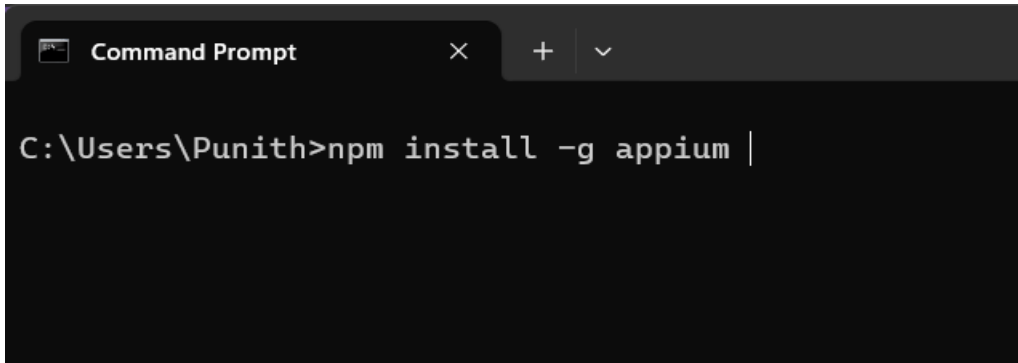


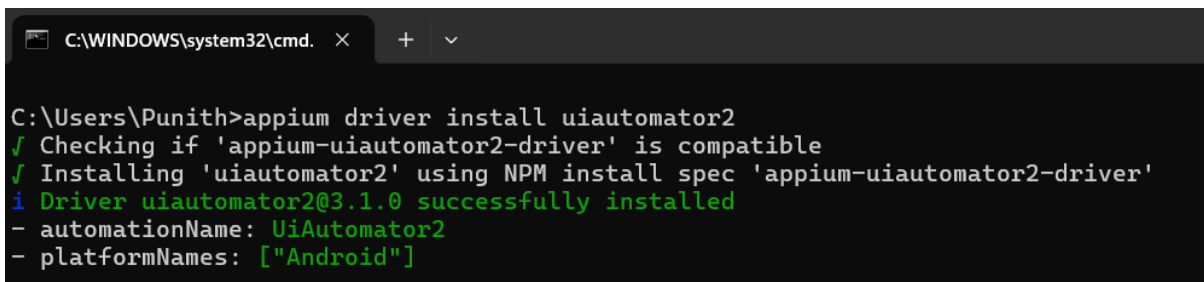
Creating Appium Script to check the battery percentage in Android phone Settings.

Install appium.



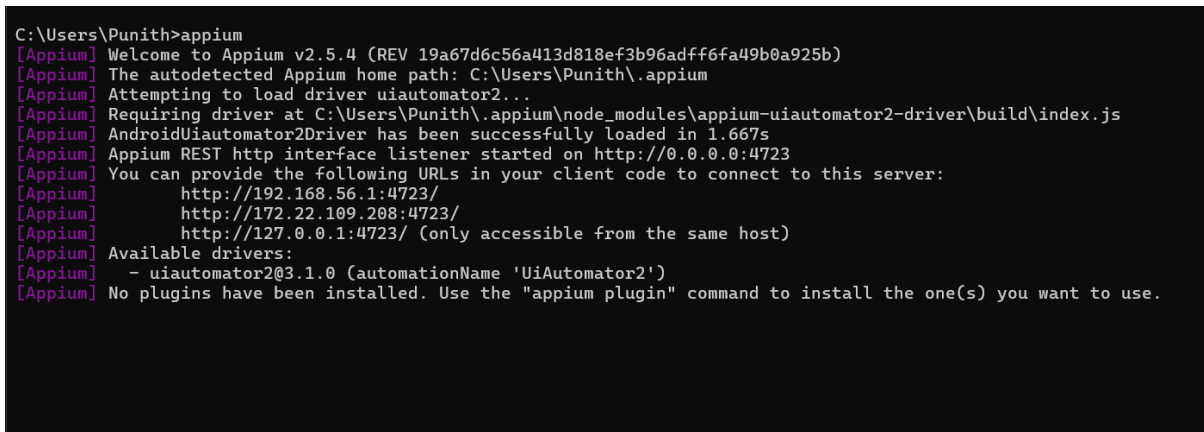
```
Command Prompt
C:\Users\Punith>npm install -g appium |
```

Install the uiautomator2 driver.



