Setting Up WebdriverIO

Before exploring how to write WebdriverIO tests, let's understand how to set up WebdriverIO. First of all, the prerequisites mentioned below have to be met.

Prerequisite -

1. In order to do the basic setup, we required to have node.js installed. To check if node.js is installed or not just type node -v command and run, we should see the node.js version.

node -v

2. When you install nodejs, node gives you a javascript runtime environment. Also, it installed by default npm which is nothing but node package manager. npm helps the user to install a third-party library. You can check npm version installed by typing the following command on the terminal.

- 3. Download Visual Studio Code
- 4. Typescript version should be >= 4.0.5
 - a. To install *npm install -g typescript*
 - b. To check the typescript version, run command npx tsc -v or tsc -v

Setup WDIO -

- 1. Creating A Project Workspace
 - Setup the project folder by creating a workspace folder so that we can keep all the files in that.
- 2. Initialize package.json
 - npm init -y
 - With this command, we have created a package.json file where we can add dependencies that we require to run our automation.
 - We have added -y option (which is optional) when we add -y option then it skips all input asking for 'Yes' prompts and setup default package.json settings for us.
- 3. Install WebdriverIO CLI
 - npm i --save-dev @wdio/cli
 - As a result of the above command, we can see dependency ("@wdio/cli": "^x.xx.xx") get added in the package.json file. (To check version npx wdio --version)
- 4. WebdriverIO Configuration
 - Once the dependency is added in the package, we need to create a webdriverIO configuration file for executing test scripts through WebdriverIO.
 - npx wdio config -y (or npx wdio config)

- By this command, the following packages are configured automatically, if needed we can change later if you want to.
 - @wdio/local-runner
 - @wdio/mocha-framework
 - @wdio/spec-reporter
 - @wdio-chromedriver-service
 - @wdio/sync chromedriver
- Again, here we have used the '-y' option so all default options get set up for you. And wdio.conf.js file gets created under your project root folder. We will use this file to configure our project.
- By default, this auto-configure set services as the chromedriver, framework as Mocha with BDD options.
- If we need different structure simply run below command *npx wdio config*
- We can choose displayed options according to your requirements. And, this is the final output after entering the above options.

```
$ npm init -y
Wrote to C:\Users\232338\OneDrive\Desktop\WDIO\DemowDIOProject\package.json:

{
    "name": "demowdioproject",
    "version": "1.0.0",
    "description": "",
    "main": "index.js",
    "scripts": {
        "test": "echo \"Error: no test specified\" && exit 1"
    },
    "keywords": [],
    "author": "",
    "license": "ISC"
}
```

```
$ npm i --save-dev @wdio/cli
added 496 packages, and audited 497 packages in 51s
92 packages are looking for funding
  run `npm fund` for details
found 0 vulnerabilities
```

- ? A project named "demowdioproject" was detected at
- ? What type of testing would you like to do? (Use arrow keys)ect? Yes
- ? What type of testing would you like to do? E2E Testing of Web or Mobile
- ? Where is your automation backend located? (Use arrow keys)
- ? Where is your automation backend located? On my local machine

- ? Which environment you would like to automate? (Use arrow keys)
- ? Which environment you would like to automate? Web web applications in the
- ? With which browser should we start? (Press <space> to select, <a> to toggle
- ? With which browser should we start? Chrome
- ? Which framework do you want to use? (Use arrow keys)
- ? Which framework do you want to use? Mocha (https://mochajs.org/)
- ? Do you want to use a compiler? TypeScript (https://www.typescriptlang.org/)
- ? Do you want WebdriverIO to autogenerate some test files? (Y/n) Y
- ? Do you want WebdriverIO to autogenerate some test files? Yes
- ? What should be the location of your spec files?
- ? What should be the location of your spec files?
- ? Do you want to use page objects
- ? Where are your page objects located?
- ? Which reporter do you want to use? (Press <space> to select, <a> to toggle s
- ? Which reporter do you want to use? spec
- ? Do you want to add a plugin to your test setup? (Press <space> to select, <a>
- ? Do you want to add a plugin to your test setup?
- ? Would you like to include Visual Testing to your setup? For more information γ
- ? Would you like to include Visual Testing to your setup? For more information
- ? Do you want to add a service to your test setup? (Press <space> to select, <a>

- ? Do you want to add a service to your test setup? visual
- ? Do you want me to run `npm install` (Y/n)
- ? Do you want me to run `npm install` Yes