UNIVERSITI MALAYSIA TERENGGANU

CSM3103 FRONT-END PROGRAMMING (K1)

BACHELOR OF COMPUTER SCIENCE (MOBILE COMPUTING) WITH HONORS

LAB 2

SEMESTER II 2023/2024

Prepared for:

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Prepared by:

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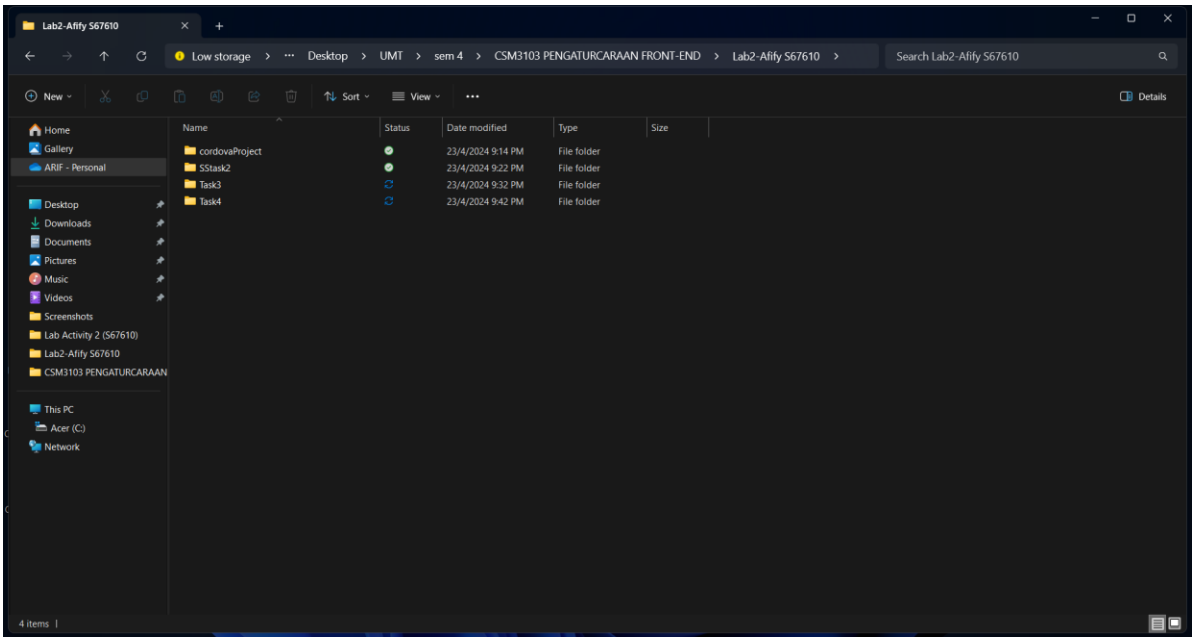
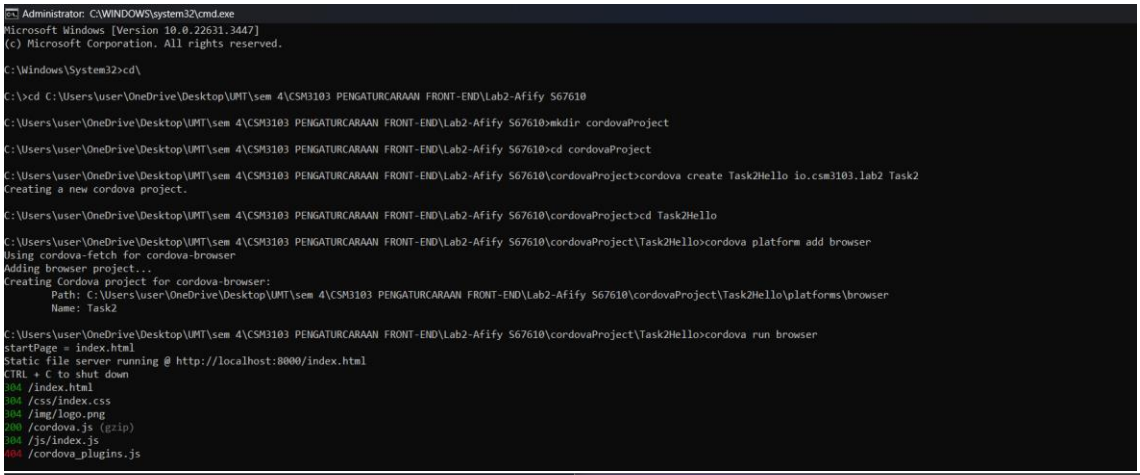
(S67610)