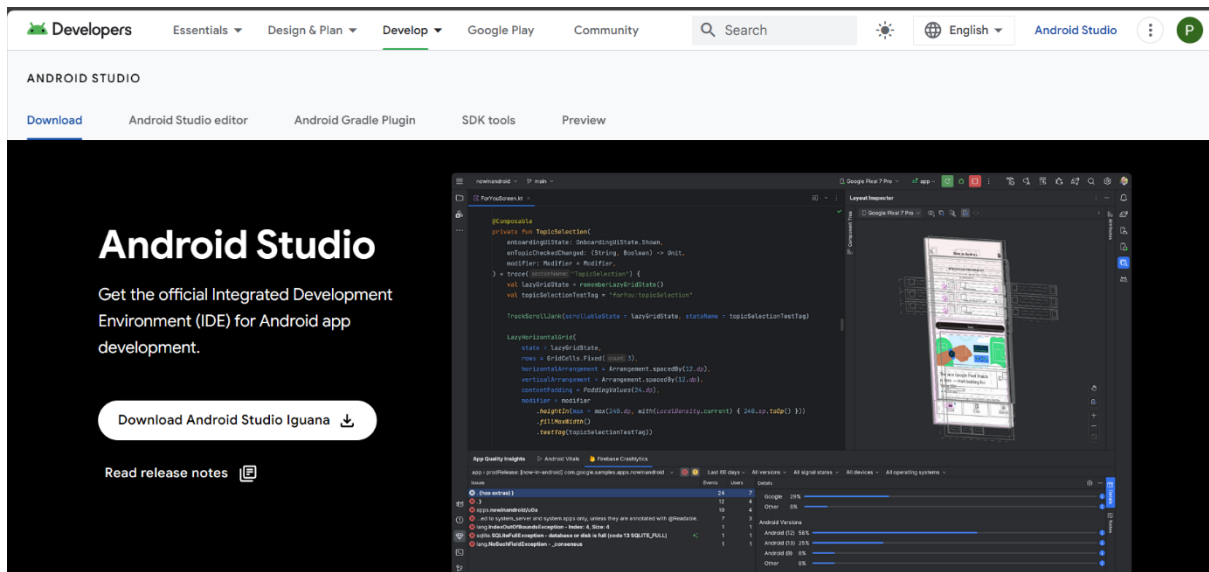
```
C:\WINDOWS\system32\cmd.
C:\Users\Punith>appium driver install uiautomator2
✓ Checking if 'appium-uiautomator2-driver' is compatible
✓ Installing 'uiautomator2' using NPM install spec 'appium-uiautomator2-driver'
i Driver uiautomator2@3.1.0 successfully installed
- automationName: UiAutomator2
- platformNames: ["Android"]
```

“appium” is the command to run the server. The appium runs on port 4723 by default.



```
C:\Users\Punith>appium
[Appium] Welcome to Appium v2.5.4 (REV 19a67d6c56a413d818ef3b96adff6fa49b0a925b)
[Appium] The autodetected Appium home path: C:\Users\Punith\.appium
[Appium] Attempting to load driver uiautomator2...
[Appium] Requiring driver at C:\Users\Punith\.appium\node_modules\appium-uiautomator2-driver\build\index.js
[Appium] AndroidUiAutomator2Driver has been successfully loaded in 1.667s
[Appium] Appium REST http interface listener started on http://0.0.0.0:4723
[Appium] You can provide the following URLs in your client code to connect to this server:
[Appium]   http://192.168.56.1:4723/
[Appium]   http://172.22.109.208:4723/
[Appium]   http://127.0.0.1:4723/ (only accessible from the same host)
[Appium] Available drivers:
[Appium]   - uiautomator2@3.1.0 (automationName 'UiAutomator2')
[Appium] No plugins have been installed. Use the "appium plugin" command to install the one(s) you want to use.
```

Download Android Studio. Choose the latest version.



Check the terms and conditions and Choose Download.

