Clip Notes

to run

SSA Training Projects

for

SSA Laptop in SSA Network

# Required Software

Some of the software are required to setup development environment

1. Git for Windows, provides command line tools to work with git repository
2. Node for Windows, javascript compiler and runtime environment
3. RAD or Eclipse
4. Notepad++, enhanced text editor for editing source code files.

# Configuring Proxy Settings

Since the development tools uses internet to download necessary packages in real-time, configuration of proxy setting is necessary

## Proxy settings for Environment Variable

Add the following variables in user environment settings.

1. HTTP\_PROXY = http://<pin-number>:<password>@access.lb.ssa.gov:80
2. HTTPS\_PROXY = http://<pin-number>:<password>@access.lb.ssa.gov:80
3. NODE\_TLS\_REJECT\_UNAUTHORIZED = 0

## Proxy settings for GIT

Execute the following command in a GIT BASH shell

git config --global http://<pin-number>:<password>@access.lb.ssa.gov:80

## Proxy settings for Node

Execute the following command in a GIT BASH shell

npm config set registry=http://nexus.ba.ssa.gov:8082/nexus/content/groups/npm-all/

npm config set http-proxy=http://<pin-number>:<password>@access.lb.ssa.gov:80 -g

npm config set https-proxy=http://<pin-number>:<password>@access.lb.ssa.gov:80 -g

npm config set strict-ssl false -g

Note: npm configuration file .npmrc is located in the root of user profile folder. This file can be opened in notepad++ for review and edit in case of any error.

# Installing the npm packages

Open a Git Bash shell, change to the project directory and execute npm install statements. Since the high-level ‘npm install’ not able to resolve all package automatically, install necessary package one after another.

npm install express --save

npm install body-parser --save

npm install cookie-parser --save

npm install cors --save

# Conversion of local dependency library

Some of the javascript library and CSS resources are linked to external servers not able to be accessed in the browser due to firewall security. To access these resources properly, they needs to referenced locally from the application. Some example of external resources are

<link rel="stylesheet" href="http://ajax.googleapis.com/ajax/libs/angular\_material/1.1.0/angular-material.min.css">

<link rel="stylesheet" href="http://netdna.bootstrapcdn.com/font-awesome/4.1.0/css/font-awesome.min.css">

<script src="https://s3-us-west-2.amazonaws.com/s.cdpn.io/t-114/svg-assets-cache.js"></script>

<script src="https://cdn.gitcdn.link/cdn/angular/bower-material/v1.1.0/angular-material.js"></script>

## Use of Bower

Bower is a package manager for web, it uses node and git internally manage javascript and CSS library. Following statements needs to be executed in git bash shell, to convert necessary libraries to local dependency for slackclone project.

bower install angular-material --save  
bower install angular-route --save  
bower install font-awesome --save  
bower install loadsh --save  
bower install svg-assets-cache --save

Note: Alternate solution to bower is manually download necessary javascript and CSS library files and include them to project directory. This could become tedious process in case of upgrading those library.

## Cross Browser Script Changes

Some of the javascript statements are not fully supported by Internet Explorer, they need to be changed to cross browser supported statements.

1. Use of script statement **for … of** not supported, proposed solution would be using **for … in** statement.
2. IE does not support **.find** method in array of objects, proposed solution would be using javascript library like underscorejs (<http://underscorejs.org)>.

After these changes, slackclone project runs on IE and chrome browsers.

## Other Script issues

Some other compatibility issues found on other projects…

1. IE seems not support this promise statement **.then((messages) => {**  
   solution: Use **.then(function(messages) {**
2. In case of missing promise library, browser throws “Reference error: Promise is undefined”  
   solution: include a local copy of bluebird.js or reference it from external   
   <script src= ‘https://cdnjs.cloudflare.com/ajax/libs/bluebird/3.4.6/bluebird.min.js’>