



Dev Document

Team 6

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The Motion Me Crazy (MMC) project requires **both** our app and our service to be running in order to use all of its capabilities. From here on, we will refer to the Motion Me Crazy project as the **app** and the MMC Service as the **service**. The links to the GitHub repos for both are below:

App Repo: <https://github.com/chrislqiu/MotionMeCrazy>

Service Repo: <https://github.com/ethandonahue/MMC-Service>

Our project requires the following minimum hardware specifications, software, and development tools. Anything that is optional or recommended (but not required) will be listed as such. To emphasize, if it is not listed as optional or recommended, it is **required** to run our project.

Project Requirements:

- A device running macOS with **Xcode installed**
- A device running iOS with **developer mode** must be turned **on**
- An Apple ID
- Minimum hardware specifications to run the app
 - Processor: any Mac newer than 2014
 - Ram: 8gb
 - Storage: 128gb in general for the computer
- Minimum hardware specifications to run the service
 - Processor: Any Intel i3/i5/i7 newer than 2014. Any AMD Ryzen processor
 - Ram: 8gb
 - Storage: 128gb in general for the computer
- PostgreSQL
- Swift
- Ruby
- TensorFlow's PoseNet MobileNet Model
- Homebrew (Recommended)
- CocoaPods
- GitHub
- Xcode
- Visual Studio Code (Recommended)
- Node.js
- npm
- DBeaver (Optional)
- Postman Desktop (Optional)

We will now outline how to run our project. Please follow the steps in order and read all the instructions to avoid running into errors. The commands you need to run will look like this and links will be provided when necessary.

Getting Started:

1. Make sure you have Git installed on your device (You can follow the guide from Git if you do not have it installed: <https://git-scm.com/downloads/mac>)
2. Clone our app repo into a directory you can easily access

```
git clone https://github.com/chrislqiu/MotionMeCrazy
```

3. Clone our service repo into the same directory (not the app repo)

```
git clone https://github.com/ethandonahue/MMC-Service
```

Running the App:

1. After cloning the app repo, you can navigate to the project directory MotionMeCrazy (The following steps will continue to refer to this repo as the project directory)

```
cd MotionMeCrazy
```

2. If you do not have Homebrew installed on your device, we highly recommend you install it for the next step (Installation instructions can be found on the Homebrew site: <https://docs.brew.sh/Installation>)
3. Install CocoaPods (We recommend using Homebrew, but other options are available in the CocoaPods “Getting Started” guide: <https://guides.cocoapods.org/using/getting-started.html#getting-started>)

```
brew install cocoapods
```

4. Check for the Podfile in the project directory
5. If the Podfile is present, skip to step 9
6. If the Podfile is not present, run the following command in the project directory

```
pod init
```

7. Open the Podfile using a text editor

```
vim Podfile
```

8. After the line `use_frameworks!`, add the following line to the Podfile and save the file

```
pod 'TensorFlowLiteSwift'
```

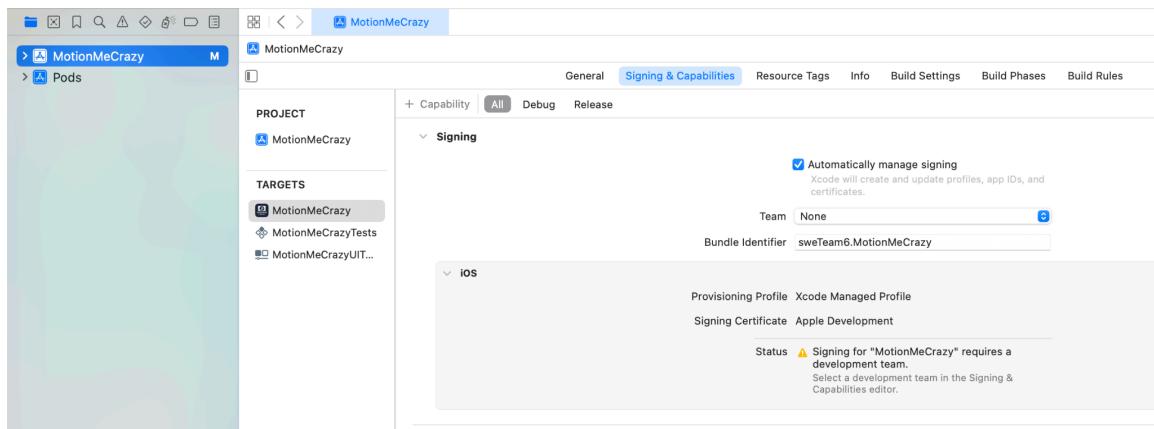
9. Run the following command and wait for it to finish running

```
pod install
```

