



**UNIVERSITY MALAYSIA TERENGGANU
FACULTY OF OCEAN ENGINEERING TECHNOLOGY &
INFORMATICS**

**[CSM3103]
FRONT-END PROGRAMMING**

LAB REPORT 2

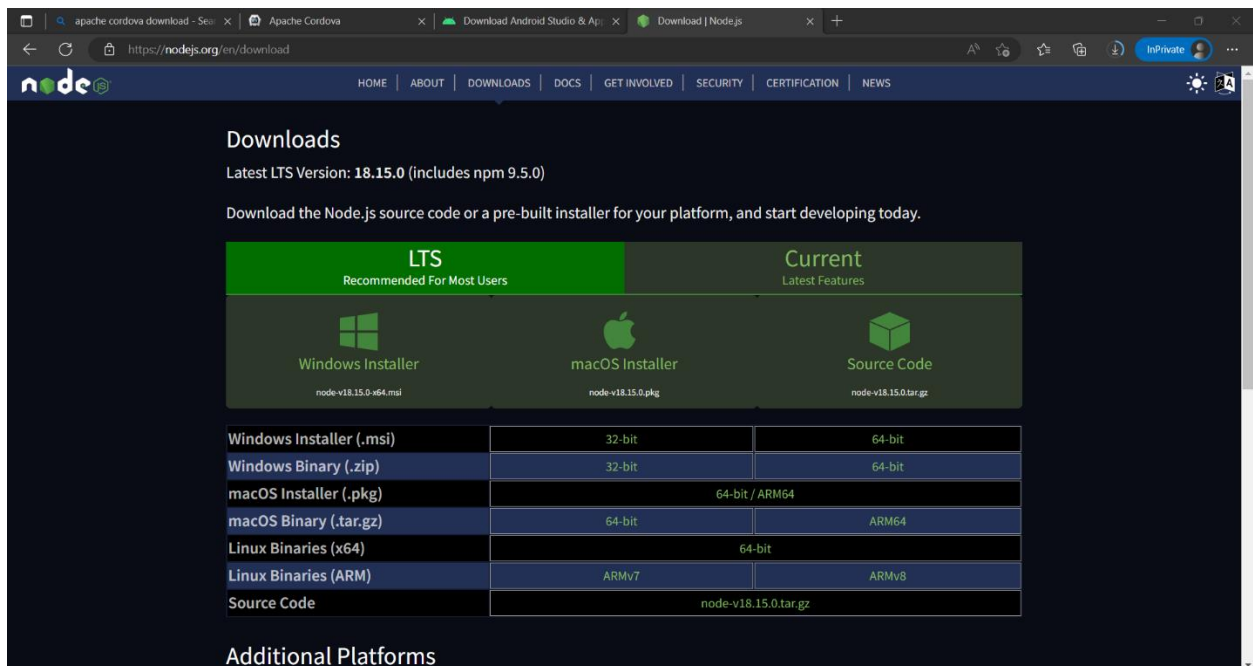
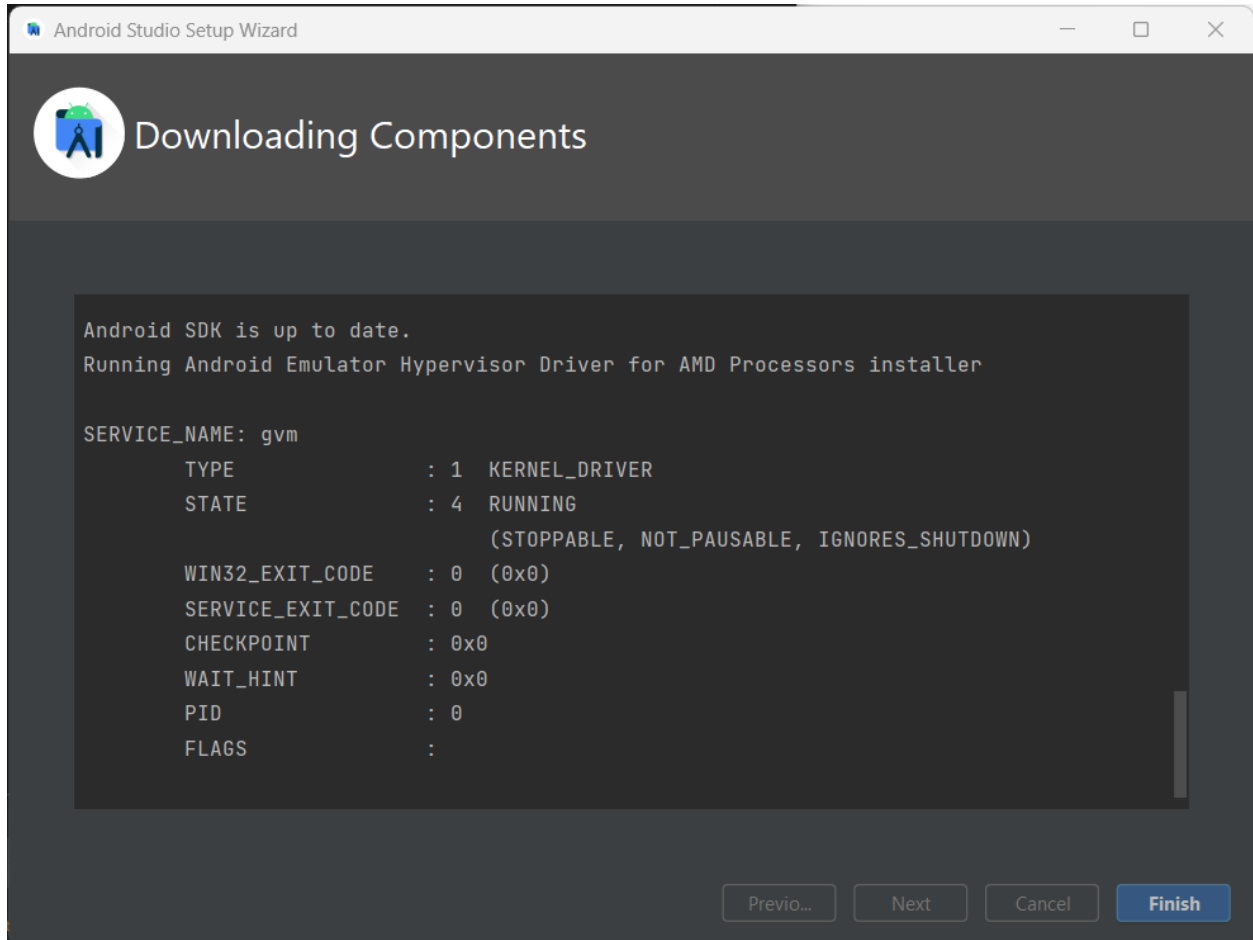
[Apache Cordova]

