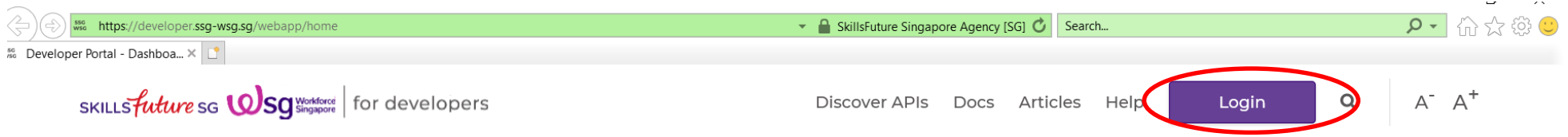


User Guide To Run MTLS Sample Code

Developer Portal: Step 1

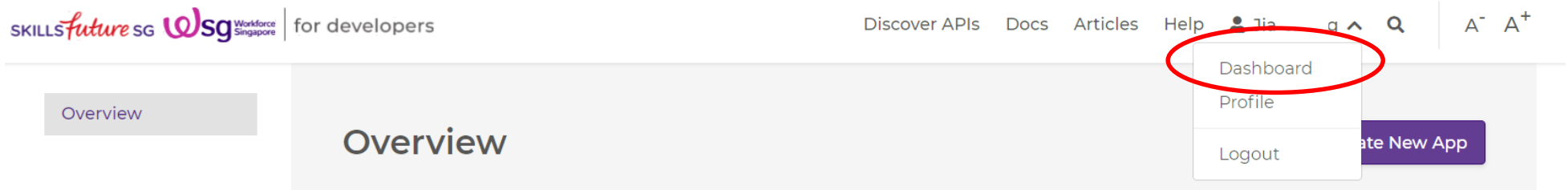
- Step 1.1

- ❖ Go to developer portal <https://developer.ssg-wsg.sg/webapp/home>
- ❖ Then Create or log in your Github account



- Step 1.2

- ❖ After log in with your GitHub account
- ❖ Click your profile and select Dashboard



Developer Portal : Step 2

(Create New App)

- Step 2.1

- ❖ Click the Create New App

Create New App

- Step 2.2

- ❖ Type any App Name and description you want to input
- ❖ Select Authentication: Certificate.
- ❖ Then Click Create

Create New App

Application Information

App Name

Description

Authentication ⓘ

☐ Open

☒ Certificate

Cancel

Create

Developer Portal : Step 3 (Overview)

- Step 3.1

- ❖ Click the overview App you have created

Overview

Overview

MTLS

Call MTLS API for testing

Owner:



- Step 3.2

- ❖ It shows 3 categories.
 - App Settings: Add APIs
 - Subscriptions: Shows the APIs that you have added
 - Subscription Settings

[Dashboard](#) / [MTLS](#)

