Functional Automation Testing

Tools Used: Selenium Web driver and JavaScript.

Purpose of using Selenium and JavaScript:

Selenium web driver is a tool that is used to automate web applications. It supports in 5 languages such as Java, Python, JavaScript, Ruby and C#.

Ruby is 12% faster than Python and Node.js is 11% faster than Ruby. In terms of raw speed.

However, raw speed is just a minor factor on UI test automation, if difference is not huge. Other factors include easy to read, easy to maintain, flexible to use third party libraries.

Test Cases:

- First need to install Node.js in system. Node.js is a platform built on Chrome and JavaScript for easily building and scalable network applications.
- After installing Node.js we need to install packet manager and add path variable.
- Install visual Studio code and add npm modules init.
- Npm is a node packet manager basically used for managing dependencies of various server-side dependencies. It puts modules in place so that node can find them and manages dependency conflicts intelligently.

```
const {Builder,Buy,Key,util} = require("selenum-webdriver");
```

- In the above code we are pulling functions from node module.

```
await driver.get(https://deakin.edu.au);
```

- In the above code we're fetching the Deakin website

```
await driver.findElement(By.id("popup-accept")).click();
```

- In the above Code we've written code to accept any popup that appears on screen.

```
await driver.findElement(By.id("search-bar__input")).isDisplayed();

await driver.findElement(By.id("search-bar__input")).sendKeys("bachelor of arts");
```

- In the above Code we are searching for bachelor of arts in the search bar.

```
await driver.findElement(By.xpath("//*[@id='search-bar__button--submit']//span")).click();
```

- In the above code we're clicking the search button after giving input in the search bar.

```
await driver.findElement(By.xpath("(//span[@class='icon--
wrapper']//following-
sibling::span[text()='Course information'])[1]")).click();
```

- In the above code we're selecting for course information.