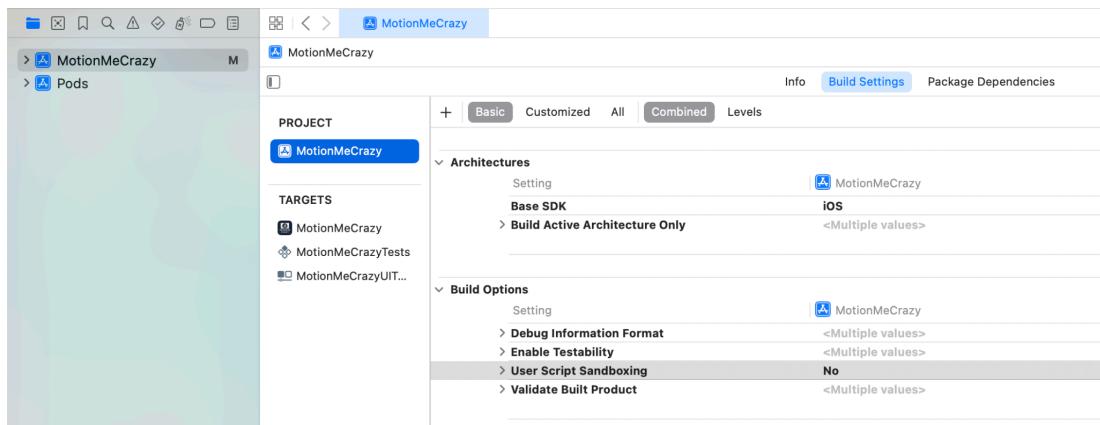
10. Open the .xcworkspace file in the project directory

11. Inside Xcode, you need to make a few adjustments (all pictured below)

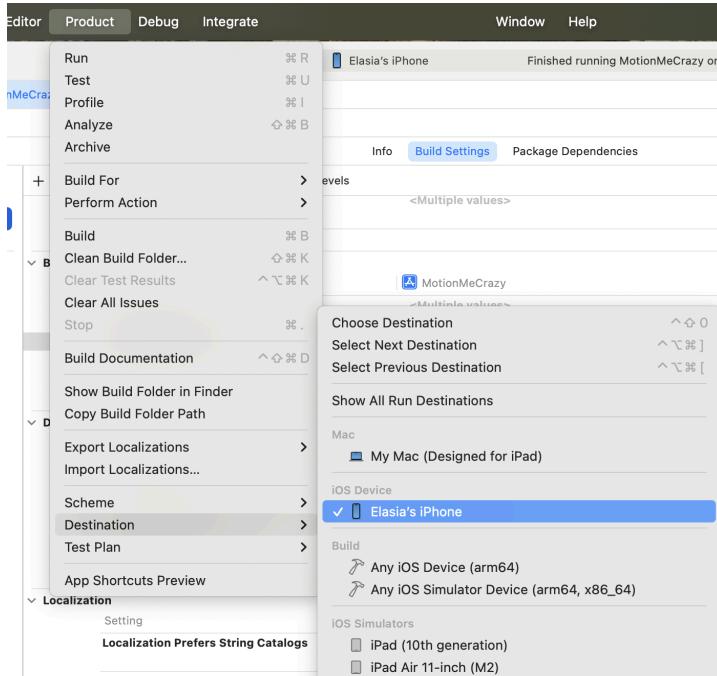
Navigate to the MotionMeCrazy.xcodeproj in the file explorer. Make sure the MotionMeCrazy tab under Targets is selected and click the Signing & Capabilities tab. Change the Team from None to the personal team on your device. If you do not have a personal team, you will need to add one by adding an account and signing in with your Apple ID.