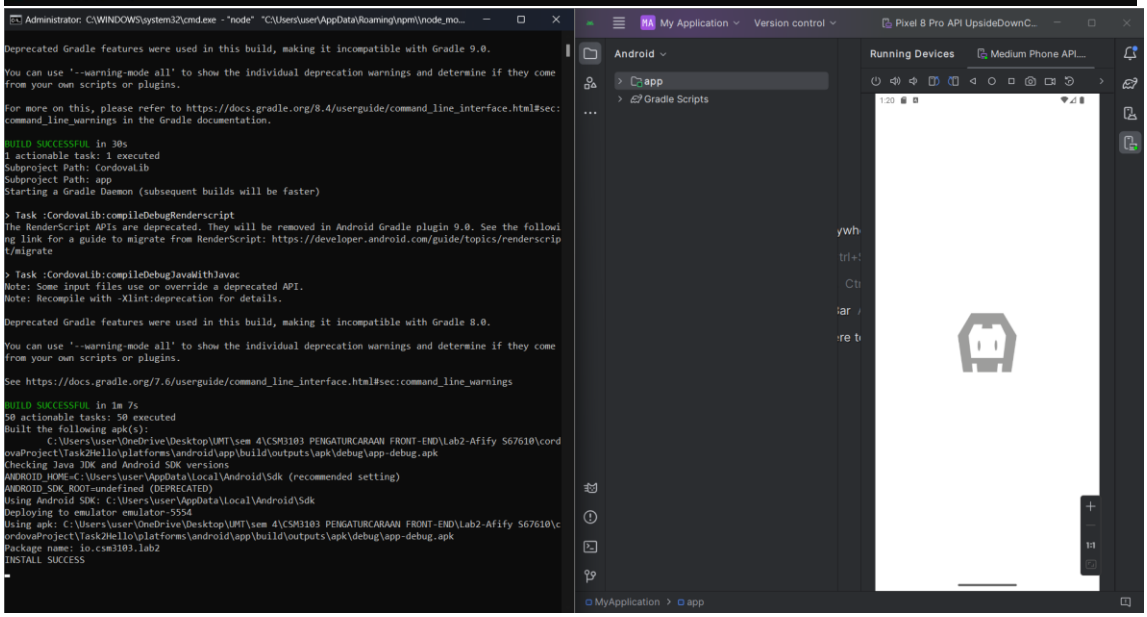
Task 1 – Setup and configure Apache cordova on your desktop/laptop

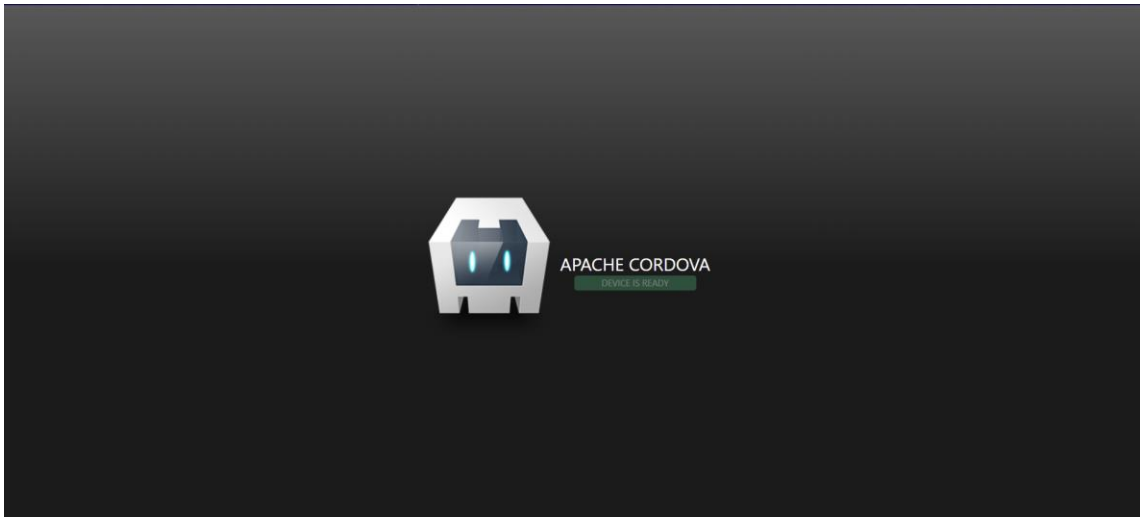



```
15/04/2024  04:45 PM    <DIR>          .
21/04/2024  12:44 PM    <DIR>          ..
15/04/2024  02:47 PM               889 .gitignore
15/04/2024  04:45 PM    <DIR>          .idea
15/04/2024  02:58 PM               496 config.xml
15/04/2024  03:02 PM    <DIR>          node_modules
15/04/2024  03:02 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)
```

