

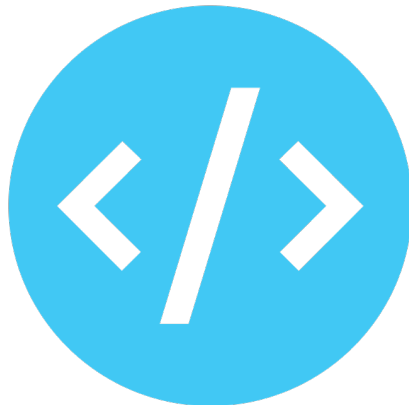


T5 - Web frameworks

T-WEB-510

P2PApp

REACT Native & P2P app





P2PApp

repository name: WEB_p2papp_\$ACADEMICYEAR
repository rights: ramassage-tek
language: JS, REACT



- Your repository must contain the totality of your source files, but no useless files (binary, temp files, obj files,...).

- Develop the following skills
- Introduction
- Part 1 - The heart of your application
- Part 2 - Basic functionalities
- Part 3 - To go further
- Part 4 - To go even further
- Part 5 - And finally...

DEVELOP THE FOLLOWING SKILLS

- REACT Native
- Peer to peer (P2P)

INTRODUCTION

The objective of this project is to develop a cross-platform mobile application that allows two users to exchange media content without going through a centralized server.



PART 1 - THE HEART OF YOUR APPLICATION

Using a WebRTC library that is compatible with your application, you must allow two users to establish a peer-to-peer connection and exchange messages.



Check out the WebRTC before you start the project. Did you do the bootstrap of this project?



Take the time to choose your native REACT-compatible WebRTC library before you start. Feel free to do some tests.

PART 2 - BASIC FUNCTIONALITIES

You must implement the following features in your application:

- Real time chat
- Simple file exchange



When receiving an element, a notification must be pushed by the application.



Think about the principles of P2P before you start creating your file manager. How does a P2P client react in such a case?



PART 3 - TO GO FURTHER

You must allow two people to connect using a shortcode sent by one of the two parties.



Even if a server is absolutely necessary for the exchange of this token, it is absolutely forbidden to send anything else through this server.



What is the most ergonomic solution to solve this problem?

PART 4 - TO GO EVEN FURTHER

You must allow your application to receive notifications even if the application is closed or in background.

PART 5 - AND FINALLY...

Implement the following features:

- Audio calls
- Video calls
- Multiple file exchange