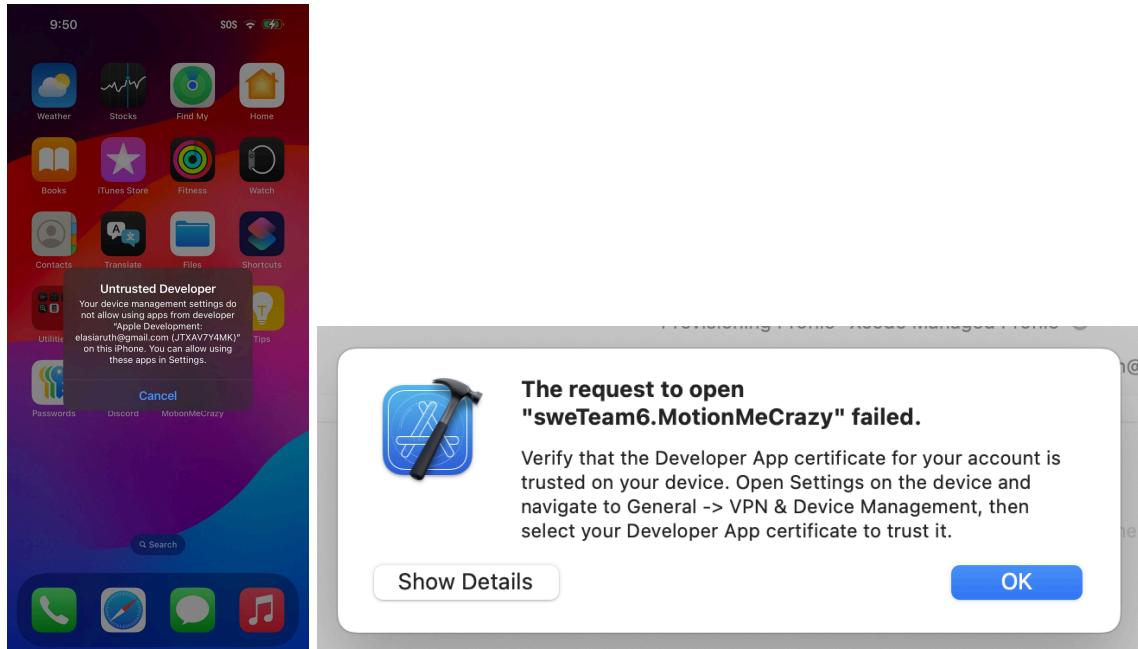
In the same MotionMeCrazy.xcodeproj file, you will select the MotionMeCrazy tab under Project and click the Build Settings tab. Under Build Options, you should change User Script Sandboxing to No.



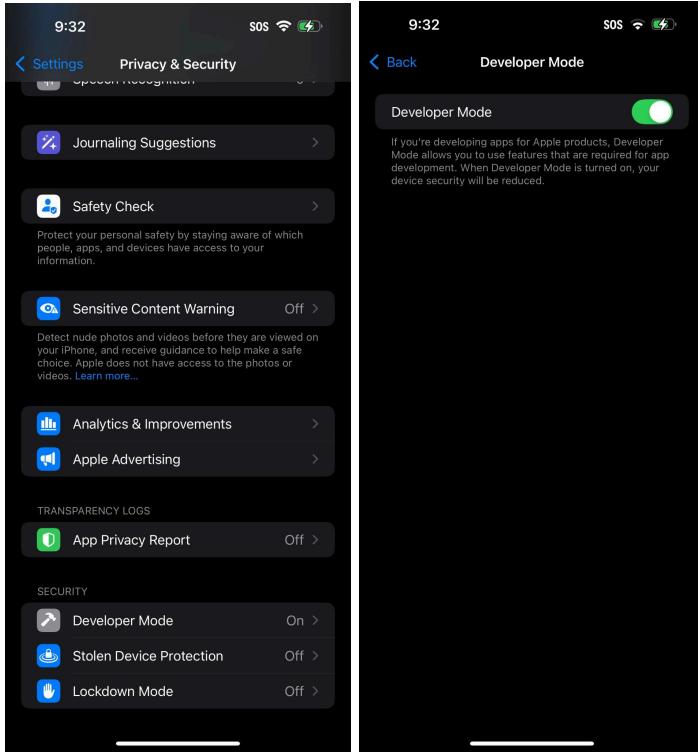
In order to run the app, you will need to connect an iOS device to your macOS device using a cable. After connecting the iOS device, you will go to the Product tab in the navigation bar at the top of Xcode, select destination, and then choose the connected device.



