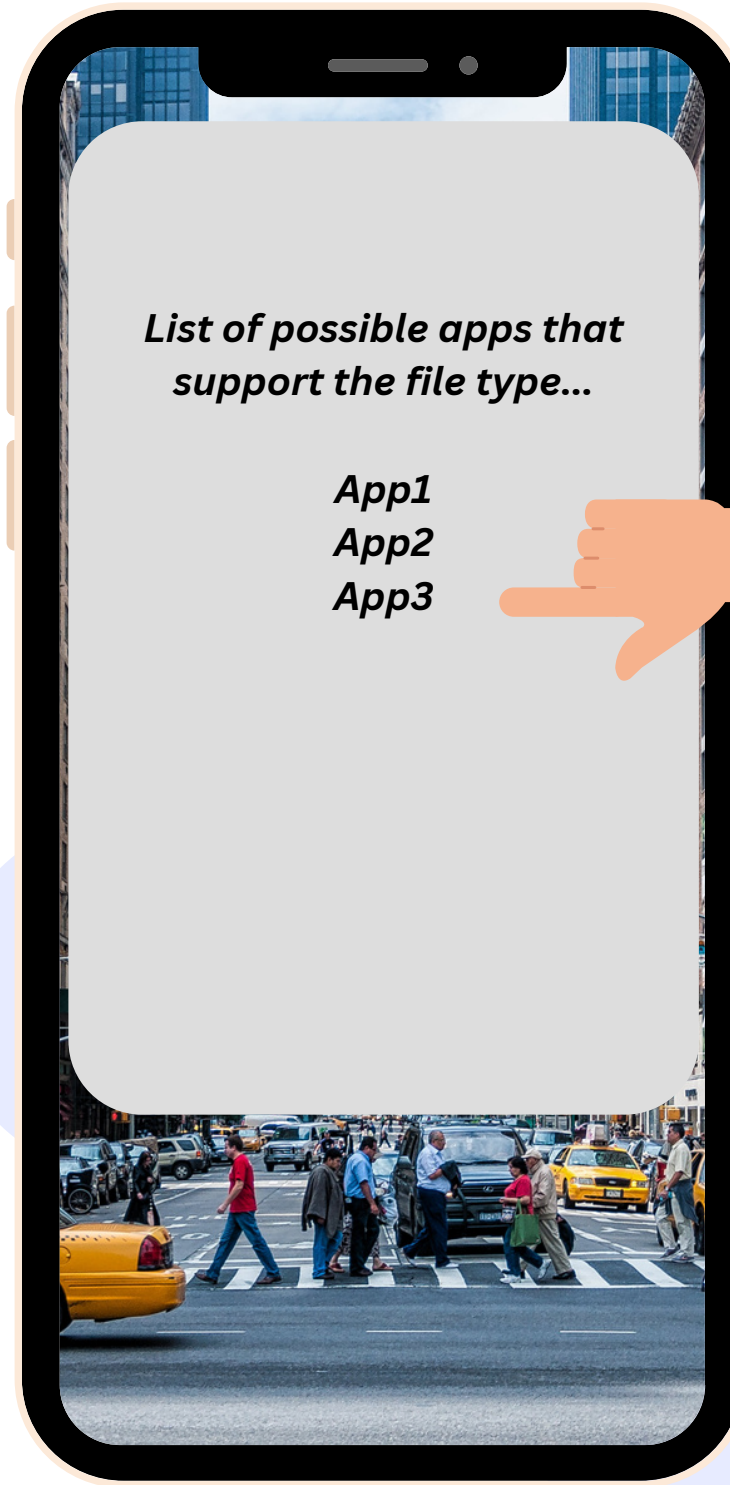
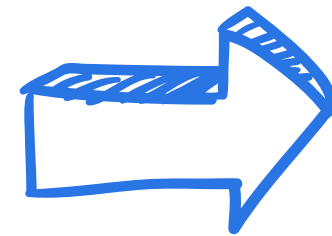
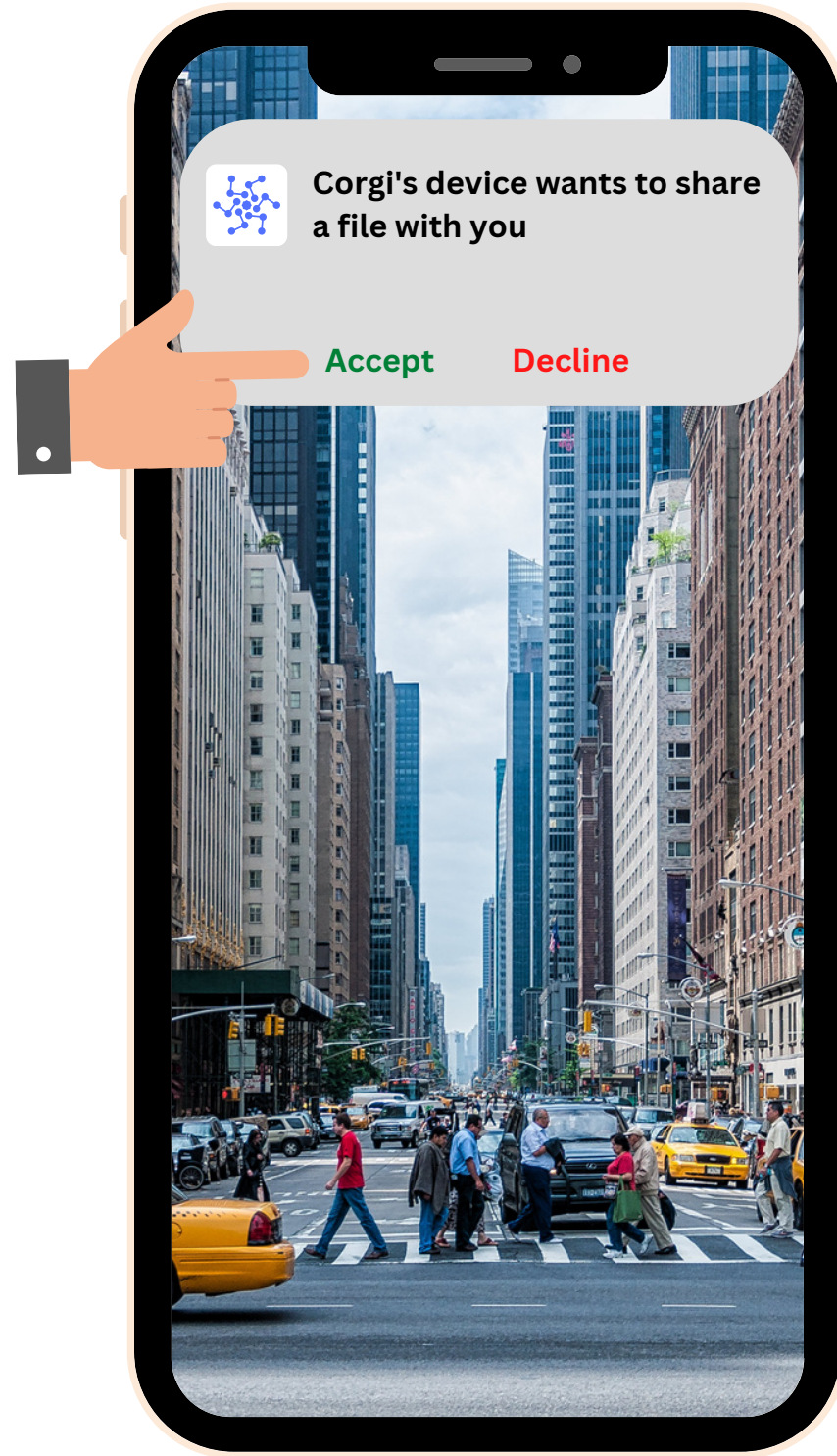
Open the "Share" menu within the file