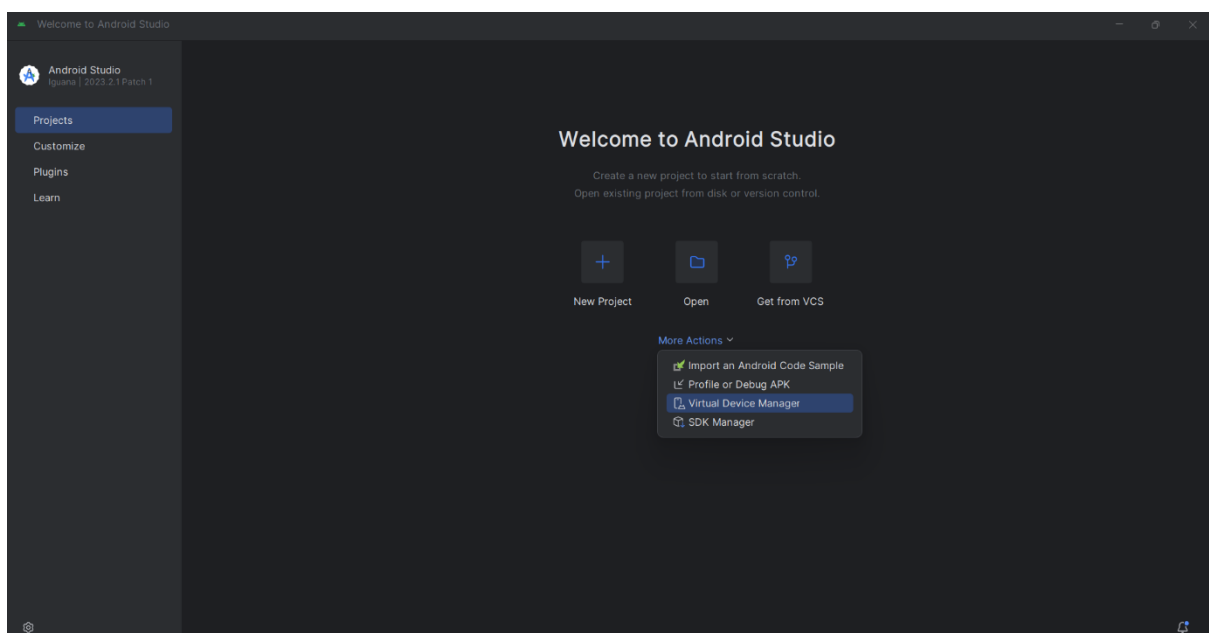
RESTRICTIONS ON DESTINATIONS, END USERS AND END USE. 14.6 The rights granted in the License Agreement may not be assigned or transferred by either you or Google without the prior written approval of the other party. Neither you nor Google shall be permitted to delegate their responsibilities or obligations under the License Agreement without the prior written approval of the other party. 14.7 The License Agreement, and your relationship with Google under the License Agreement, shall be governed by the laws of the State of California without regard to its conflict of laws provisions. You and Google agree to submit to the exclusive jurisdiction of the courts located within the county of Santa Clara, California to resolve any legal matter arising from the License Agreement. Notwithstanding this, you agree that Google shall still be allowed to apply for injunctive remedies (or an equivalent type of urgent legal relief) in any jurisdiction. July 27, 2021

☒ I have read and agree with the above terms and conditions

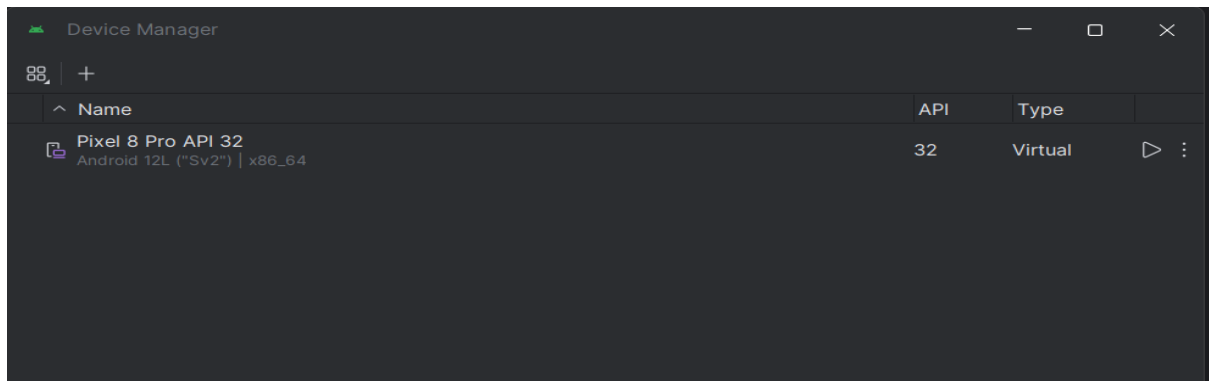
Download Android Studio Iguana | 2023.2.1 Patch 2 for Windows