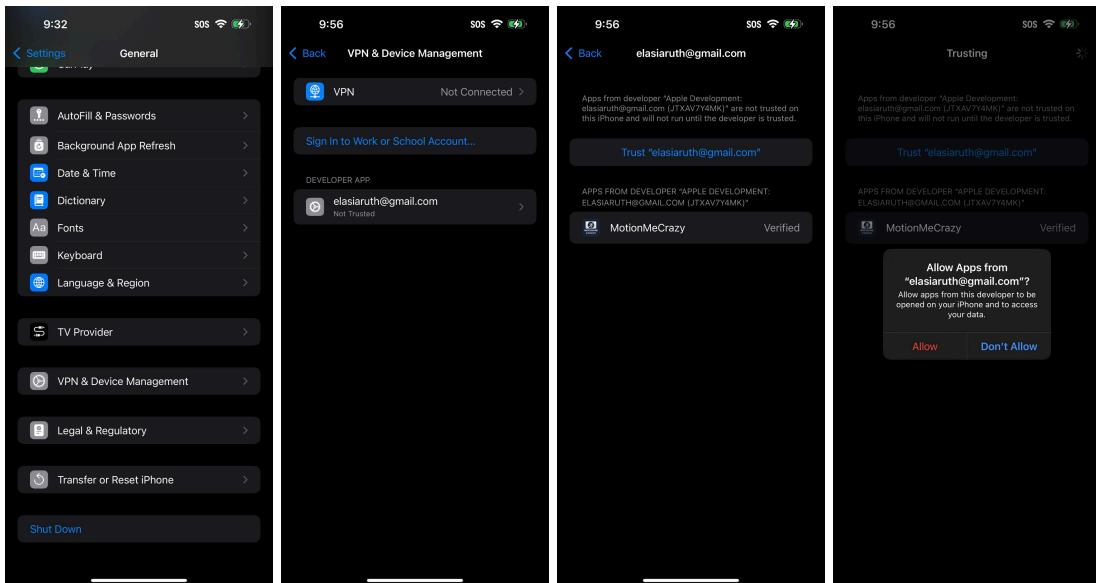
When you click the play button in Xcode to run the app, it should fail. For the app to successfully build on the iOS device, you will need to have developer mode turned on and trust the developer of this app in your settings.



To turn on developer mode, go to the Privacy & Security tab in Settings. Scroll to the bottom, click Developer Mode, and toggle the switch to on. You will need to restart your device before developer mode becomes active.

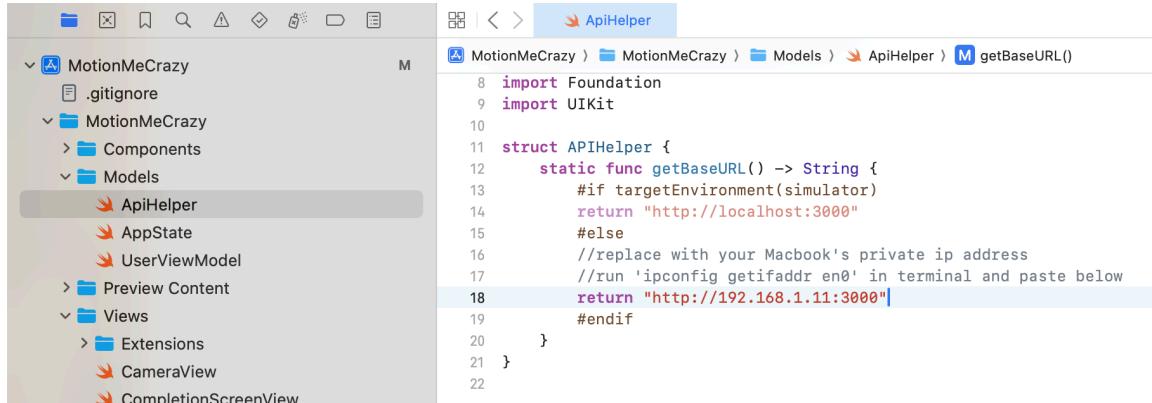


To trust the developer of the app, you will go to the General tab in Settings. Scroll to the bottom, click VPN & Device Management, select the Apple ID you provided to run the project under Developer App, click Trust, and click Allow on the pop up.



