Team members:

Group 3

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**Description:**

SpiceClassifier is an Android application that records audio through the user’s device and classifies the genre of that audio.

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**Execution Instructions:**

Android Version: R | Android 11.0 x86

Ideal Phone Model: Nexus 7

SDK Version: 24 | Target SDK: 30

Instructions for running in Android Studio:

Open SpiceClassifier in Android Studio. Select the correct Android version and ideal phone model in the AVD manager. Follow other emulator instructions listed in the notes marked by (1). Run the project. Once the emulator is open, you will need to follow further instructions listed in the notes section marked by (2). From there, follow the user manual on instructions on how to use the app.

Solutions to common Android Studio problems:

In the event Android Studio is not detecting a library that is used in any of the classes you will want to do the following: Go to Build then click on “Clean Project”. Afterwards, rebuild the project within the Build dropdown menu. If this does not resolve the issue, then the next step will be to go to the File dropdown menu and click on “Sync Project with Gradle Files”. Lastly, if libraries or classes are still not being recognized then within the File dropdown menu click on “Invalidate Caches / Restart”. This will invalidate any caches in the project that could be causing Android Studio to not detect the libraries. After a restart, the problem should be fixed.

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**Included Folders:**

SpiceClassifier

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**Notes:**

* Due to a licensing issue with Chaquopy, the app will not run for more than 5 minutes at a time.
* There is an error popup that sometimes appears titled “System UI is not responding.” If this popup appears, simply click the “wait” button. There is no known fix for this error, but it does not affect functionality other than provide an annoyance.
* It is assumed that if a popup appears asking for permission to record audio, then permission will be granted. Otherwise, the app will not function correctly.

If running an emulator in Android Studio:

1. In Android Studio, look at the very top bar and select the Tools dropdown. From there, open AVD Manager. Click on the Pencil icon to the right of the window under the “Actions” tab for whichever emulator you are using. Change Graphics from “Automatic” to “Hardware – GLES 2.0” under Emulated Performance.
2. When the emulator is open, find the toolbar on the side of the emulator. Click the very bottom button, the 3 dots. In that menu, navigate to Microphone settings. Make sure that “Virtual microphone uses host audio input” is enabled. Otherwise, the emulator will not be able to record any sound.