



UNIVERSITI MALAYSIA TERENGGANU

CSM3103 FRONT-END PROGRAMMING (K1)

**BACHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING) WITH
HONORS**

LAB 2

SEMESTER II 2023/2024

Prepared for:

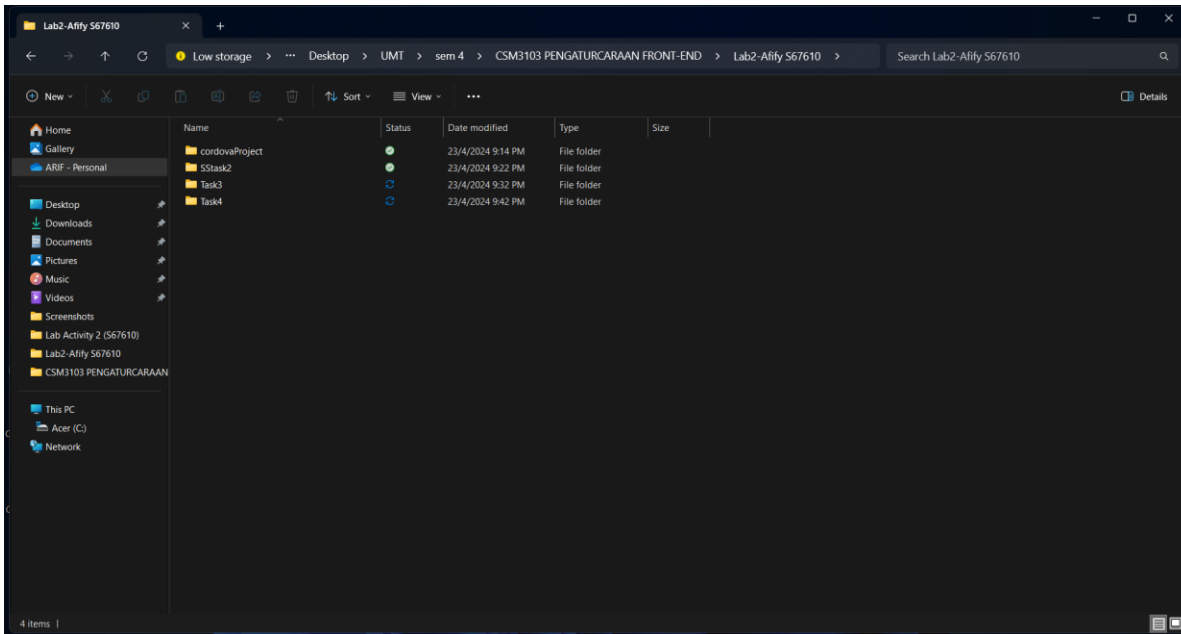
DR. RABIEI B MAMAT

Prepared by:

ARIF AFIFY BIN SULAIMAN

(S67610)

Task 1 – Setup and configure Apache cordova on your desktop/laptop



```
15/04/2024 04:45 PM <DIR> .
21/04/2024 12:44 PM <DIR> ..
15/04/2024 02:47 PM 889 .gitignore
15/04/2024 04:45 PM <DIR> .idea
15/04/2024 02:58 PM 496 config.xml
15/04/2024 03:02 PM <DIR> node_modules
15/04/2024 03:02 PM 63,946 package-lock.json
15/04/2024 03:02 PM 510 package.json
15/04/2024 03:02 PM <DIR> platforms
15/04/2024 02:58 PM <DIR> www
      4 File(s) 65,841 bytes
      6 Dir(s) 7,203,487,744 bytes free

C:\Users\ [redacted] \helloworld>cordova platform add browser
Using cordova-fetch for cordova-browser@^7.0.0
Platform browser already added.

C:\Users\ [redacted] \helloworld>cordova run browser
startPage = index.html
Static file server running @ http://localhost:8000/index.html
CTRL + C to shut down
200 /index.html (gzip)
200 /css/index.css (gzip)
200 /img/logo.png
200 /cordova.js (gzip)
404 /cordova_plugins.js
200 /js/index.js (gzip)
```