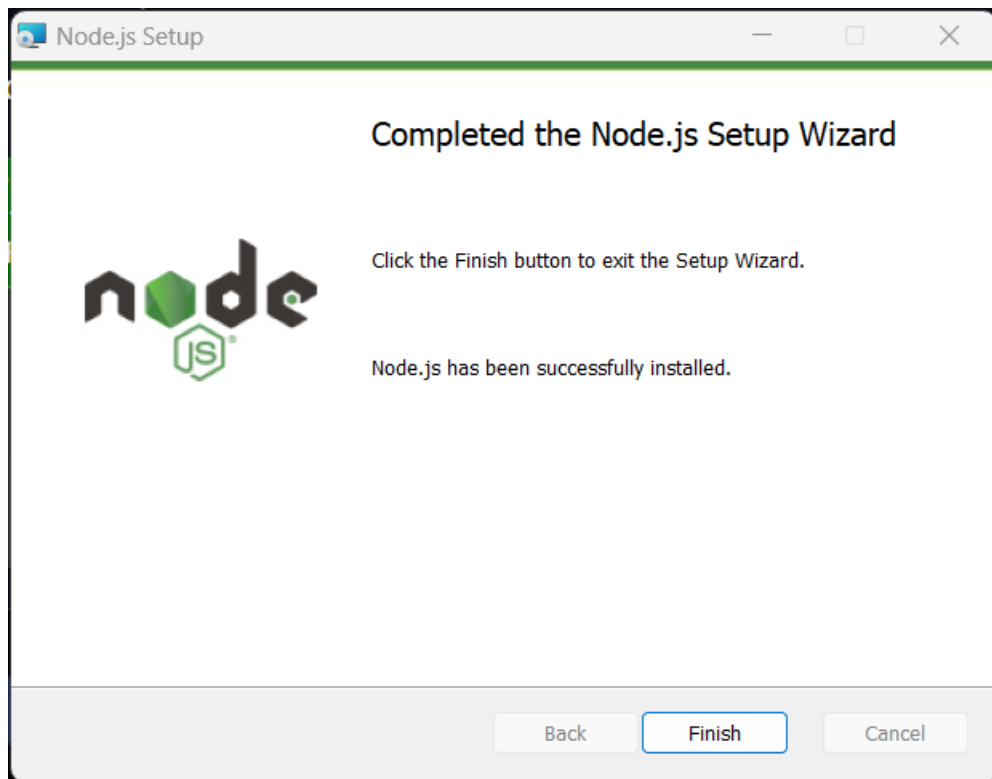
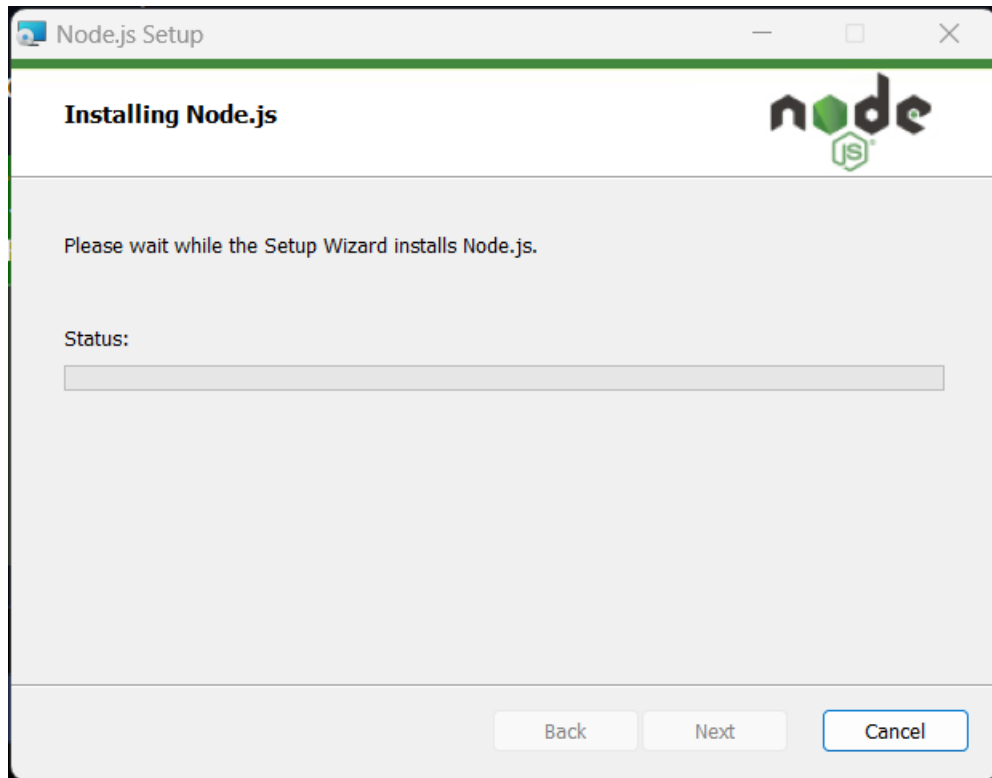
Prepared by:
[WAN ABDUL AZIM BIN WAN MALEK (S63190)]