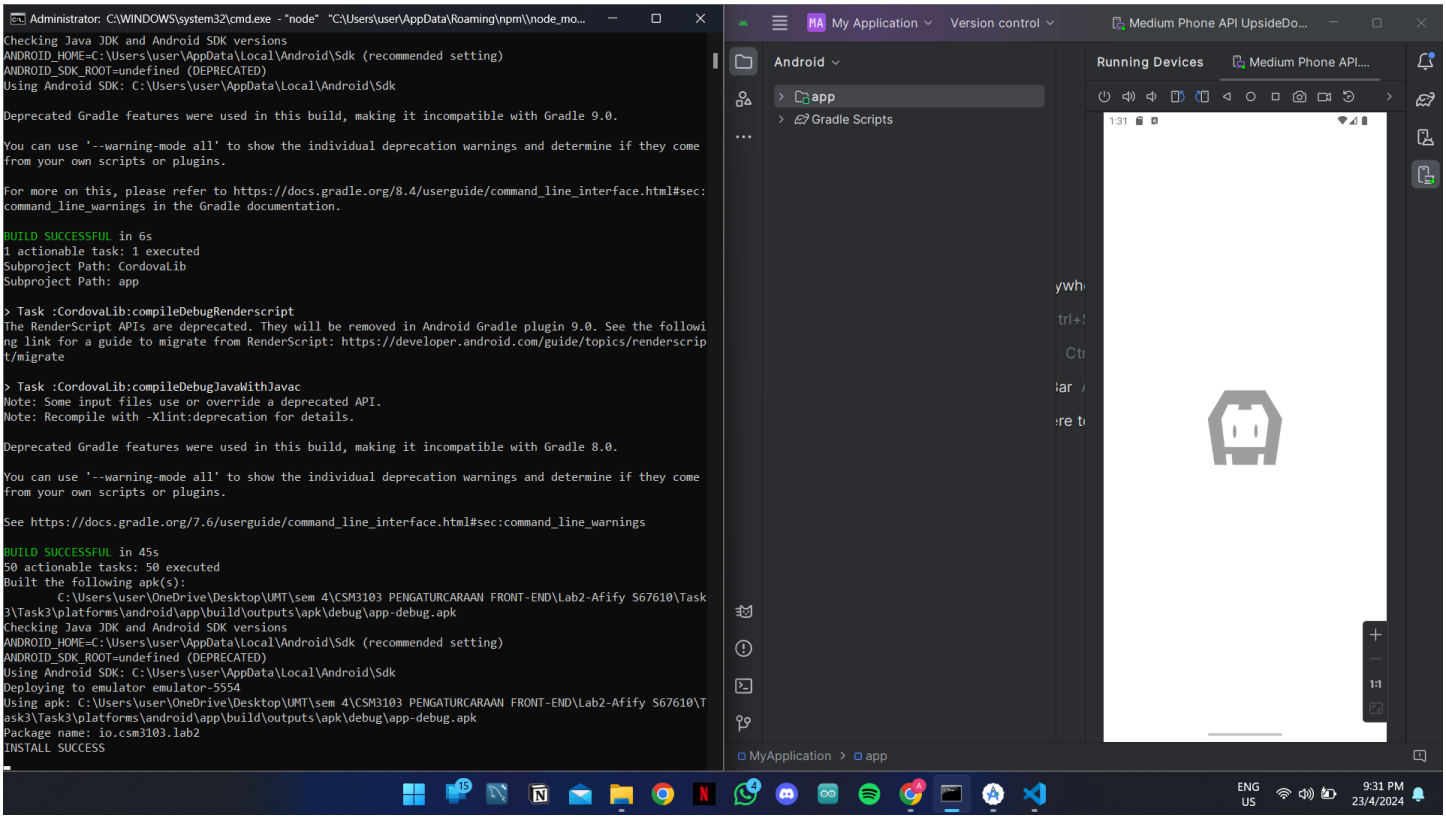
Task 2 – Your First Apache Cordova Application