App Settings

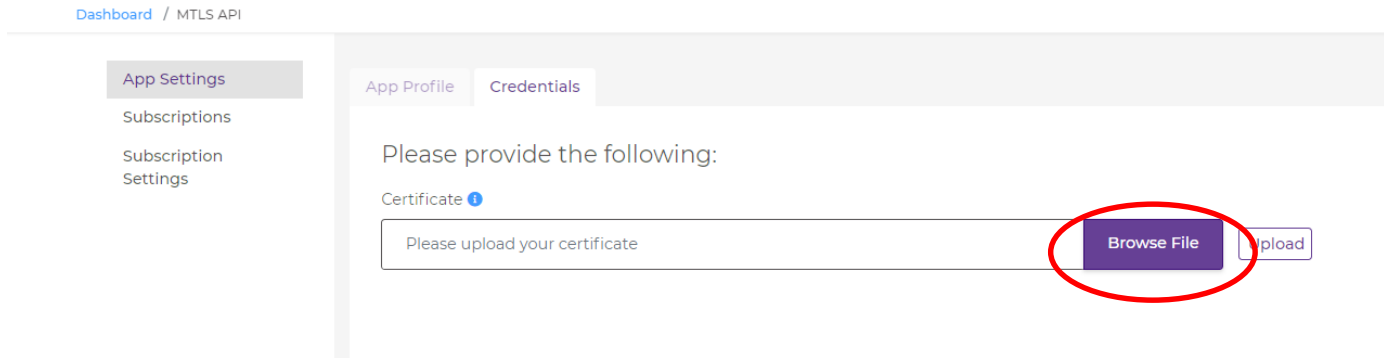
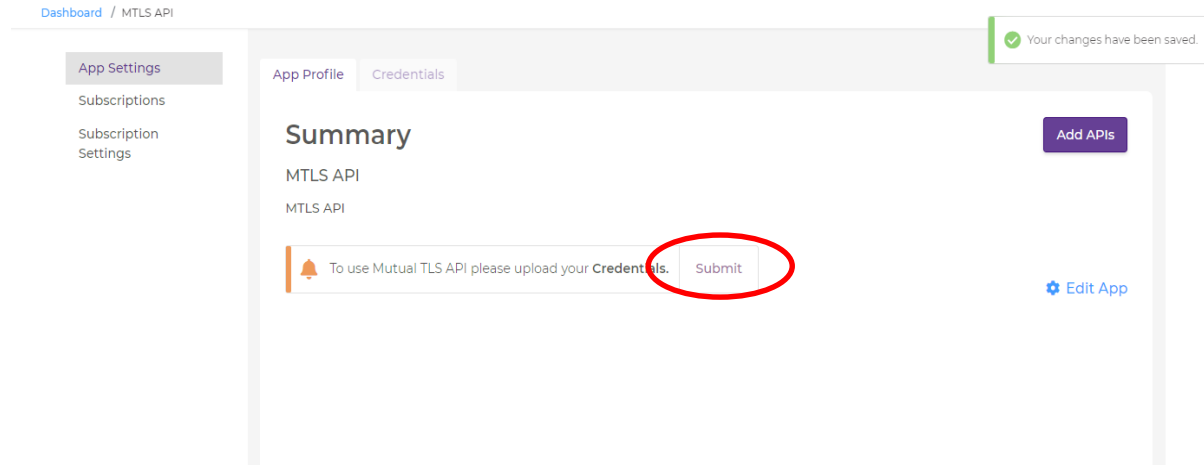
Subscriptions

Subscription
Settings

Developer Portal : Step 4 (App Settings)

- Step 4.1

- ❖ Click on “Submit”
- ❖ Then Click “Browse File” to locate your “Cert.pem” file
- ❖ Once done, Click “Upload”



Developer Portal : Step 4 (Add APIs)

- Step 4.2

- ❖ Select any APIs you want to explore
- ❖ Then click Add APIs – it will show on the subscriptions.

[Dashboard](#) / [MTLS API](#) / Add APIs

Add APIs

RESOURCES

COURSES

PROGRAMMES FOR INDIVIDUAL

SKILLS

RESOURCES

SELECT API(S)

☐ Job Role Titles

☐ Skills & Competencies Generic

☐ Field of Studies

☐ Skills & Competencies Technical

☐ Job Roles

☐ List of Occupations

☐ List of SSIC

☐ TSC Code Autocomplete Details

☐ Related Job Roles By ID

☐ Job Role Profile By ID

Clear Selection

Add APIs

Developer Portal : Step 5

- Step 5.1

- ❖ Click Discover APIs



- Step 5.2

- ❖ Then choose any one of the 4 categories;
For E.g. : Resources → Skills Framework → Sectors
- ❖ Click on the “Get” or “Post” to expand the section

The screenshot shows the 'Discover APIs' section of the Developer Portal. The left sidebar lists various categories under 'Skills Framework', with 'Sectors' selected at the bottom. The main content area displays the 'Retrieve List of Sectors' API, marked with 'v1' and 'OAS3' tags. It includes the release date (2019-07-29) and a description: 'This API is used to retrieve the list of sectors in taxonomy system.' A table lists API details: Authentication (Open, Read Guide), Production Base URL (public-api.ssg-wsg.sg), Subscription Approval (Not Required), Conformance Test (Not Required), and Change Log (2019-07-29 (v1) with an initial release note). Below the table, a 'Servers' dropdown is set to 'https://mock-public-api.ssg-wsg.sg/'. At the bottom, a 'default' section shows a 'GET' button (circled in red) for the endpoint '/skills-framework/sectors' to 'Retrieve list of sectors'. A 'Schemas' section is partially visible at the bottom.