Prepared for:
DR RABIEI B MAMAT

[*MOBILE COMPUTING*]
SEMESTER II 2022/2023

Task 1 – Installing Apache Cordova





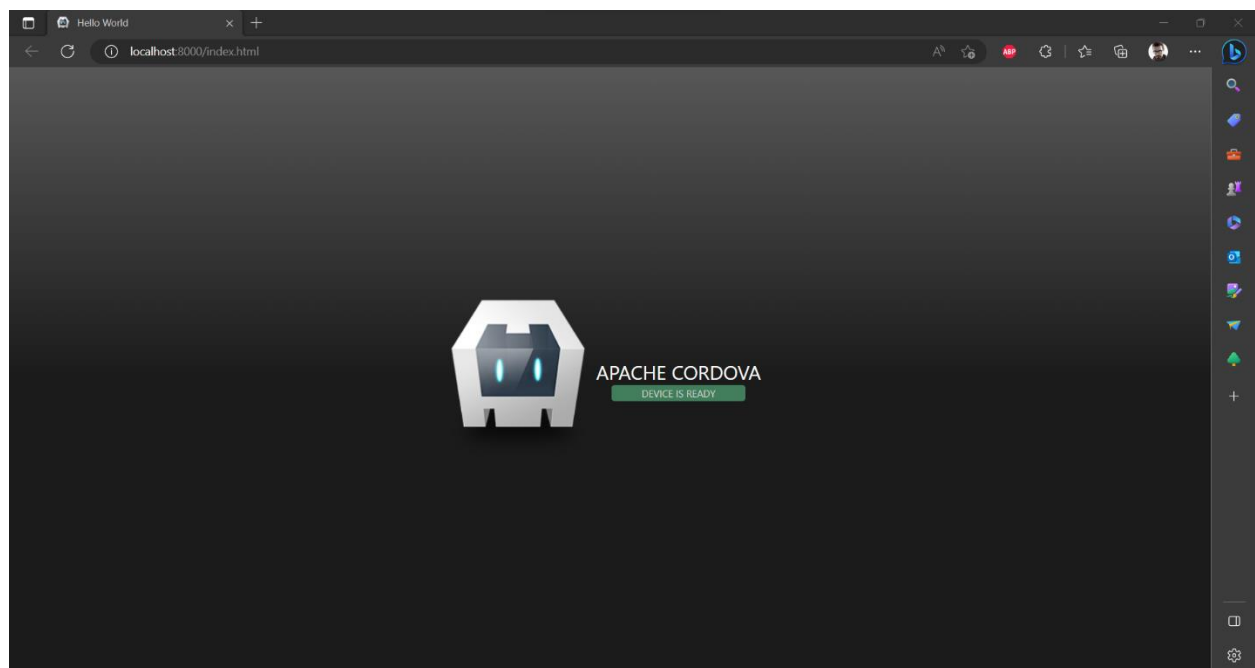
```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.22621.1413]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>npm install -g cordova
npm WARN deprecated har-validator@5.1.5: this library is no longer supported
npm WARN deprecated @npmcli/move-file@1.1.2: This functionality has been moved to @npmcli/fs
npm WARN deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142
npm WARN deprecated uuid@3.4.0: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain
circumstances, which is known to be problematic. See https://v8.dev/blog/math-random for details.
npm WARN deprecated stringify-package@1.0.1: This module is not used anymore, and has been replaced by @npmcli/package-j
son

added 489 packages in 26s

52 packages are looking for funding
  run `npm fund` for details
npm notice
npm notice New minor version of npm available! 9.5.0 -> 9.6.4
npm notice Changelog: https://github.com/npm/cli/releases/tag/v9.6.4
npm notice Run npm install -g npm@9.6.4 to update!
npm notice

C:\Windows\System32>
```