You will be able to use the app offline without any further steps. In order to use the online features, you can utilize the ApiHelper which is located in the MotionMeCrazy/Models/ directory. You will need to run the following command and change the line indicated in the file to match your IP address.

```
ipconfig getifaddr en0
```



The screenshot shows the Xcode interface with the project 'MotionMeCrazy' open. The left sidebar displays the file structure: MotionMeCrazy (with .gitignore), MotionMeCrazy (with Components, Models, ApiHelper, AppState, UserViewModel, Preview Content, Views, Extensions, CameraView, CompletionScreenView), and MotionMeCrazy (with MotionMeCrazy, Models, ApiHelper, getBaseUrl()). The right pane shows the 'ApiHelper' file with the following code:

```
8 import Foundation
9 import UIKit
10
11 struct APIHelper {
12     static func getBaseUrl() -> String {
13         #if targetEnvironment(simulator)
14             return "http://localhost:3000"
15         #else
16             //replace with your Macbook's private ip address
17             //run 'ipconfig getifaddr en0' in terminal and paste below
18             return "http://192.168.1.11:3000"
19         #endif
20     }
21 }
22
```

Make sure to follow the steps to run the service, or the app will run in offline mode.

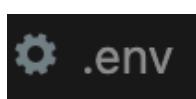
Running the Service:

1. After cloning the app repo, you can navigate to the parent directory MMC-Service

```
cd MMC-Service
```

2. Make sure you have the latest version of Node.js and npm installed on your device (You can follow the download guide to update it: <https://Node.js.org/en/download>)
3. Add the .env to the parent directory (It can be found at this link:
https://drive.google.com/file/d/1AKHicSnFOLt9uYW8OGQ_W42XWqBa6QEw/view?usp=sharing)

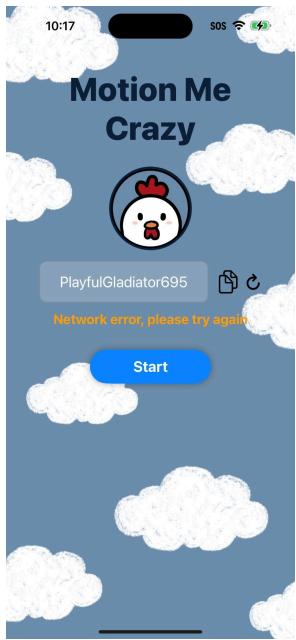
The file should be named just “.env”, just the extension no file name



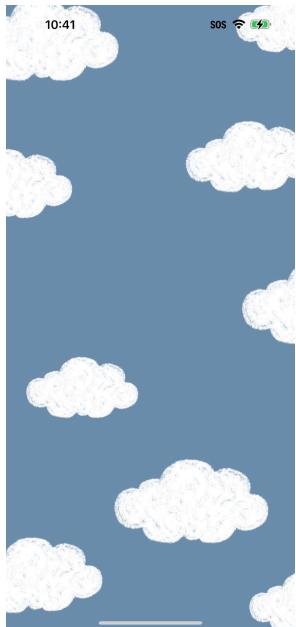
4. Run the service by following the instructions in the README in the parent directory

Troubleshooting:

App Errors:



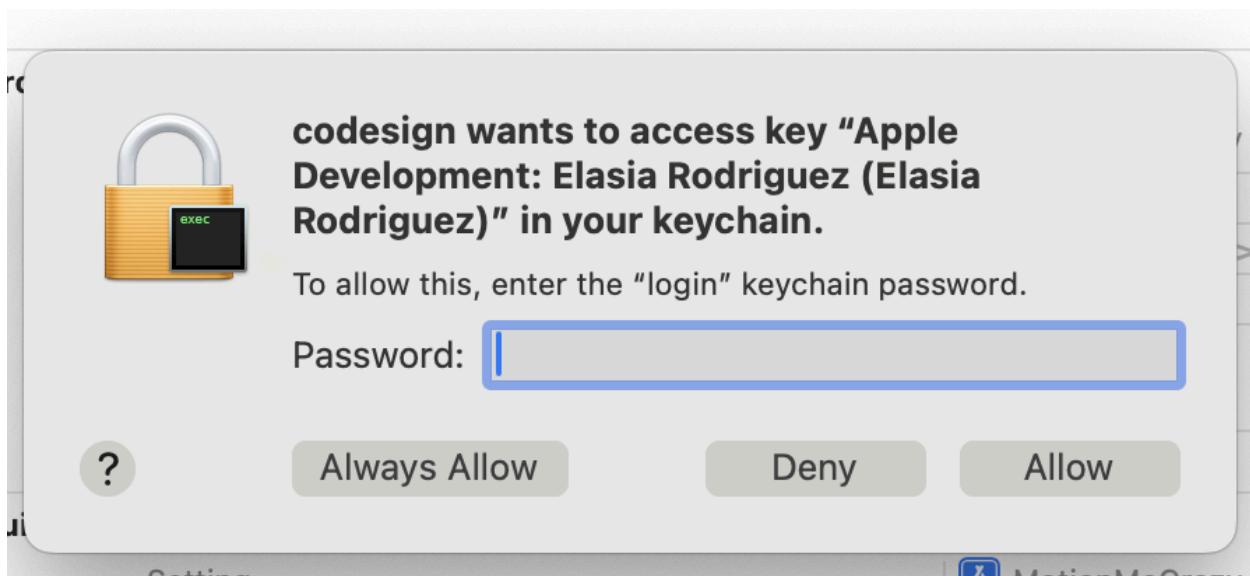
Getting a screen like this when opening the app means the service is not running. Start the service in a terminal to begin using the online functionality of the app.



A screen like this also indicates that you are offline. You can run the server and rebuild the app in order to start the online game play or wait for the offline mode to load. The steps to fix this are in step 11 of running the app.

- MotionMeCrazy 1 issue
- ✖ Signing for "MotionMeCrazy" requires a development team. Select a development team in the Signing & Capabilities editor.

This happens when the team is not set. Go back to step 11 for running the app and make sure you choose a team.



This pop up may appear a few times. Enter your device password for every pop up to continue.

Service Errors:

```
Connection error AggregateError [ECONNREFUSED]:  
at internalConnectMultiple (node:net:1139:18)  
at afterConnectMultiple (node:net:1712:7)
```

This is the result of not having the .env file set up correctly. The env file should be at the root directory of the project (MMC-Service/.env).

```
sh: tsc: command not found
```

This is from not running the `npm install` command. Make sure you have the latest version of Node.js installed.

```
/Users/Rachel/Documents/PURDUE/SPRING25/CS407/MMC-Service/dist/routes/leagues/leagues.routes.js:5
const nanoid_1 = require("nanoid");
^

Error [ERR_REQUIRE_ESM]: require() of ES Module /Users/Rachel/Documents/PURDUE/SPRING25/CS407/MMC-Service/node_modules/nanoid/index.js from /Users/Rachel/Documents/PURDUE/SPRING25/CS407/MMC-Service/dist/routes/leagues/leagues.routes.js not supported.
Instead change the require of index.js in /Users/Rachel/Documents/PURDUE/SPRING25/CS407/MMC-Service/dist/routes/leagues/leagues.routes.js to a dynamic import() which is available in all CommonJS modules.
    at Object.<anonymous> (/Users/Rachel/Documents/PURDUE/SPRING25/CS407/MMC-Service/dist/routes/leagues/leagues.routes.js:5:18) {
  code: 'ERR_REQUIRE_ESM'
}

Node.js v20.15.0
```

If you see anything like the picture above, make sure you have the latest version of Node.js installed.