Local Environment Setup

# Github

See document: Github

# Database

## Install MySQL

**Software**

Software: MySQL Community Edition  
Link: http://dev.mysql.com/downloads/  
Click: MySQL Community Server  
Version: 5.7.17 (as of 1/2/2017)

**Installation**  
Accept all the default configuration during installation.  
Some of the components may fail to install. Make sure you have the following installed successfully:

MySQL Server

MySQL Workbench

Connector/ODBC (?)  
MySQL Root Password:

Enter the password that C4SG configuration uses: mysql

If you use a different password, please change the config setting in *application.properties*:

# Username and secret

spring.datasource.username = root

spring.datasource.password = ***mysql***

## Run the DDL script

Launch MySQL Workbench.  
Run the script located in the repository:

\Documentation\Database\Table\_Definition.sql  
\Documentation\Database\Data\_Load.sql

Refresh Schemas. You will see c4sg schema created. Tables are loaded with dummy data.

# Backend

## Setup in IDE

Install your perfered IDE: Eclipse, STS, IntelliJ Idea, etc.  
Import C4SGSvc source code.  
Run the application in IDE.  
Make sure MySQL is running.

## Test Backend

Test JSON API in browser: http://localhost:8080/api/project/all  
The API show returns JSON data

## Eclipse Specific Setup

### Download Java JDK

Link: http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html

Version: 8u112 ( as of 1/2/2017)

Accept all the default configuration during installation

### Download Eclipse

Link: https://eclipse.org/downloads/

Version: Neon (as of 1/2/2017)

Type: Eclipse IDE for Java EE Developers

### Launch Eclipse

Select a directory as workspace: Click "browse" to create a new folder as your workspace

### Install Plugin

Help -> Eclipse Marketplace

Install Plugin: Spring Tool Suite (STS) for Eclipse 3.8.3.RELEASE

### Import project

File -> Import -> General -> Projects from Folder or Archive

Import Source: C4SGSvc

Import as: Maven

Verify there is no warnings or errors

### Run application

Right click on project: C4SGSvc, Run as: Spring Boot App

Verify Last line in console: org.c4sg.C4SgApplication : Started C4SgApplication in 9.852 seconds

# Frontend

## Install IDE

Install your perfered IDE: Sublime, WebStorm, etc

## Install Node.js

Software: Node.js (we install Node.js in order to get npm package manager from Node.js)  
Link: https://nodejs.org/  
Version: v6.9.2 LTS (as of 1/2/2017)  
Accept all the default configuration during installation

## Install npm packages

Click Windows Start button, launch "Node.js command prompt"

Run the commands

> cd <path\_to\_local\_repository>\C4SGWeb  
> npm install

A new folder is created under C4SGWeb: \node\_modules

## Test Frontend

Run the command: > npm start  
The application is launched in browser: http://localhost:3000/  
Click Volunteer - > Projects, verify that you can see dummy projects retrieved from database.