Discover APIs Docs Articles Help A⁻ A⁺

Docs / Resources

Skills Framework

- Job Role Titles
- Skills & Competencies Generic
- Field of Studies
- Skills & Competencies Technical
- Job Roles
- List of Occupations
- List of SSIC
- TSC Code Autocomplete Details
- Related Job Roles By ID
- Job Role Profile By ID
- Job Role Details By ID
- Sector Profile By Sector ID
- Videos By Sector
- GSC Code Autocomplete Details
- Job Roles By Occupation
- Sectors**

Retrieve List of Sectors v1 OAS3

Release Date: 2019-07-29

This API is used to retrieve the list of sectors in taxonomy system.

Authentication	Open Read Guide
Production Base URL	public-api.ssg-wsg.sg
Subscription Approval	Not Required
Conformance Test	Not Required
Change Log	2019-07-29 (v1) <ul style="list-style-type: none">Initial release

Servers

default

GET /skills-framework/sectors Retrieve list of sectors

Schemas

Developer Portal : Step 5

- Step 5.3

- ❖ Click Try it out and execute to get the json file output
- ❖ This is to show the mock example of GET request

Output:
Json File

Servers

<https://mock-public-apt.esg-weg.sg/>

default

GET /skillsFramework/sectors Retrieve list of sectors

This API is used to retrieve all sectors.

Parameters

Name	Description
x-api-version	API version
string (header)	Default value : v1

Responses

Code	Description	Links
200	Successful operation	No links

application/json

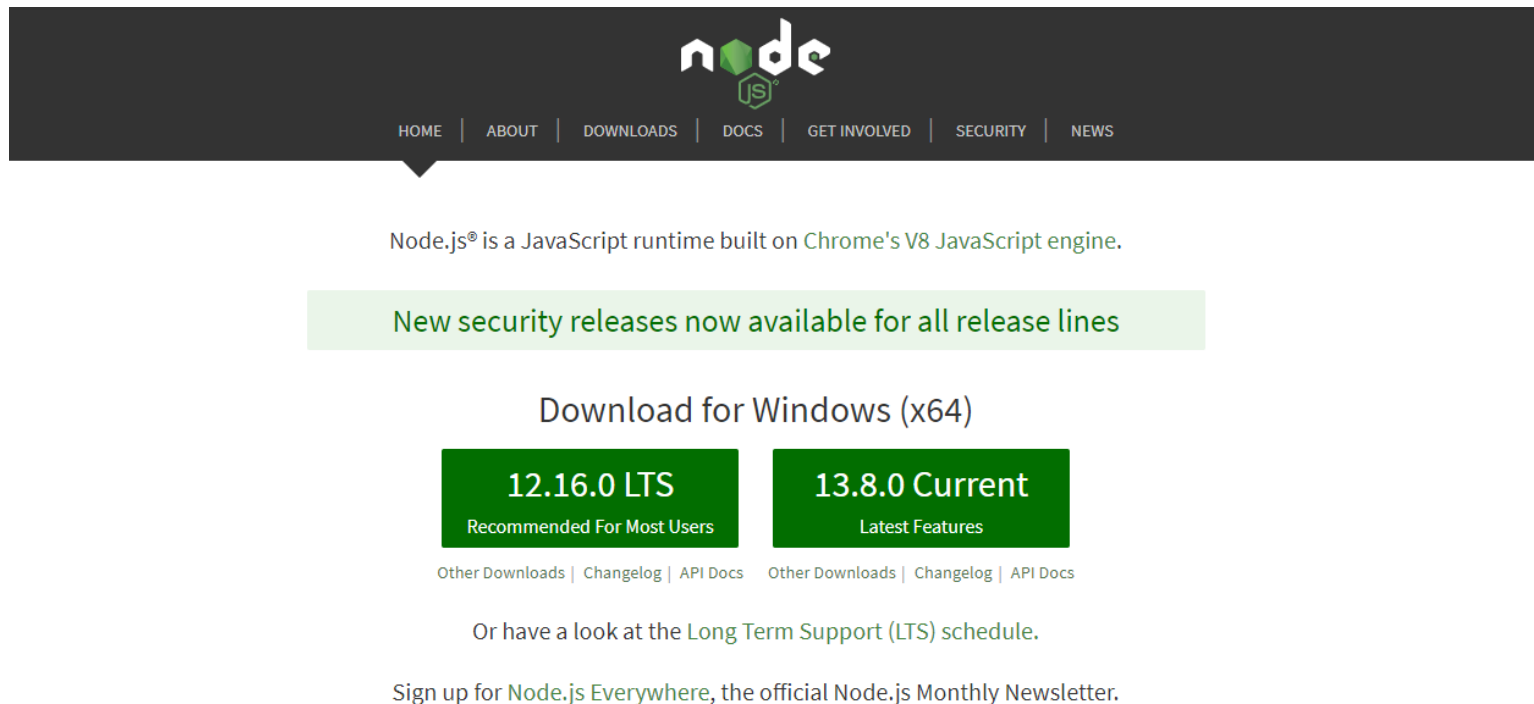
Controls [Accept](#) header.