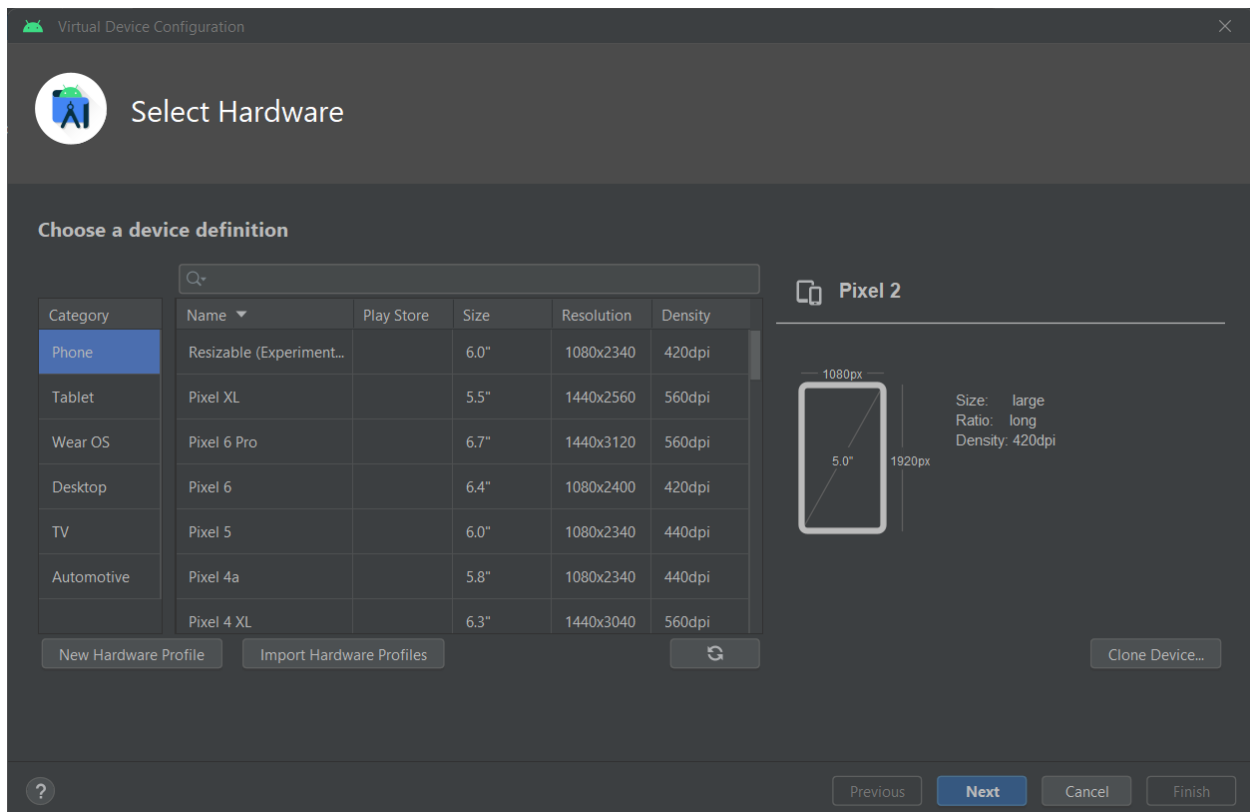
Task 2 - First Apache Cordova Application

```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.22621.1413]
(c) Microsoft Corporation. All rights reserved.

C:\Users\azimm>cd Desktop
C:\Users\azimm\Desktop>mkdir cordovaProject
C:\Users\azimm\Desktop>cd cordovaProject
C:\Users\azimm\Desktop\cordovaProject>cordova create Task2Hello io.csm3103.lab2 Task2
? May Cordova anonymously report usage statistics to improve the tool over time? Yes
Thanks for opting into telemetry to help us improve cordova.
Creating a new cordova project.

