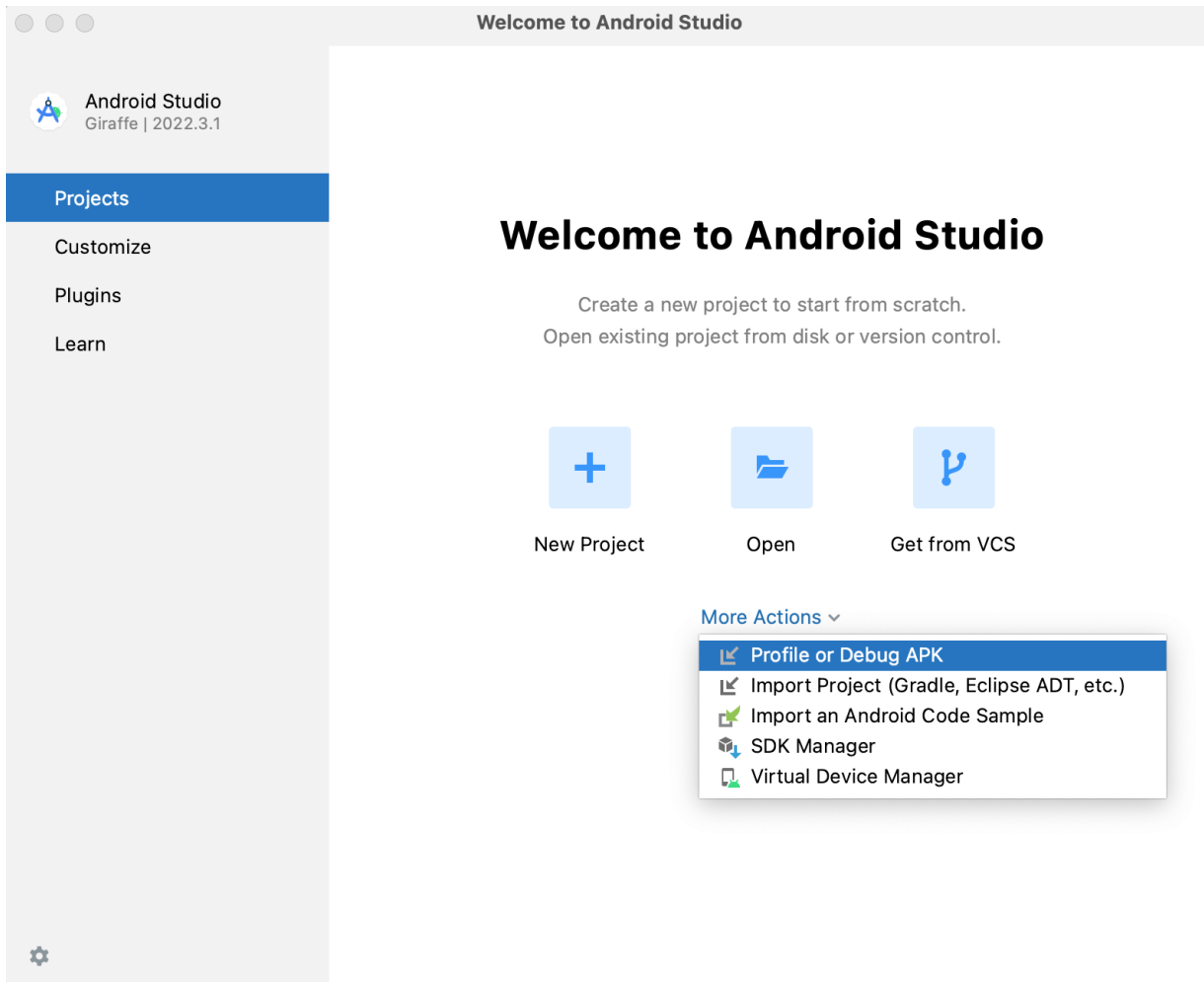# Lesson:

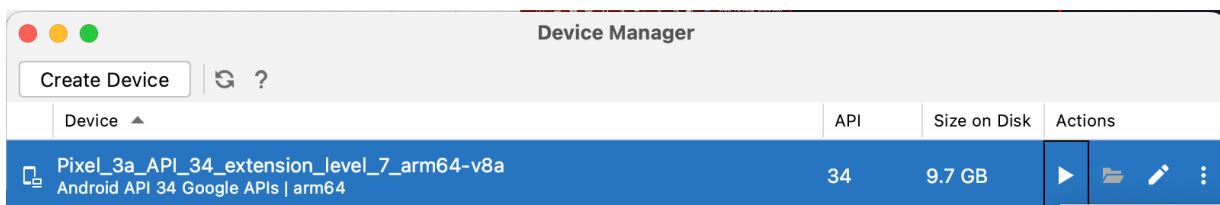# Running the Hello World Example in an Android Simulator

To run the Hello World example in an Android simulator, follow the steps below:
1. Make sure you have set up your development environment and installed Android Studio and dependencies for React Native development.
2. In Android studio, click on 'More Actions → Virtual Device Manager'

3. In the Device Manager, click on the launch button

4. Open your project directory in a terminal or command prompt.
5. Run the following command to start the Metro bundler, which bundles your JavaScript code:

```
1  npm start
```

6. After the server is started, press the a button
7. This command will build the Android app and launch it in the Android emulator.
8. Wait for the emulator to start and the app to be installed. You should see the Hello World message displayed in the emulator.
9. If everything is set up correctly, you can now interact with the Hello World app in the Android emulator.

Resolution Steps for Common Errors

During the installation of React Native and its dependencies, you may encounter some common errors. Here are the resolution steps for a few common installation errors:

6. **Metro bundler not starting:** If you are unable to start the Metro bundler, make sure you are in the correct project directory and run npm start again. Ensure that you have a stable internet connection and that there are no conflicting processes running on the same port (default is 8081).
7. **Android emulator not launching**: If the Android emulator fails to launch or you encounter an error related to the emulator, make sure you have the Android SDK installed and set up correctly. Additionally, check that the emulator is properly configured and that you have created a virtual device using the AVD (Android Virtual Device) Manager.
8. **Build failures:** If you encounter build failures related to missing dependencies or outdated versions, make sure you have installed all the required dependencies as specified in the React Native documentation. You can also try deleting the node_modules directory and reinstalling the dependencies using the command npm install.
9. **Permissions or access errors:** If you encounter permissions or access errors during the installation process, make sure you have the necessary permissions to install packages and access the required directories. On macOS or Linux, you may need to run the installation commands with sudo or ensure that your user account has the appropriate permissions.

If you encounter any other specific errors during the installation process, refer to the official React Native documentation, community forums, or Stack Overflow for detailed troubleshooting steps. These resources are often filled with valuable information and solutions to common issues.

By following these steps and troubleshooting common installation errors, you should be able to run the Hello World example in an Android simulator.