Select the receiver's device name



Receiver's POV



Receive a notification about the sender request to share the file with you







Accept/Reject the file from the sender



Select a designated app to open the file with

Architecture

Technologies:

-  Implemented using **C# and .NET maui framework** - enabling cross-platform implementation in the future
-  By using **Wifi-Direct** for file transfer - the transfer operation is faster and easier than using Bluetooth, with the option for one-to-one or one-to-many transfer.
-  **Integrated within the "share" menu of a file** - no need to open the app beforehand - just tap on the Syncros icon in the menu and start sharing !
-  **No need to register or pay a subscription** - all free !

Other Solutions



Currently, there are few options available for easily and securely sharing files between Android devices.



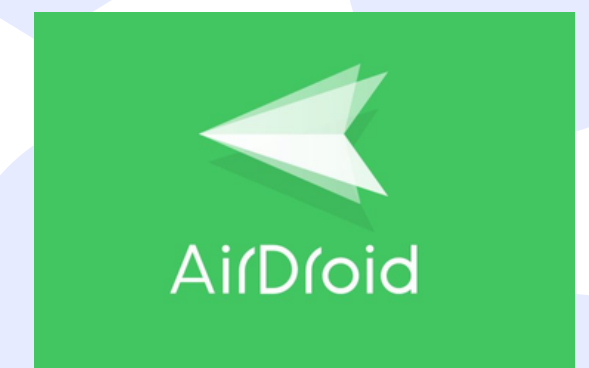
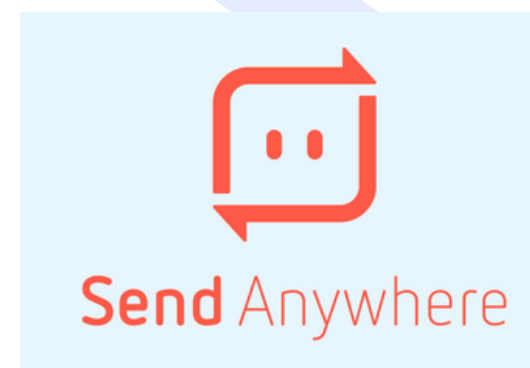
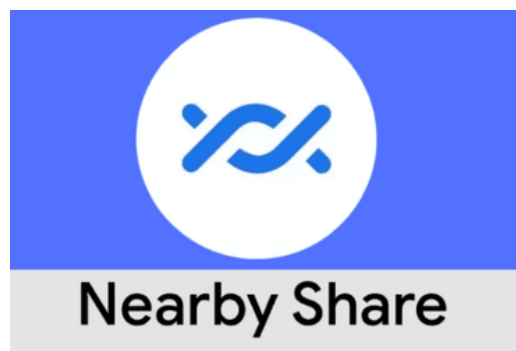
Many existing file sharing apps require users to open the app and navigate to a specific screen to share files - which can be inconvenient and time-consuming.



Not all of them are free (or at least not all of the app's features are free).



Some solutions require the user to have an internet connection - the file transfer is made using the cloud



Conclusion

Syncros mission is to have Android users enjoy the same comfort and easy-to-use file sharing feature as an Apple device owner would when transferring files - while maintaining the original quality of the file.

Basically - our motivation is (when looking into the future) is to "bridge" users and devices without depending on the device's OS.

Share seamlessly, Share [Syncros](#)