Task 2 – Your First Apache Cordova Application

```
Administrator: C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.22621.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd

C:\>cd C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610>mkdir cordovaProject
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610>cd cordovaProject
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject>cordova create Task2Hello io.csm3103.lab2.Task2
Creating a new cordova project.
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject>cd Task2Hello
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject\Task2Hello>cordova platform add browser
Using cordova-fetch for cordova-browser
Adding browser project...
Creating Cordova project for cordova-browser:
  Path: C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject\Task2Hello\platforms\browser
  Name: Task2
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject\Task2Hello>cordova run browser
startPage = index.html
Static file server running @ http://localhost:8000/index.html
CTRL + C to shut down
  004 /index.html
  004 /css/index.css
  004 /img/logo.png
  000 /cordova.js (gzip)
  004 /js/index.js
  004 /cordova_plugins.js

Administrator: C:\WINDOWS\system32\cmd.exe - "node" "C:\Users\user\AppData\Roaming\npm\node_modules\cordova\bin\cordova"
Deprecated Gradle features were used in this build, making it incompatible with Gradle 9.0.
You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.
For more on this, please refer to https://docs.gradle.org/8.4/userguide/command_line_interface.html#sec:command_line_warnings in the Gradle documentation.

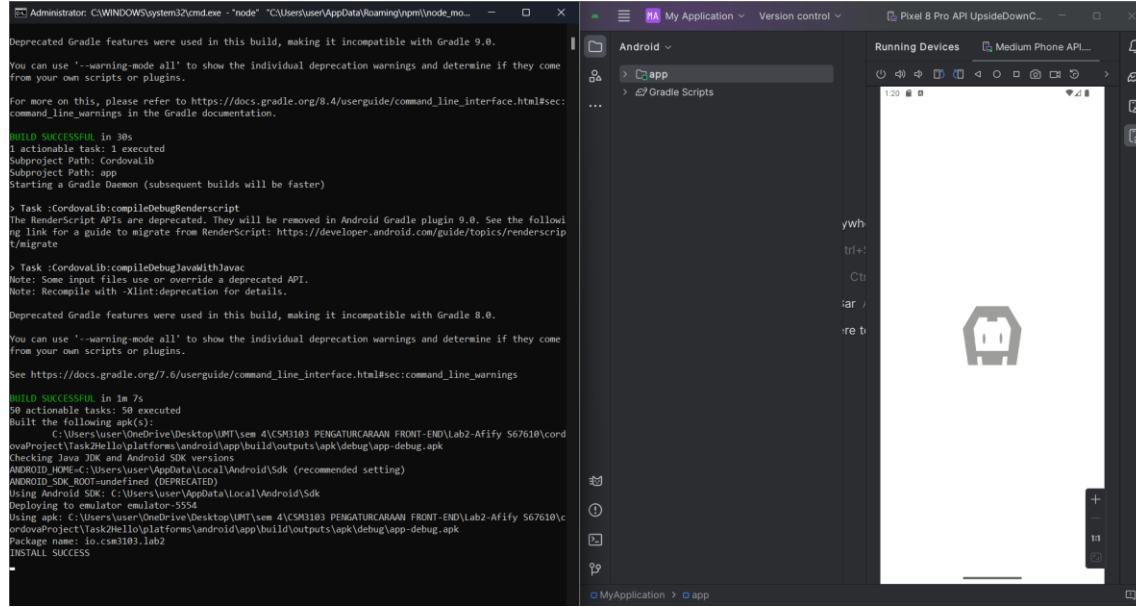
BUILD SUCCESSFUL in 30s
1 actionable task: 1 executed
Subproject Path: CordovaLib
Subproject Path: app
Starting a Gradle Daemon (subsequent builds will be faster)

> Task :CordovaLib:compileDebugRenderscript
The RenderScript APIs are deprecated. They will be removed in Android Gradle plugin 9.0. See the following link for a guide to migrate from RenderScript: https://developer.android.com/guide/topics/renderscript/migrate


> Task :CordovaLib:compileDebugJavaWithJavac
Note: Some input files use or override a deprecated API.
Note: Recompile with -Xlint:deprecation for details.

Deprecated Gradle features were used in this build, making it incompatible with Gradle 8.0.
You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.
See https://docs.gradle.org/7.6/userguide/command_line_interface.html#sec:command_line_warnings

BUILD SUCCESSFUL in 1m 7s
50 actionable tasks: 50 executed
Built the following apk(s):
  C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject\Task2Hello\platforms\android\app\build\outputs\apk\debug\app-debug.apk
Checking Java SDK and Android SDK versions
ANDROID_HOME=C:\Users\user\AppData\Local\Android\Sdk (recommended setting)
ANDROID_SDK_ROOT=undefined (DEPRECATED)
Using Android SDK: C:\Users\user\AppData\Local\Android\Sdk
Deploying to emulator emulator-5554
Using apk: C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSH3103 PENGATURCARAAN FRONT-END\Lab2-Afify 567610\cordovaProject\Task2Hello\platforms\android\app\build\outputs\apk\debug\app-debug.apk
Package name: io.csm3103.lab2
INSTALL SUCCESS
```



