# Developers guide (Front-End)

Note: For Linux and Mac users only.

#### Overview:

This project was built for AssessMachines(this). The project uses ace editor as the base editor. For more information have a look at this. The editor will use it's intellisense for the Java, C++, C and C#.

# 1. Starting the virtual enviornment:

Type in source bin/activate in the console. There is no need to install Django specifically.

# 2. Intellisense data management:

#### 2.1 Extracted Data:

We have extracted data from most of the important libraries and classes. All the localhost:8000/data/lang\_id/lib.

Example: localhost:8000/c\_cpp/stdio.h (Loads data for stdio.h) Example: localhost:8000/c\_cpp/stdio.h,stdlib.h (Loads data for both stdio.h and stdlib.h)

The exctracted data is then intellisensely shown into editor.

#### 2.2 Snippet Data:

The extracted data is highly abstract and can go very complicated in a complex manner. So we also store some intellisense data in form of snippets which is a highly common way in which the user wants the intllisense data to be.

### 3. A guide through editor:

### 3.1 Embedding ace inside the code:

Project has it's ace code embedded in the file /src/templates/index.html. For details about embedding ace code, have a look at this this.

### 3.2 Enabling ace's intellisense:

To enable ace's intellisense features just have a look through /src/static/enableIntellisense.js.

#### 3.3 Language ID's:

#### Language ID Language

c\_cpp C c\_cpp C++

#### Language ID Language

java Java csharp C#

#### 3.4 Adding snippets:

Snippets are a easy way of storing intellisense features inside of ace. In snippets the data can be stored according to users need very easily. For adding more snippets to the editor, Go to src/static/src-noconflict/snippets. To select a particular languages snippet just choose the lang id.js file from the current directory.

#### 3.5 Showing Intellisense from Extracted data:

First add the function which will handle adding all the intellisense data in /src/static/enableIntellisense.js. All the intellisense data reterival is done in the function functionExtractor in the file /src/templates/index.html.

#### 3.6 Adding more themes:

Currently the project has three editor themes. For adding more themes, look at /src/src-noconflict/theme-id.js.

# 4. A guide through functions:

All the functions below are in the file /src/static/index.js.

### 4.1 changLang:

The function detects the change in language and store it to the global variable lang which helps in fetching the intellisense data.

### 4.2 changTheme:

The function detects the change in theme and set the theme to the selected theme.