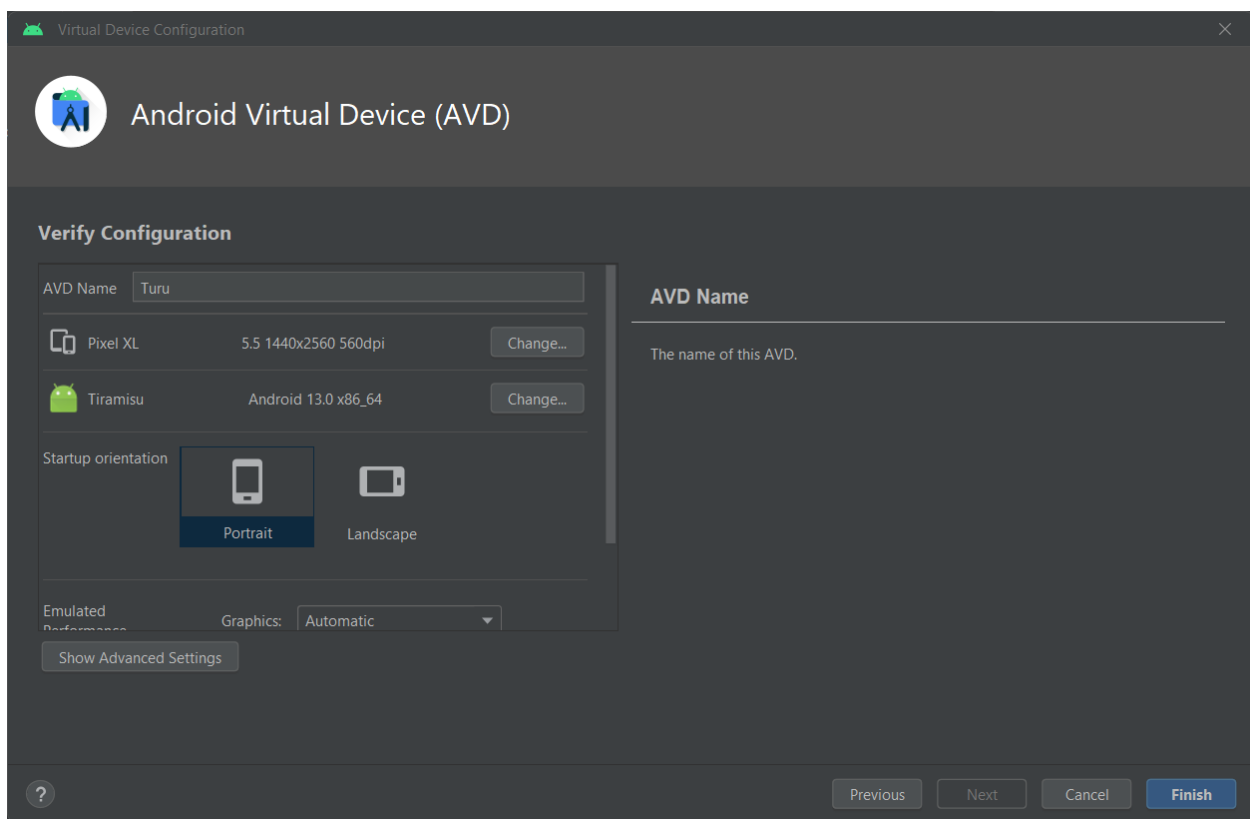
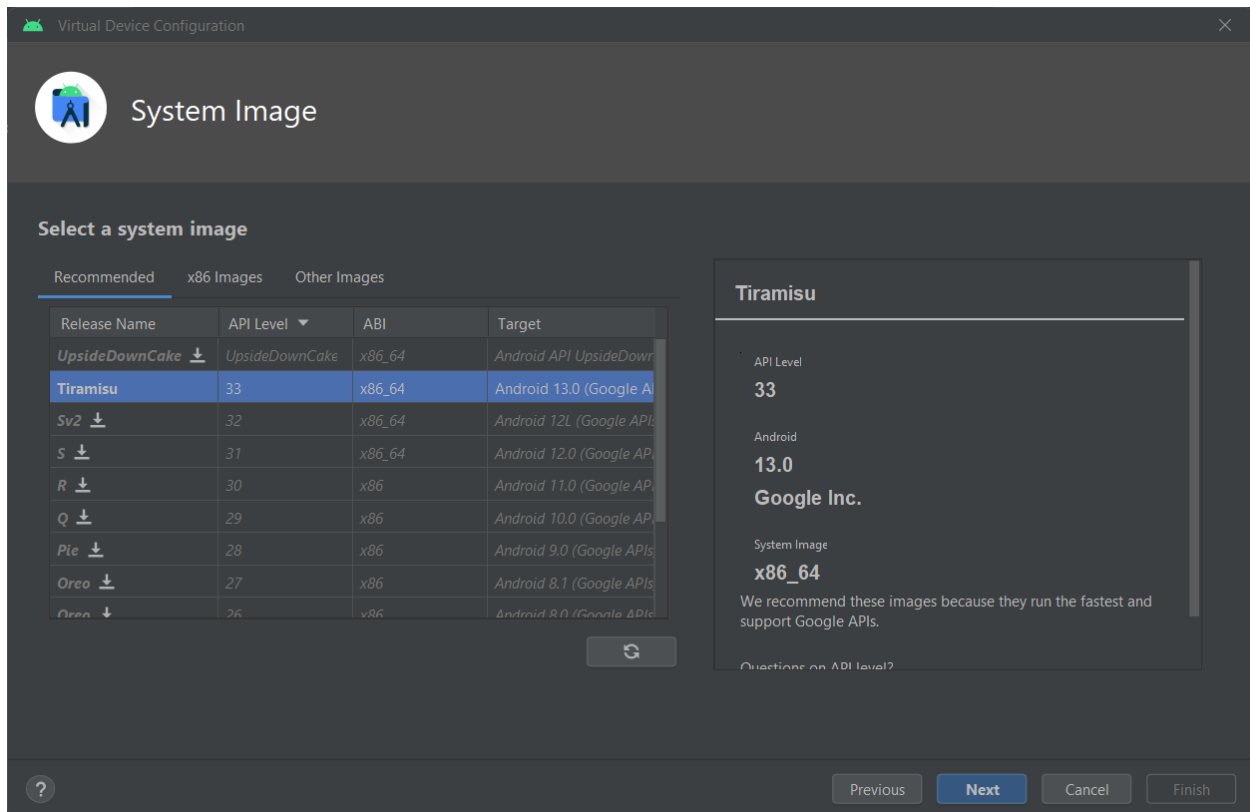
C:\Users\azimm\Desktop\cordovaProject>cd Task2Hello
C:\Users\azimm\Desktop\cordovaProject\Task2Hello>cordova platform add browser
Using cordova-fetch for cordova-browser@*6.0.0
Adding browser project...
Creating Cordova project for cordova-browser:
  Path: C:\Users\azimm\Desktop\cordovaProject\Task2Hello\platforms\browser
  Name: Task2
C:\Users\azimm\Desktop\cordovaProject\Task2Hello>cordova platform add browser
Using cordova-fetch for cordova-browser@*6.0.0