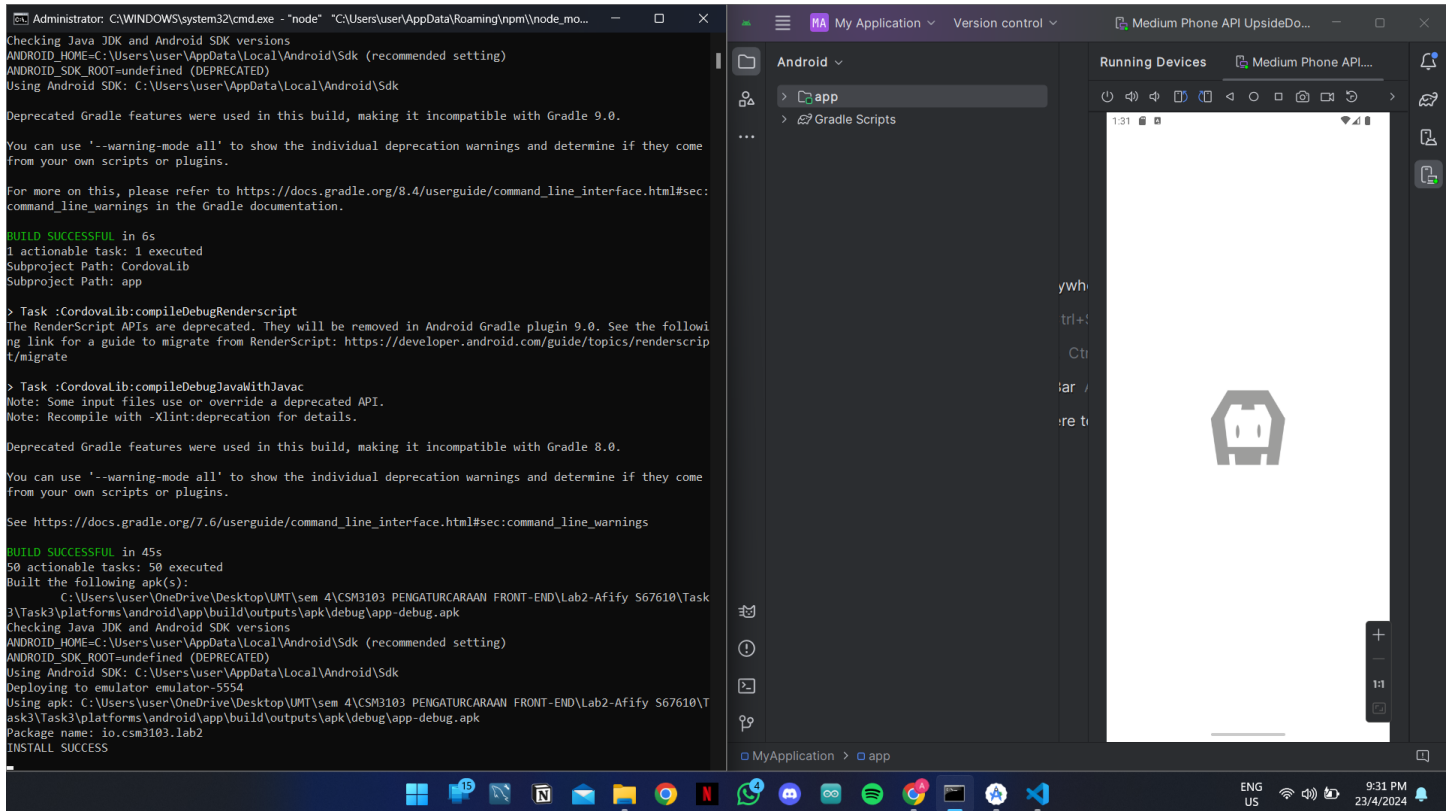
```
MyApplication > app
```



APACHE CORDOVA

DEVICE IS READY

Task3 – Simple eventListener in Cordova Project



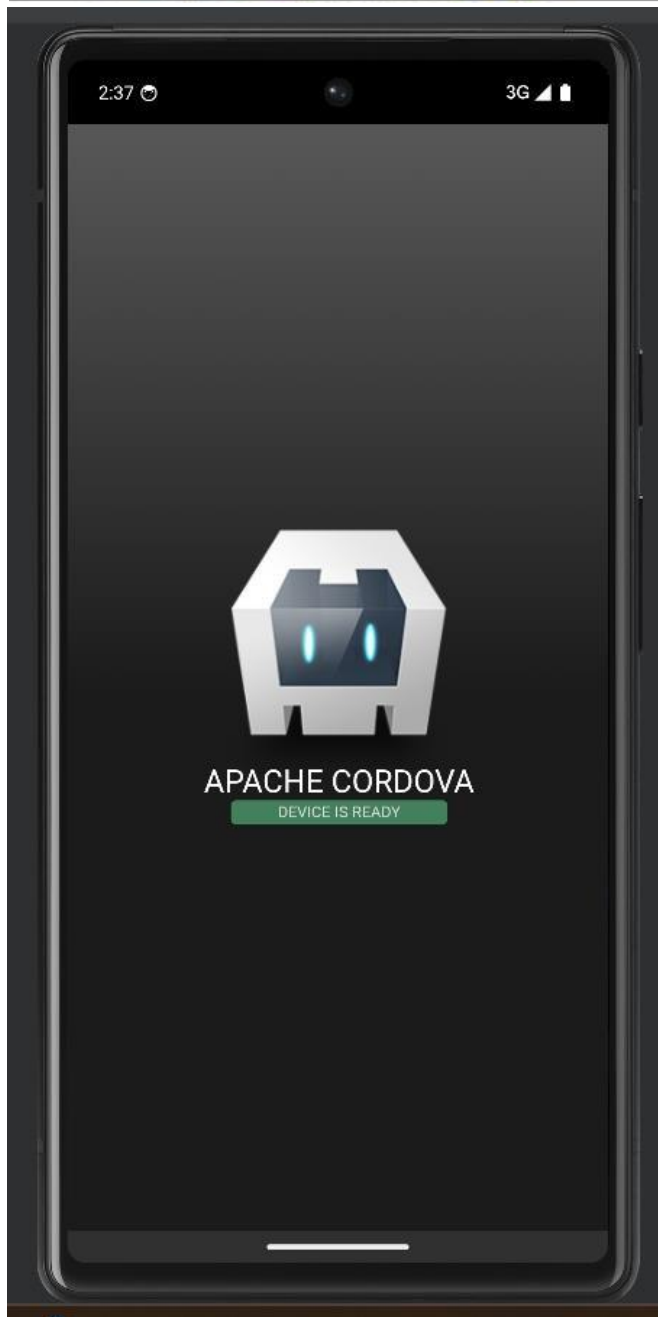
Do some research on how to add two controls to you index.js to do the following:

- Handle volume up button



b. Handle menu button

```
28 document.addEventListener('backbutton',onBackButton,false);  
29  
30 function onBackButton(e){
```



Task 4 – Cordova Plugin use case (Simple Geolocation)

The screenshot displays an IDE interface with two main panels. The left panel shows a terminal window with the output of a Gradle build. The right panel shows a running Android emulator with the Apache Cordova splash screen.