android-studio-2023.2.1.25-windows.exe

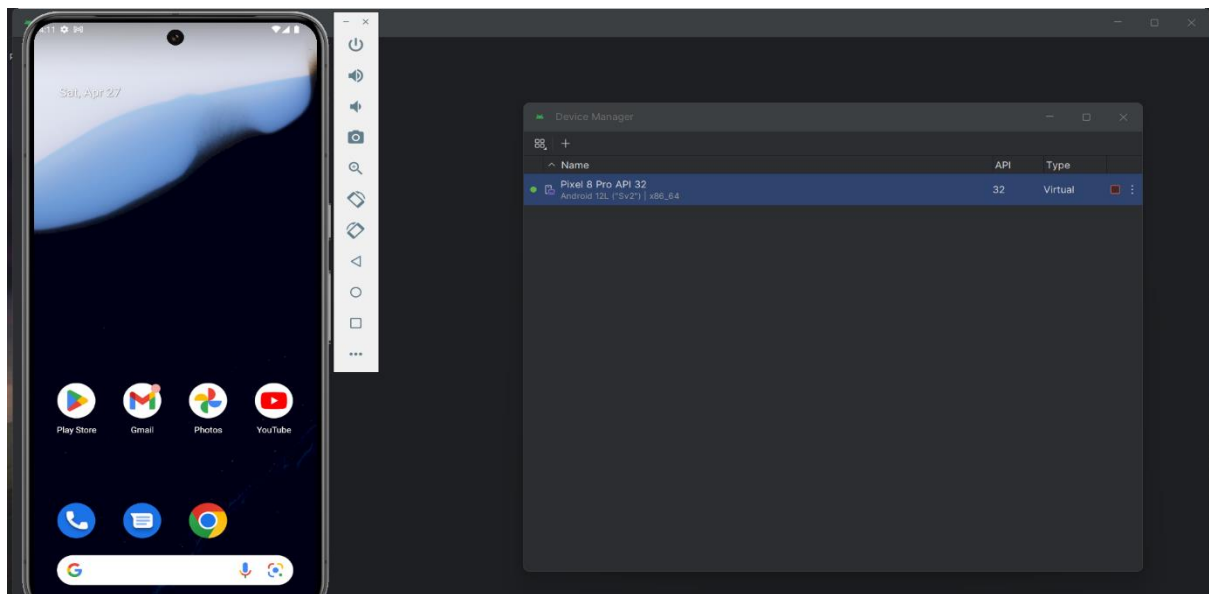
This is how android studio interface looks like. Choose Virtual Device Manager.



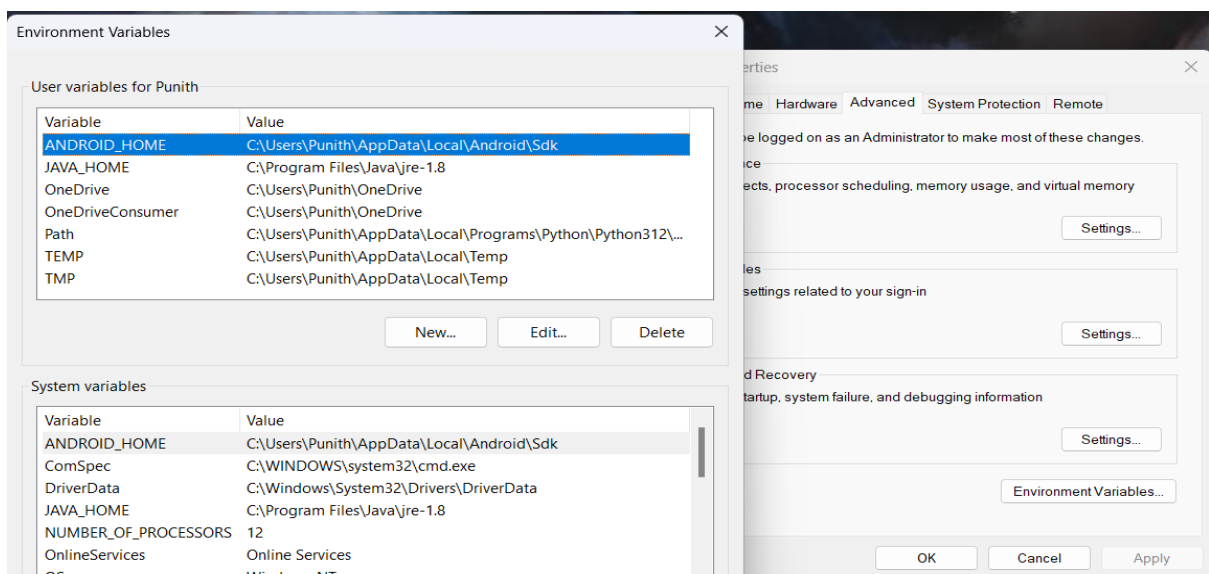
There is an virtual device installed. Run the emulator.