Platform browser already added.

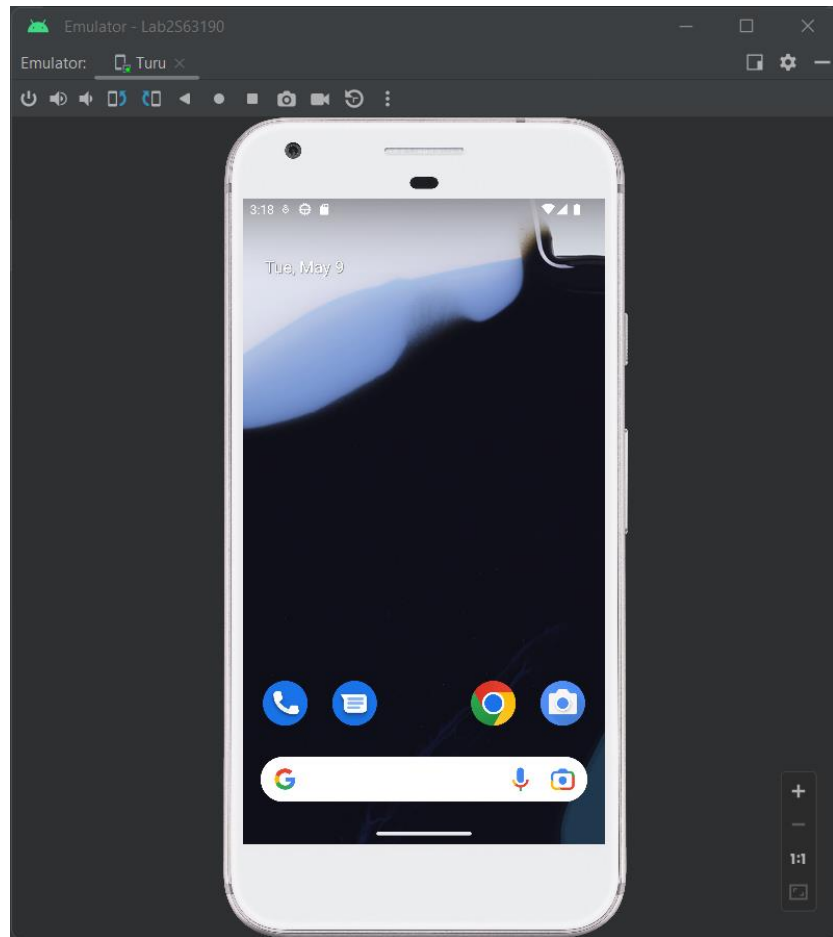
C:\Users\azimm\Desktop\cordovaProject\Task2Hello>cordova run browser
startPage = index.html
Static file server running @ http://localhost:8000/index.html
CTRL + C to shut down
200 /index.html (gzip)
(node:40536) [DEP0066] DeprecationWarning: OutgoingMessage.prototype._headers is deprecated
(Use 'node --trace-deprecation ...' to show where the warning was created)
200 /css/index.css (gzip)
200 /cordova.js (gzip)
200 /img/logo.png
404 /cordova_plugins.js
200 /js/index.js (gzip)
```



