# Cypress Automation

## Installing Visual Studio Code:

- Download **Visual Studio Code** here https://code.visualstudio.com/download

## Installing Cypress:

- Create project folder in desired location
- Navigate to folder via command prompt
- Follow instructions here:
  https://docs.cypress.io/guides/getting-started/installing-cypress.html#npm-install
  `npm install --save-dev typescript`
  - **Important** after install open cypress by using `./node_modules/.bin/cypress open`
    This creates additional folders in project folder
- Next create package.json for cypress project
  - In Visual Studio Code command terminal type:
    **npm init** (and go through its options)
    **Note:** package name will be package name of project folder by default
    **Note:** press Enter leave options blank
    Package.json Video Link: https://www.youtube.com/watch?v=kxzHbxlmXW8
  - After all options completed **package,json** file will be created
- Next change how cypress is started from command line
  - Add the following to package.json
    https://docs.cypress.io/guides/getting-started/installing-cypress.html#Adding-npm-scripts
    ```
    {
    "scripts": {
    "cypress:open": "cypress open"
    }
    }
    ```
  - now start cypress `npm run cypress:open`
    no longer do we need to use `./node_modules/.bin/cypress open`

## Cypress Add-Ons :

- cypress-xpath
  https://www.npmjs.com/package/cypress-xpath
  add `require('cypress-xpath')` to `cypress/support/index.js`
- cypress-wait-until
  https://www.npmjs.com/package/cypress-wait-until
  add `import 'cypress-wait-until';` to `cypress/support/commands.js`
- Install jQuery add-ons of jQuery type API call ability
  npm install jquery --save
  npm install @types/jquery --save

## Visual Studio Code Add-Ons :

- Install TypeScript
  https://www.npmjs.com/package/typescript
- After TypeScript installed create tsconfig.json file (if not already created)
  https://docs.cypress.io/guides/tooling/typescript-support.html#Install-TypeScript
- Next add the following
  - Make sure following is added to file:
    "target": "es5",
    "module": "commonjs",
    "lib": ["es6", "dom", "es2017"],
  - add this at end of file  `"**/*.ts", "node_modules/cypress-xpath","node_modules/cypress-wait-until"`
    https://www.typescriptlang.org/docs/handbook/tsconfig-json.html
  - also add to file `"suppressImplicitAnyIndexErrors": true,`
    https://stackoverflow.com/questions/40358434/typescript-ts7015-element-implicitly-has-an-any-type-because-index-expression

# Set Up Local React Environment

- Install Docker
  https://docs.docker.com/docker-for-windows/install/
  https://hub.docker.com/editions/community/docker-ce-desktop-windows/
  After installing docker you may be asked to restart laptop
- clone https://github.com/DiligentCorp/be-react-web.git
    - After clone put in like C:\BE React\be-react-web-master
    - Then also clone https://github.com/DiligentCorp/material-atlas.git
        - Then put in same folder at same level as above C:\BE React\material-atlas-master
        - Rename C:\BE React\material-atlas-master to C:\BE React\material-atlas
- install NodeJS
- Install `nvm` (node version manager` and ensure you're using Node version `12.16.1`
  https://nodejs.org/dist/v12.16.1/
- Install the `yarn` package manager
- Run `yarn install` while inside the root of the `be-react-web` folder on your machine to install app dependencies
- Run `yarn run start` and see if you can get the app running on `localhost:3000`