Example Value Schema

```
{
  "sectors": [
    {
      "id": "15614",
      "code": "ACC",
      "title": "Accountancy",
      "background": {
        "disclaimer": "If you have a knack for numbers, money matters, economics and business, you might want to consider a career in accountancy. Accountants are critical to the success of any business and are often sought after as key players in any business set-up. <br>Source: <br>is target? <br>blank? <br>http://www.skillsfuture.sg/study/journals/accountancy/skillsfuture-singapore-stillafuture-study-award-for-accountancy-2016-2017/ <br>The industry overview has been validated with the industry in 2016 and updated with statistics from 2016 census. <br>Source: <br>disco"
      },
      "subsectors": {
        "count": 1
      },
      "briefDescription": "If you have a knack for numbers, money matters, economics and business, you might want to consider a career in accountancy. Accountants are critical to the success of any business and are often sought after as key players in any business set-up."
    }
  ],
  "meta": {
    "total": 1
  },
  "status": 200
}
```

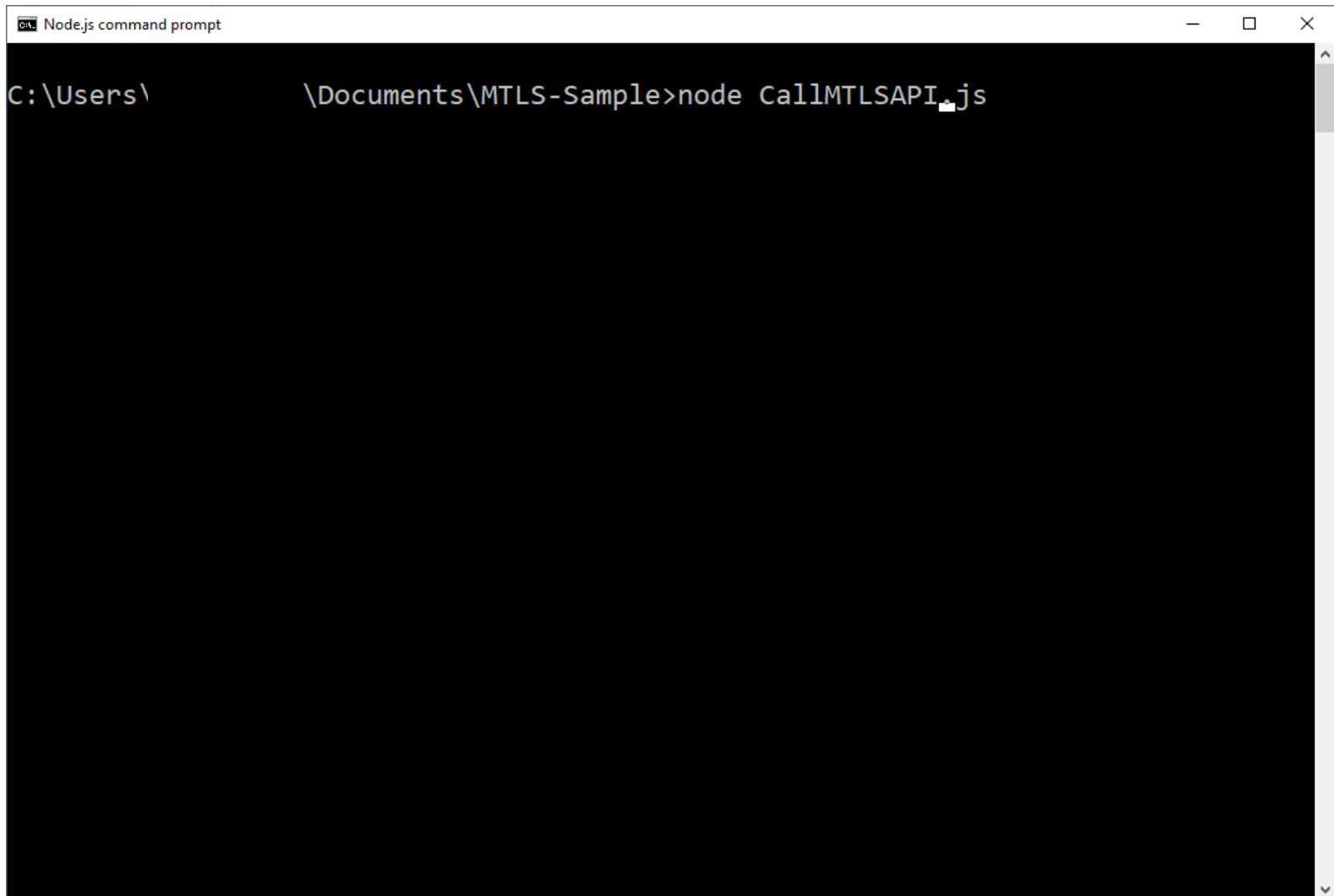

Install Node.js