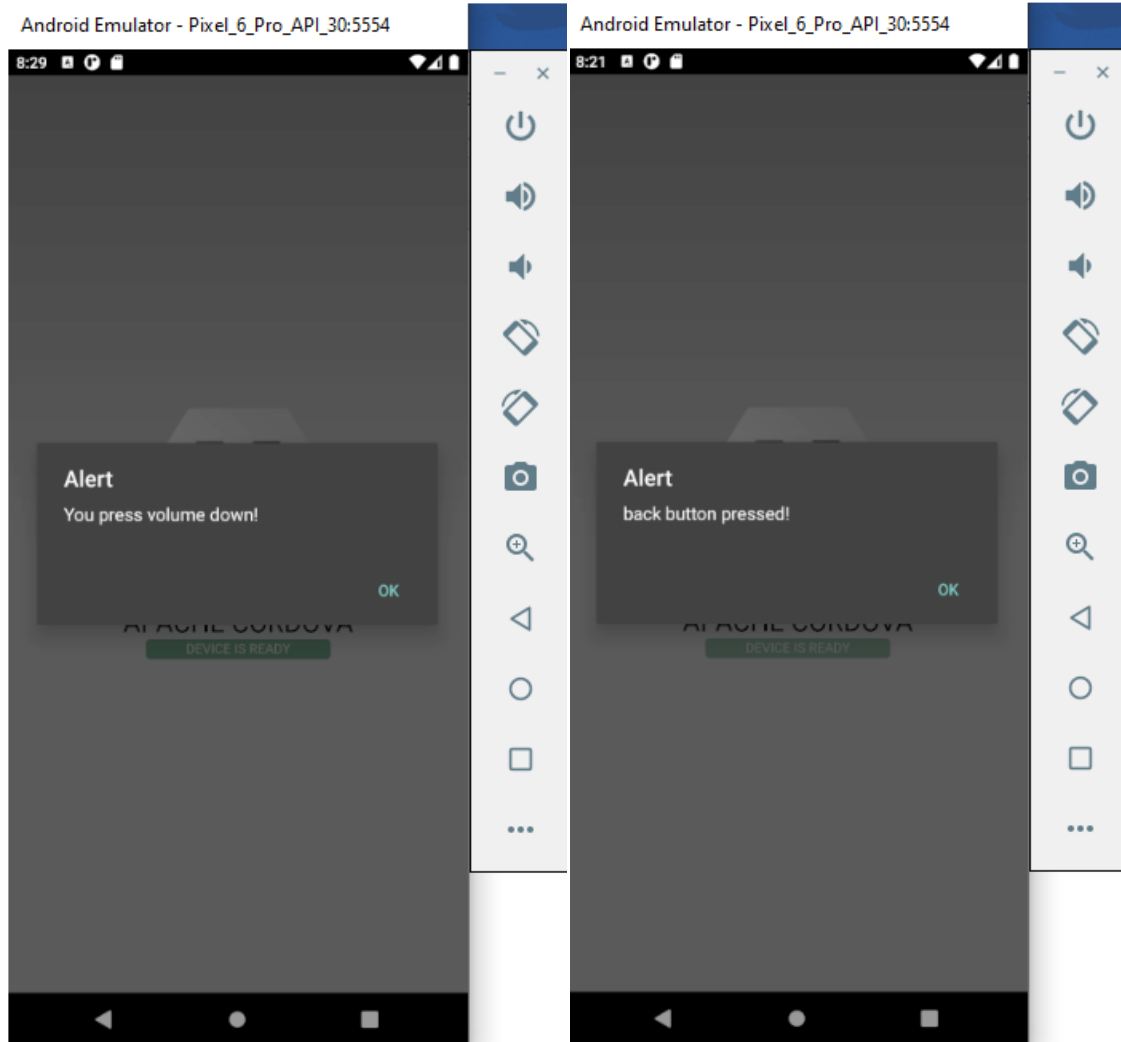
The Virtual Device Configuration window is titled "Virtual Device Configuration" and "Select Hardware". It features a search bar and a table of device definitions. The "Phone" category is selected, showing a list of devices including Resizable (Experiment...), Pixel XL, Pixel 6 Pro, Pixel 6, Pixel 5, Pixel 4a, and Pixel 4 XL. To the right, the "Pixel 2" device is highlighted, showing its dimensions (1080px width, 1920px height, 5.0" diagonal) and specifications (Size: large, Ratio: long, Density: 420dpi). At the bottom, there are buttons for "New Hardware Profile", "Import Hardware Profiles", "Clone Device...", "Previous", "Next", "Cancel", and "Finish".