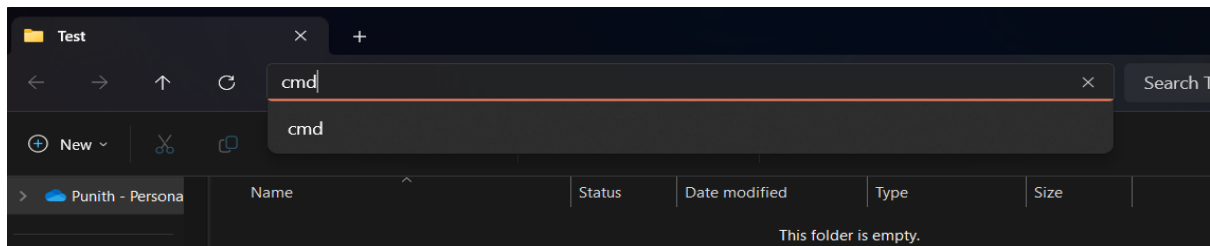
The virtual device has opened.



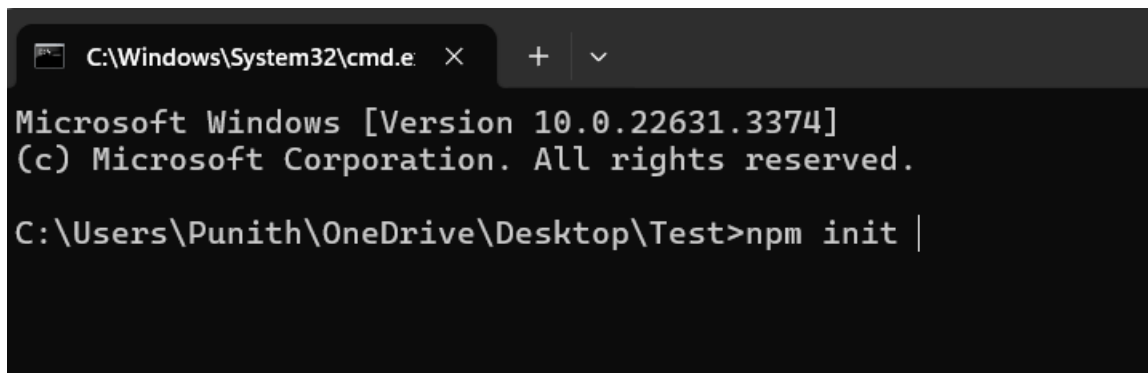
Make sure to set the ANDROID_HOME path.



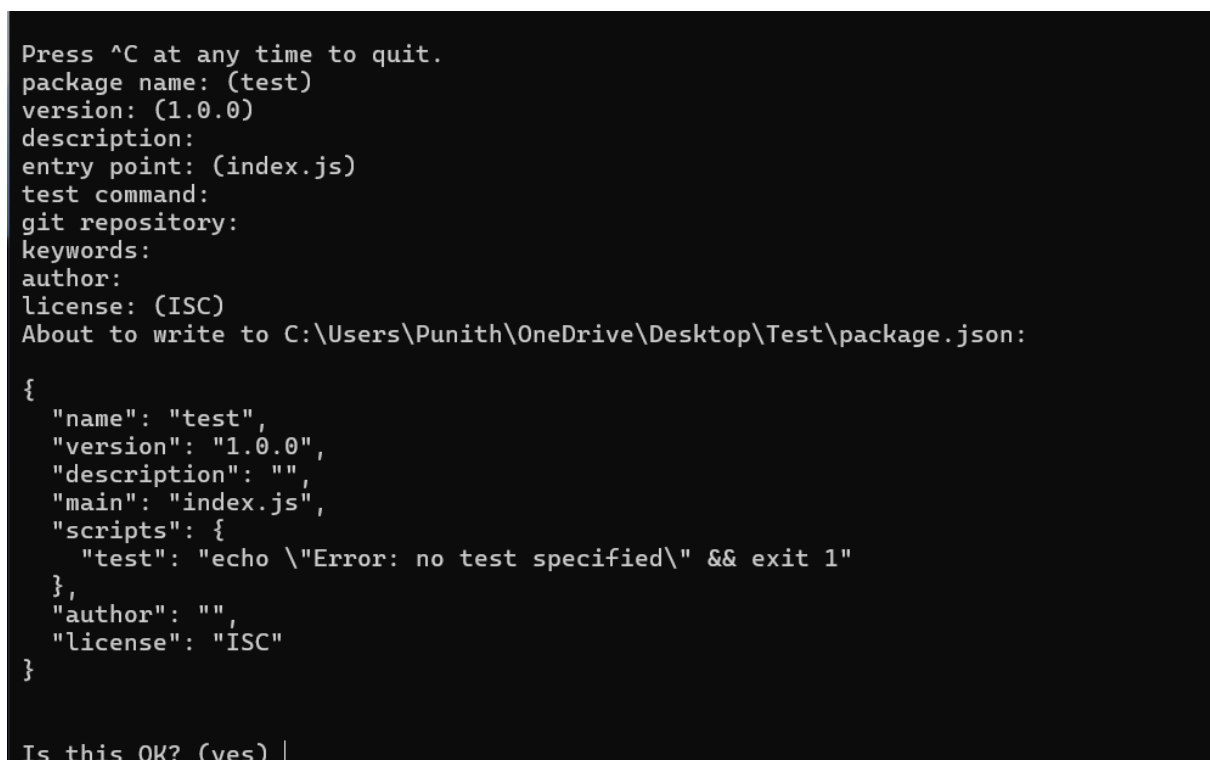
Create a new folder and open in terminal.