Go <https://nodejs.org/en/> to install the runtime software



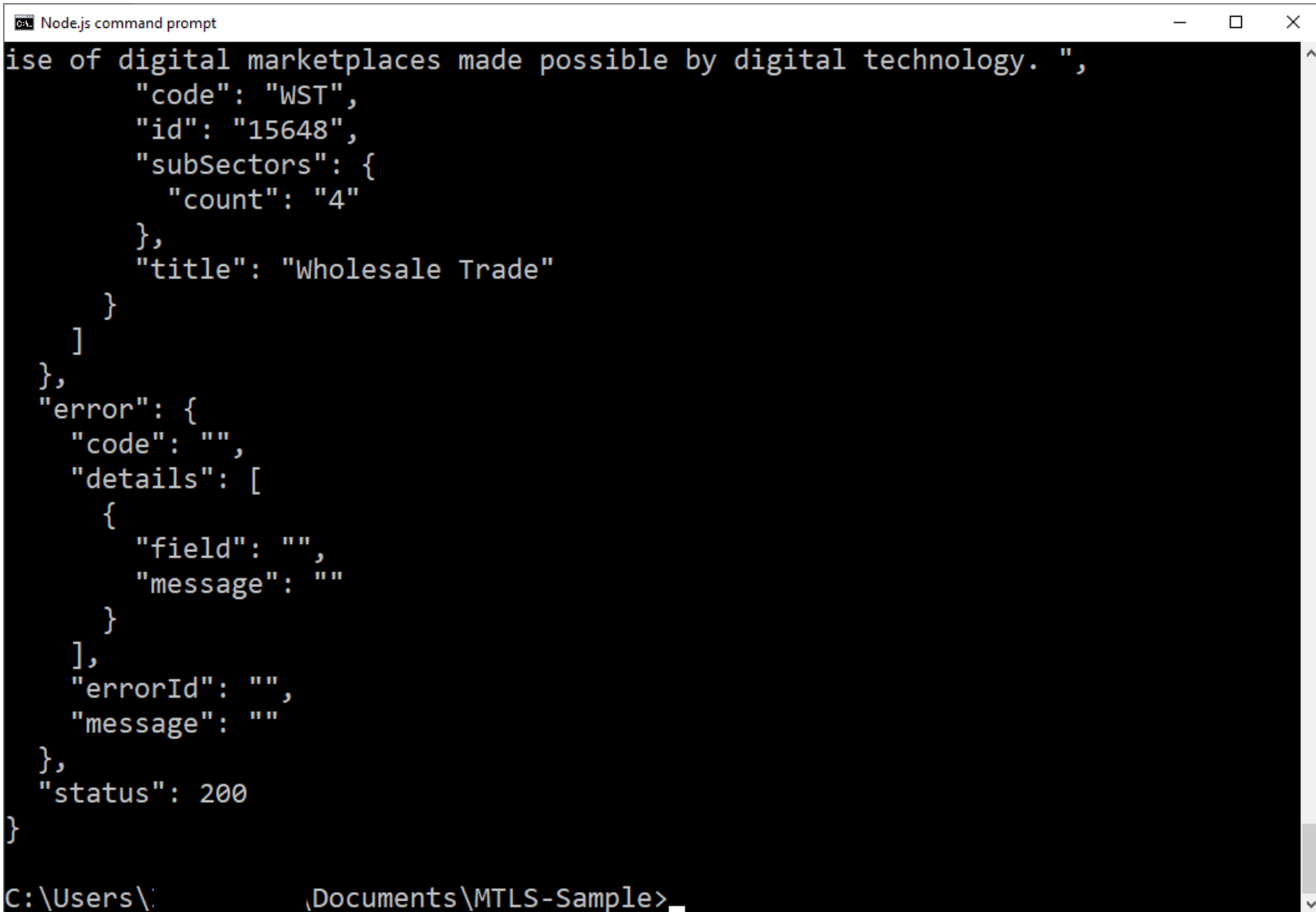
Run the Sample Code using Node.js Command Prompt

Please ensure your Key.pem and Cert.pem is in the running directory

A screenshot of a Node.js command prompt window. The window title is "Node.js command prompt". The command prompt shows the current directory as "C:\Users\... \Documents\MTLS-Sample" and the command "node CallMTLSAPI.js" being entered. The command prompt is black with white text. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

```
Node.js command prompt
C:\Users\... \Documents\MTLS-Sample>node CallMTLSAPI.js
```

Run the Sample Code using Node.js Command Prompt

A screenshot of a Node.js command prompt window. The window has a title bar that says "Node.js command prompt" and standard Windows window controls (minimize, maximize, close). The main area of the window is black with white text, displaying a JSON response. The JSON is a multi-line string. At the bottom of the window, the command prompt shows the current directory as "C:\Users\...\Documents\MTLS-Sample>".

```
ise of digital marketplaces made possible by digital technology. ",
  "code": "WST",
  "id": "15648",
  "subSectors": {
    "count": "4"
  },
  "title": "Wholesale Trade"
}
],
},
"error": {
  "code": "",
  "details": [
    {
      "field": "",
      "message": ""
    }
  ],
  "errorId": "",
  "message": ""
},
"status": 200
}

C:\Users\...\Documents\MTLS-Sample>
```

MTLS Sample Code (Get All Sectors)

```
var https = require('https'),           // Module for https
    fs = require('fs');                  // Required to read certs and keys

var options = {
    hostname: 'api.ssg-wsg.sg',           // Production Base URL
    path: '/skillsFramework/sectors',     // This API is to retrieve all Sectors
    method: 'GET',                        // Method : Get or POST
    key: fs.readFileSync('C://exampleDirectory/MTLS-Sample/key.pem'), //Input the directory for key.pem
    cert: fs.readFileSync('C://exampleDirectory/MTLS-Sample/cert.pem') //Input the directory for cert.pem
};

makeAPICall = function(response) {
    var str = '';
    response.on('data', function (chunk) {
        str += chunk;
    });

    response.on('end', function () {
        console.log(str);
    });
}

https.request(options, makeAPICall).end();
```