Task3 – Simple eventListener in Cordova Project



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

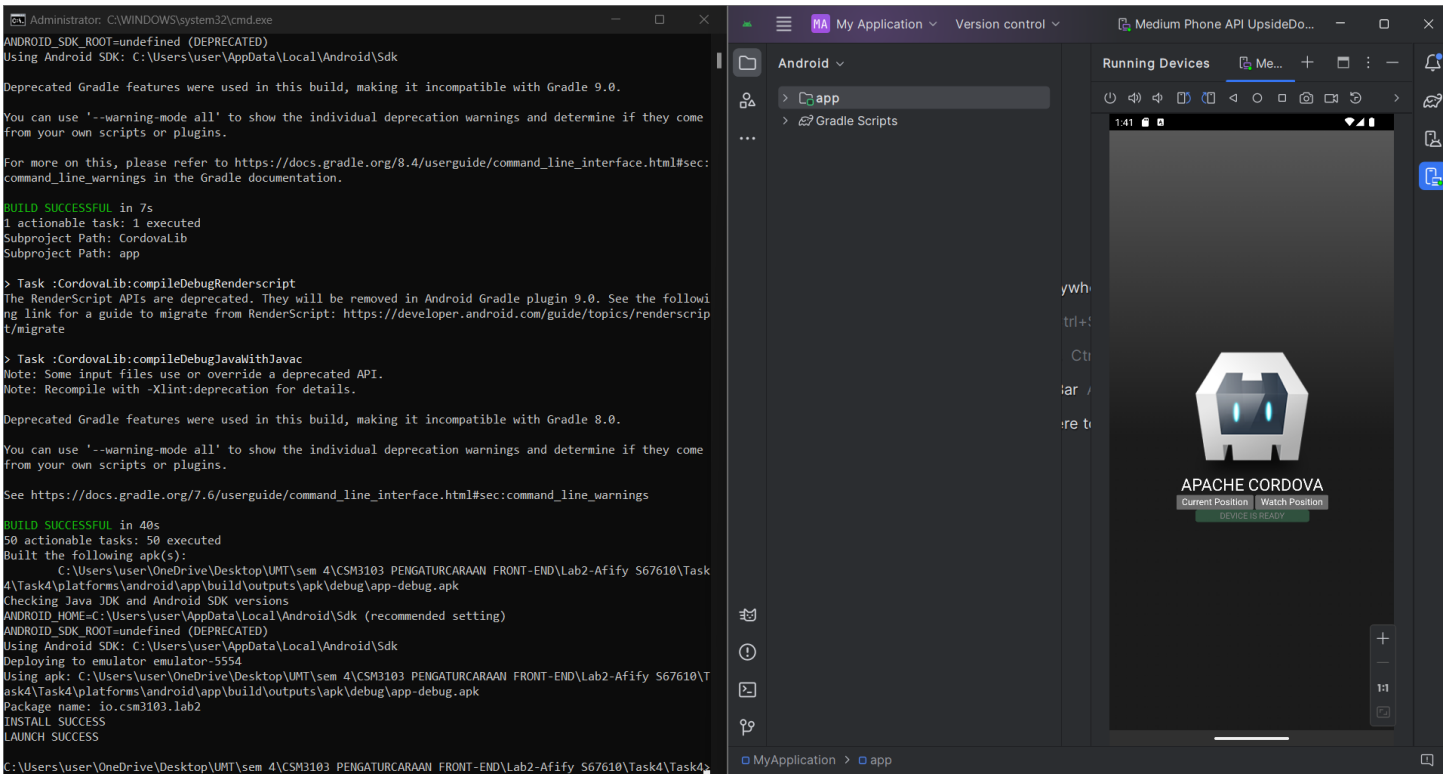
a. Handle volume up button

```
document.addEventListener('volumeupbutton', onVolumekeyUp, false);

function onVolumekeyUp(){
    alert("You press volume up!");
}

document.addEventListener('upbutton', onUpButton, false);

function onUpButton(e){
    e.preventDefault();
    alert("Up button pressed!");
}
}
```