Use 'npm init' to initialize node into the folder.



Hit enter and the package.json has the dependencies created.

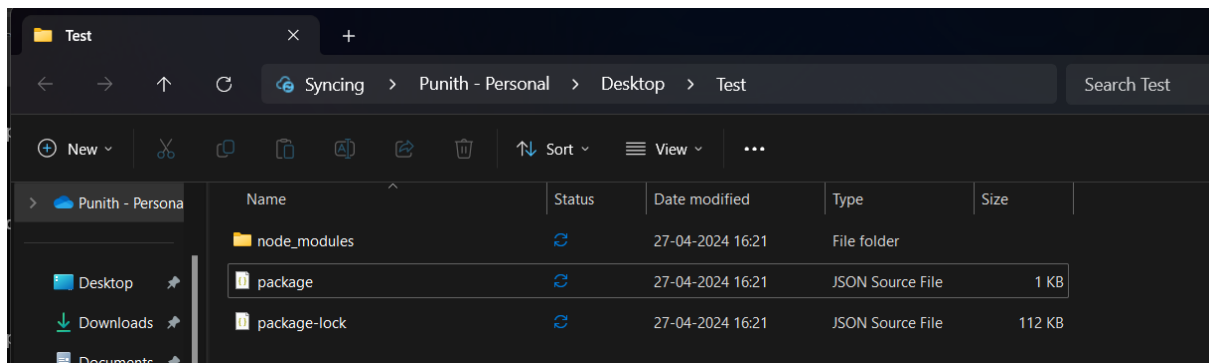


Install webdriverio package.

```
C:\Windows\System32\cmd.e x + v

C:\Users\Punith\OneDrive\Desktop\Test>npm i --save-dev webdriverio |
```

The node modules have been installed into folder.



This is the code used to run appium script and go to settings>battery and click on battery.

```
JS test.js x
JS test.js > ...
1  const {remote} = require('webdriverio');
2
3  const capabilities = {
4    platformName: 'Android',
5    'appium:automationName': 'UiAutomator2',
6    'appium:deviceName': 'Android',
7    'appium:appPackage': 'com.android.settings',
8    'appium:appActivity': '.Settings',
9  };
10
11  const wdOpts = {
12    hostname: process.env.APPIUM_HOST || 'localhost',
13    port: parseInt(process.env.APPIUM_PORT, 10) || 4723,
14    logLevel: 'info',
15    capabilities,
16  };
17
18  async function runTest() {
19    const driver = await remote(wdOpts);
20    try {
21      const batteryItem = await driver.$('//*[@text="Battery"]');
22      await batteryItem.click();
23    } finally {
24      await driver.pause(1000);
25      await driver.deleteSession();
26    }
27  }
28
29  runTest().catch(console.error);
```

