

2024 Internship & COOP Take Home Challenge - Full-Stack

Challenge description: create an offline-first note taking React Native application, with the final build either in iOS or Android. The app should allow the user to write down text when the phone is not connected to the internet, and synchronize notes to AWS when the phone is back online.

Architecture requirements:

- front end: you must complete this challenge in React Native. Please do not spend time on the UI/UX or design side of the app as we care the most about online-offline data synchronization.
- You must use AWS Amplify to set up your project. Using Expo for initializing the project is not required and optional.
- You must use AWS DataStore to perform the online-offline data sync feature.
- Using Git & GitHub from the beginning is required. Your final deliverables should be an open-source GitHub repo that showed your step-by-step progress in commit history.

Deliverables:

- You should send us a link to your public GitHub repo with full git commit history that showed your progress commit by commit. Do not squash your commits. It is ok to be messy in your git history as long as you show progress.
- A proof that your app is working. You can choose to either record your screen on your desktop simulator, phone, or create GIFs to demonstrate what you have accomplished.

Resources:

- Setting up a RN project using CLI:  [Setting up the development environment · React Native](#)
- AWS Amplify tutorial:  [Introduction - React Native - AWS Amplify Documentation](#)
- Amplify DataStore document:  [Set up Amplify DataStore - JavaScript - AWS Amplify Documentation](#)
- Amplify DataStore examples:  [GitHub - dabit3/amplify-datastore-example: Example of basic app using Amplify DataStore](#)
- DataStore with React (not React Native), but useful reference:  [Realtime Offline-First Chat App in 100 Seconds](#)
- Hands-on tutorial on how to use Amplify DataStore with Expo:  [Expert led courses for front-end web developers.](#)

Please feel free to reach out if you have any questions. For this challenge, we focus on how you learn and deal with new tech stack so don't feel stressed to have complete functionalities by the end of the challenge.