Terminal Output:

```
Administrator: C:\WINDOWS\system32\cmd.exe
ANDROID_SDK_ROOT=undefined (DEPRECATED)
Using Android SDK: C:\Users\user\AppData\Local\Android\Sdk

Deprecated Gradle features were used in this build, making it incompatible with Gradle 9.0.

You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.

For more on this, please refer to https://docs.gradle.org/8.4/userguide/command_line_interface.html#sec:command_line_warnings in the Gradle documentation.

BUILD SUCCESSFUL in 7s
1 actionable task: 1 executed
Subproject Path: CordovaLib
Subproject Path: app

> Task :CordovaLib:compileDebugRenderscript
The RenderScript APIs are deprecated. They will be removed in Android Gradle plugin 9.0. See the following link for a guide to migrate from RenderScript: https://developer.android.com/guide/topics/renderscript/migrate

> Task :CordovaLib:compileDebugJavaWithJavac
Note: Some input files use or override a deprecated API.
Note: Recompile with -Xlint:deprecation for details.

Deprecated Gradle features were used in this build, making it incompatible with Gradle 8.0.

You can use '--warning-mode all' to show the individual deprecation warnings and determine if they come from your own scripts or plugins.

See https://docs.gradle.org/7.6/userguide/command_line_interface.html#sec:command_line_warnings

BUILD SUCCESSFUL in 40s
50 actionable tasks: 50 executed
Built the following apk(s):
  C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSM3103 PENGATURCARAAN FRONT-END\Lab2-Afify S67610\Task4\Task4\platforms\android\app\build\outputs\apk\debug\app-debug.apk
Checking Java JDK and Android SDK versions
ANDROID_HOME=C:\Users\user\AppData\Local\Android\Sdk (recommended setting)
ANDROID_SDK_ROOT=undefined (DEPRECATED)
Using Android SDK: C:\Users\user\AppData\Local\Android\Sdk
Deploying to emulator emulator-5554
Using apk: C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSM3103 PENGATURCARAAN FRONT-END\Lab2-Afify S67610\Task4\Task4\platforms\android\app\build\outputs\apk\debug\app-debug.apk
Package name: io.csm3103.lab2
INSTALL SUCCESS
LAUNCH SUCCESS
C:\Users\user\OneDrive\Desktop\UMT\sem 4\CSM3103 PENGATURCARAAN FRONT-END\Lab2-Afify S67610\Task4\Task4\
```

IDE Interface:

- Project Explorer:** Shows the project structure with 'app' and 'Gradle Scripts' folders.
- Running Devices:** Shows a virtual device named 'Medium Phone API UpsideDo...' with a status bar at the top.
- Emulator Screen:** Displays the Apache Cordova splash screen with the text 'APACHE CORDOVA' and 'Current Position' and 'Watch Position' buttons. Below the buttons, it says 'DEVICE IS READY'.


```

document.getElementById("watchPosition").addEventListener("click", watchPosition);

function watchPosition(){
    var options = {
        maximumAge: 3600000,
        timeout: 3000,
        enableHighAccuracy: true,
    }

    var watchID = navigator.geolocation.watchPosition(onSuccess, onError, options);

    function onSuccess(position){
        alert('Latitude: ' + position.coords.latitude + '\n' +
            'Longitude: ' + position.coords.longitude + '\n' +
            'Altitude: ' + position.coords.altitude + '\n' +
            'Accuracy: ' + position.coords.accuracy + '\n' +
            'Altitude Accuracy: ' + position.coords.altitudeaccuracy + '\n' +
            'Heading: ' + position.coords.heading + '\n' +
            'Speed: ' + position.coords.speed + '\n' +
            'Timestamp: ' + position.coords.timestamp + '\n');
    }

    function onError(error){
        alert('code: ' + error.code + '\n' + 'message: ' + error.message + '\n');
    }
}

```



APACHE CORDOVA

Current Position Watch Position

DEVICE IS READY

Github Repository

<https://github.com/MatReppo/CSM3103-Lab2-S67610>