Make sure the appium is running.

```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.22631.3374]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Punith>appium

[Appium] Welcome to Appium v2.5.4 (REV 19a67d6c56a413d818ef3b96adff6fa49b0a925b)
[Appium] The autodetected Appium home path: C:\Users\Punith\.appium
[Appium] Attempting to load driver uiautomator2...
[Appium] Requiring driver at C:\Users\Punith\.appium\node_modules\appium-uiautomator2-driver\build\index.js
[Appium] AndroidUiautomator2Driver has been successfully loaded in 1.922s
[Appium] Appium REST http interface listener started on http://0.0.0.0:4723
[Appium] You can provide the following URLs in your client code to connect to this server:
[Appium] http://192.168.56.1:4723/
[Appium] http://172.22.109.208:4723/
[Appium] http://127.0.0.1:4723/ (Only accessible from the same host)
[Appium] Available drivers:
[Appium] - uiautomator2@3.1.0 (automationName 'UiAutomator2')
[Appium] No plugins have been installed. Use the "appium plugin" command to install the one(s) you want to use.
```

Enter 'node test.js' to execute the code.

```
22 |         await batteryItem.click();
    |
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
PS C:\Users\Punith\OneDrive\Desktop\Test> node test.js
```

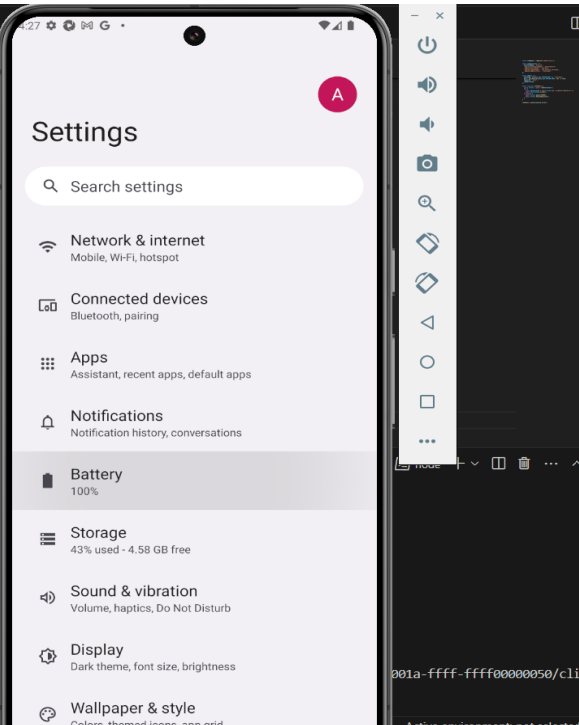
Settings has opened and clicked on the Battery.

The image shows a development workflow for testing an Android application. On the left, the VS Code editor contains a JavaScript file 'test.js' with a 'runTest' function. This function configures WebDriver with capabilities for an Android device and runs a test that clicks on the 'Battery' item in the Android Settings app. The bottom of the editor shows the 'TERMINAL' tab with logs from the WebDriver server. On the right, an Android emulator displays the 'Settings' app with the 'Battery' option highlighted. A vertical toolbar on the far right contains icons for power, volume, camera, search, and other emulator controls.