Category	Name	Play Store	Size	Resolution	Density
Phone	Resizable (Experiment...)		6.0"	1080x2340	420dpi
Tablet	Pixel XL		5.5"	1440x2560	560dpi
Wear OS	Pixel 6 Pro		6.7"	1440x3120	560dpi
Desktop	Pixel 6		6.4"	1080x2400	420dpi
TV	Pixel 5		6.0"	1080x2340	440dpi
Automotive	Pixel 4a		5.8"	1080x2340	440dpi
	Pixel 4 XL		6.3"	1440x3040	560dpi





Task 3 - Simple eventListener in Cordova Project



Press volume down button

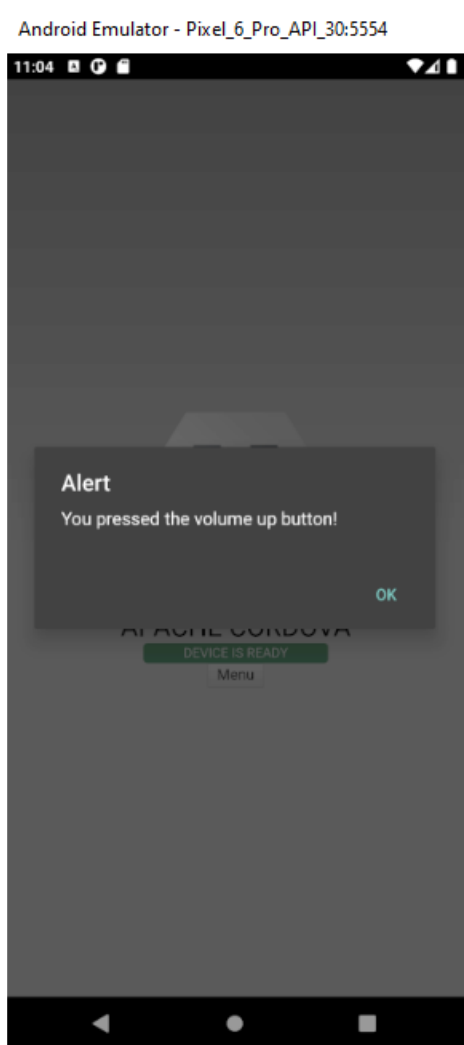
Press back button

What is the purpose of `e.preventDefault()`.

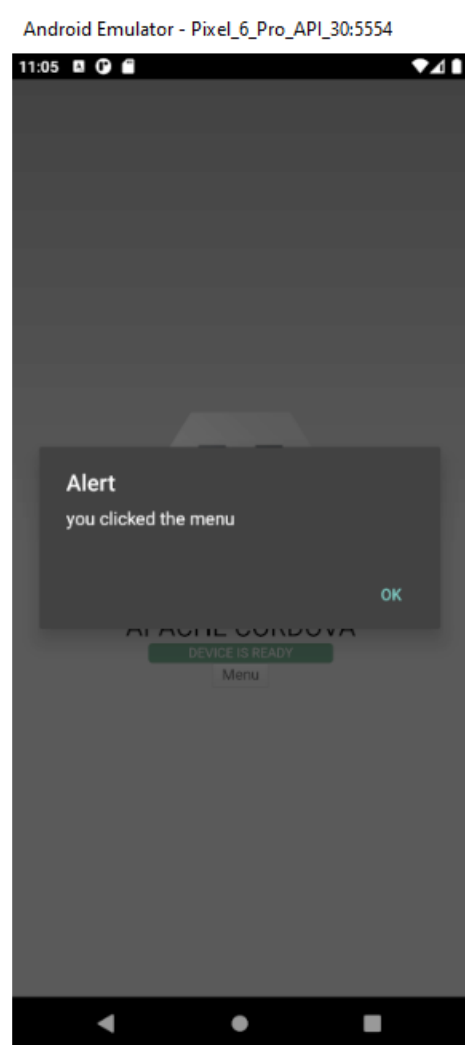
The `e.preventDefault()` function is commonly used in JavaScript event handlers to prevent the default behavior associated with an event. When an event occurs on an HTML element, such as a click event on a link or a submit event on a form, the browser typically performs some default action in response to that event.

Do some research on how to add two controls to you index.js to do the following:

- a. Handle volume up button
- b. Handle menu button



Handle volume up button



Handle menu button

Source code

Index.js

```
// Volume Up
document.addEventListener('volumeupbutton', onVolumeUpKey, false);
function onVolumeUpKey() {
  alert("You pressed the volume up button!");
}
//Menu Button
document.getElementById('menu-button').addEventListener('click', showMenu);
function showMenu() {
  alert('you clicked the menu')
}
```

Index.html

```
<div class="app">
  <h1>Apache Cordova</h1>
  <div id="deviceready" class="blink">
    <p class="event listening">Connecting to Device</p>
    <p class="event received">Device is Ready</p>
    <button id="menu-button">Menu</button>
  </div>
</div>
```

Task 4 – Cordova Plugin use case (Simple Geolocation)

