Exporting React Native Apps Correctly

READ IF YOU ARE DOING RN DEV! For RN teams only.

This guide provides step-by-step instructions for sharing your version of your RN apps (to a link) by publishing it to Expo.

Important:

Your app needs to be compatible with the most recent version of Expo Go for your CA to run your app on your device. Make sure that your app is **fully upgraded to Expo 52 with the New Architecture.** To check, try opening your app in Expo Go.

1. If you haven't upgraded to Expo 52:
   https://docs.expo.dev/workflow/upgrading-expo-sdk-walkthrough/

2. If you haven't migrated to the New Architecture:
   https://docs.expo.dev/guides/new-architecture/#enable-the-new-architecture-in-an-existing-project

Note: The following steps require having an Expo account. If you have a personal Expo account, you may want to create a new one just for CS 147.

1. Verify that the node_modules folder is installed in your directory. If not, run `npm install`

2. If you don't have an Expo account, head to https://expo.io/ and sign up

3. If you're not logged into your account in your project directory, `npx expo login` to log in.

4. Run `npx expo whoami` and verify that it matches your username. If the username doesn't match, run `npx expo logout` then `npx expo login` into your account.

Once you are correctly logged in to your expo account, do the following

1. To use Expo's publishing tool, you need to have your project directory connected with Git.

   a. If you have git-cli installed, you can run simply `git init` to initialize your project.

   b. Otherwise, follow this guide to install based on your version, then run `git init`

2. Run `npx eas-cli` to install EAS (Expo Application Services)

3. Run `npx eas-cli update`

   a. Enter "Y" to automatically create an EAS project

   b. When prompted to enter a branch name, press submit to automatically use the main branch.

   c. Provide an update message (can be anything).

d. Note: If you run into the following error while your project is exporting: `npm ERR! could not determine executable to run`, try running `npm install -g eas-cli`, then run `eas update` and redo steps a-c.

4. Once published, you should see this screen:

```
✔ Published!

Branch              testpublish
Runtime version     1.0.0
Platform            android, ios
Update group ID     38e421b3-117a-4f06-946e-33a7ce169c40
Android update ID   76fcfd6c-1b19-4fff-b379-e779b86dc5a2
iOS update ID       00b53f3f-6bcd-4faf-ba83-d44302cc23c0
Message             Initial commit

Generated by create-expo-app 2.1.1.
Commit              8c82491ebe5dcf3a5432bfea65a6c5feb80ad797*
Website link        https://expo.dev/accounts/danielwanrosli/projects/testpublish/updates/38e421b3-117a-4f06-946e-33a7ce169c40
```

5. Click on the website link generated.

6. Click the preview button at the top right

a. Note: All of the CAs will be running this locally on their personal iPhones, so make sure you minimize hard-coding your UI to the screen-size!

7. Submit a screenshot of the QR code to your CA or share the provided link! This will let them run your project on their personal device.

Troubleshooting:

EAS is a relatively new library and unfortunately, it can be non-trivial to debug.

Here are common errors that we've seen in the past and tips for debugging:

1. If you're running into errors while running any of the `npx expo [command]` commands, make sure you have node_modules installed by running `npm install`. If you do, try deleting node_modules and re-running `npm install`.
2. If you get the error **"git exited with non-zero code: 128"** after running `eas update`, then it's likely that you submitted a branch name that doesn't exist in your repository. To debug, do the following
   a. Run `npx eas channel:delete [branch_name]`
   b. Run `npx eas branch:delete [branch_name]`
   c. Run `eas update` and reference step 3 of the guide
3. If you're having difficulty selecting your main branch because EAS only prompts you to choose branches that don't exist in your repository, then you likely don't have git initialized in your repository. If you don't, you should follow step 1 of the main guide. If you do, you can follow step 2 of the Troubleshooting section.