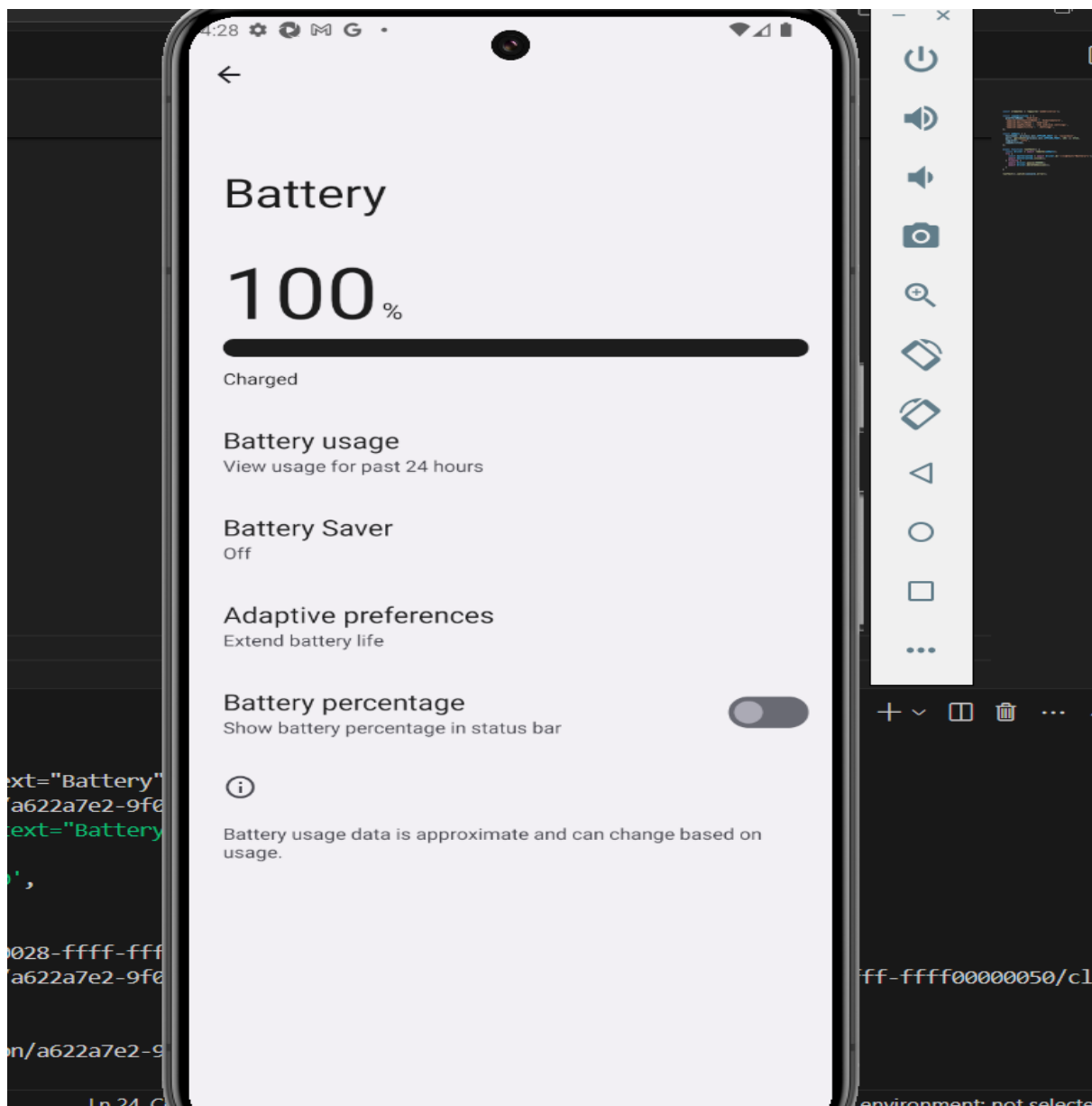
```

JS testjs
JS testjs > runTest
3  const capabilities = {
4    'appium:automationName': 'UiAutomator2',
5    'appium:deviceName': 'Android',
6    'appium:appPackage': 'com.android.settings',
7    'appium:appActivity': '.Settings',
8  };
9
10
11  const wdOpts = {
12    hostname: process.env.APPIUM_HOST || 'localhost',
13    port: parseInt(process.env.APPIUM_PORT, 10) || 4723,
14    logLevel: 'info',
15    capabilities,
16  };
17
18  async function runTest() {
19    const driver = await remote(wdOpts);
20    try {
21      const batteryItem = await driver.$('//*[text="Battery"]');
22      await batteryItem.click();
23    } finally {
24      await driver.pause(50000);
25      await driver.deleteSession();
26    }
27  }
28
29  'appium:appActivity': '.Settings'
30 }
31
32 2024-04-27T10:57:32.961Z INFO webdriver: COMMAND findElement("xpath", "//*[text="B
33 2024-04-27T10:57:32.962Z INFO webdriver: [POST] http://localhost:4723/session/f8ab2
34 2024-04-27T10:57:32.963Z INFO webdriver: DATA { using: 'xpath', value: '//*[text="
35 2024-04-27T10:57:34.222Z INFO webdriver: RESULT {
36   'element-6066-11e4-a52e-4f735466cecf': '00000000-0000-001a-ffff-ffff00000050',
37   ELEMENT: '00000000-0000-001a-ffff-ffff00000050'
38 }
39 }
40 2024-04-27T10:57:34.235Z INFO webdriver: COMMAND elementClick("00000000-0000-001a-f
41 2024-04-27T10:57:34.237Z INFO webdriver: [POST] http://localhost:4723/session/f8ab2
42 2024-04-27T10:57:34.368Z INFO webdriver: RESULT null
43
44

```



We can see it clicked and the battery of the virtual device shown up.



Video Link:

https://drive.google.com/file/d/1Kq0q7kaIfBxWjcIOLUvOKksTheOIHrfc/view?usp=drive_link