b. Handle menu button

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

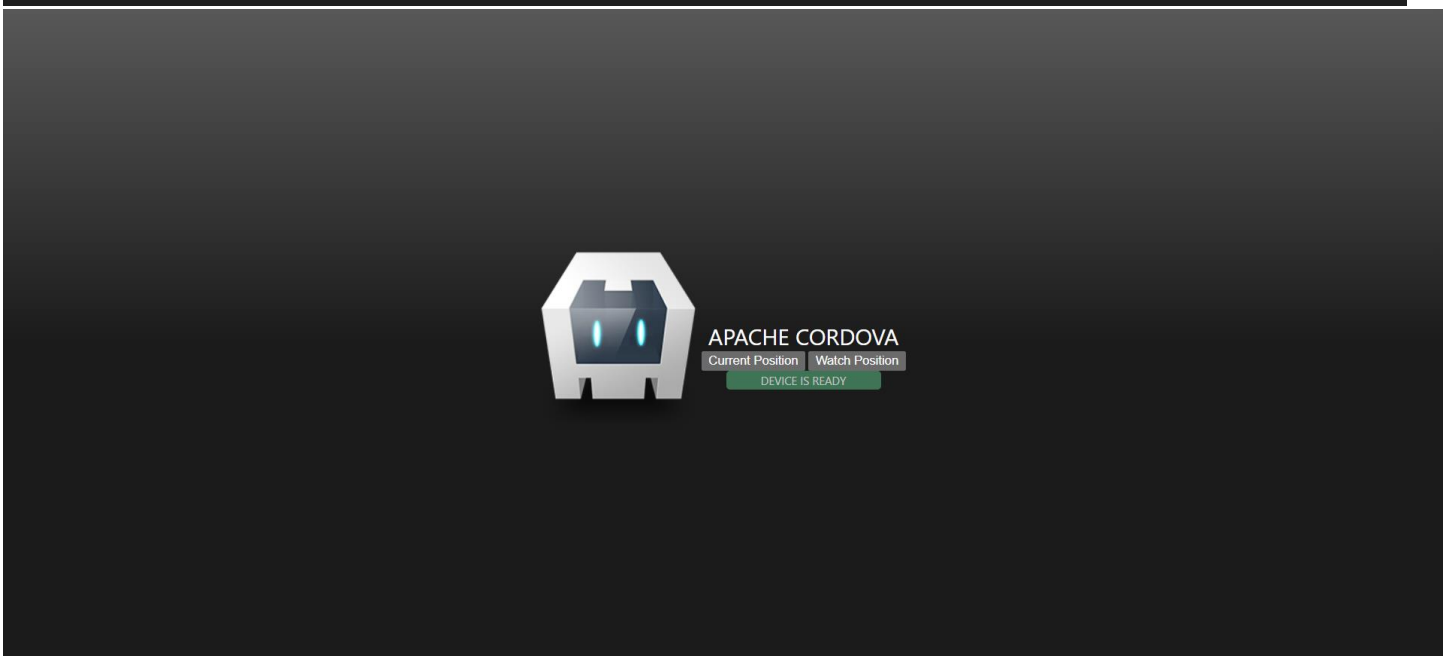
Task 4 – Cordova Plugin use case (Simple Geolocation)



```html
<html>
    <head>
        <meta charset="utf-8">
        <!--
        Customize this policy to fit your own app's needs. For more guidance, please refer to the docs:
            https://cordova.apache.org/docs/en/latest/
        Some notes:
            * https://ssl.gstatic.com is required only on Android and is needed for TalkBack to function properly
            * Disables use of inline scripts in order to mitigate risk of XSS vulnerabilities. To change this:
                * Enable inline JS: add 'unsafe-inline' to default-src
        -->
        <meta http-equiv="Content-Security-Policy" content="default-src 'self' data: https://ssl.gstatic.com 'unsa
        <meta name="format-detection" content="telephone=no">
        <meta name="msapplication-tap-highlight" content="no">
        <meta name="viewport" content="initial-scale=1, width=device-width, viewport-fit=cover">
        <meta name="color-scheme" content="light dark">
        <link rel="stylesheet" href="css/index.css">
        <title>Hello World</title>
    </head>
    <body>
        <div class="app">
            <h1>Apache Cordova</h1>
            <button id="getPosition">Current Position</button>
            <button id="watchPosition">Watch Position</button>
            <div id="deviceready" class="blink">
                <p class="event listening">Connecting to Device</p>
                <p class="event received">Device is Ready</p>
            </div>
        </div>
        <script src="cordova.js"></script>
        <script src="js/index.js"></script>
    </body>
</html>
```

```javascript
document.addEventListener('deviceready', onDeviceReady, false);

function onDeviceReady() {
    // Cordova is now initialized. Have fun!

    console.log('Running cordova-' + cordova.platformId + '@' + cordova.version);
    document.getElementById('deviceready').classList.add('ready');
}

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

function getPosition(){
    var options = {
        enableHighAccuracy: true,
        maximumAge: 3600000
    }

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

    function onSuccess(position){
        alert('Latitude: '          + position.coords.latitude              + '\n' +
            'Longtitude: '          + position.coords.longtitude            + '\n' +
            'Altitude: '            + position.coords.latitude              + '\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');
    }
}
```

```
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' +
            'Longtitude: '          + position.coords.longtitude        + '\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');
    }
}
```



Github Repository
https://github.com/MatReppo/CSM3103-Lab2-S67610