How to Build

IVA is developed in HTML5, therefore it is mainly developed in JavaScript and makes a heavy usage of HTML and CSS. It uses NPM as building tool. IVA also requires of OpenCB JSorolla project to be built, this is a JavaScript library developed for several OpenCB web-based projects, this can be found as Git submodule in IVA.

Stable releases are merged and tagged at *master* branch, you are encourage to use latest stable release for production. Current active development is carried out at *develop* branch, only building is guaranteed and bugs are expected, use this branch for development or for testing new functionalities. The only dependency of IVA from OpenCB is JSorolla.

Prerequisites

The following technologies are needed to build IVA: Node.js and npm

Installing Node.js and npm

To install Node.js you can visit this link.

npm stands for *node packaged modules* and it is the dependency manager of Node.js.

Cloning

IVA is an open-source project and can be downloaded either as package(tar.gz) from GitHub releases or source code by cloning the repository.

Default *develop* branch can be downloaded by executing:

```
$ git clone https://github.com/opencb/iva.git
Cloning into 'iva'...
remote: Counting objects: 624, done.
remote: Total 624 (delta 0), reused 0 (delta 0), pack-reused
624
Receiving objects: 100% (624/624), 139.37 KiB | 0 bytes/s,
done.
Resolving deltas: 100% (356/356), done.
Checking connectivity... done.
```

Latest stable release at *master* branch can be downloaded by executing:

```
$ git clone -b master https://github.com/opencb/iva.git
Cloning into 'iva'...
remote: Counting objects: 624, done.
remote: Total 624 (delta 0), reused 0 (delta 0), pack-reused
624
Receiving objects: 100% (624/624), 139.37 KiB | 191.00 KiB
/s, done.
Resolving deltas: 100% (356/356), done.
Checking connectivity... done.
```

After this, in both cases, you must execute the following command to fetch the JSorolla submodule (only the first time):

```
git submodule update --init

Go to lib/jsorolla and checkout to develop branch of Jsorolla by

cd lib/jsorolla
git checkout develop
```

Build

First, you must update JSorolla dependencies, from the root folder execute:

```
cd lib/jsorolla
npm install
```

Finally, to build IVA execute:

We have to install npm packages for IVA, from the the root folder execute:

```
npm install
```

This will make npm to look at file package.json and install locally all the dependencies listed there. *Note*: Because a bug in Google Polymer npm script you have to create a symbolic link, this is likely to be solved soon, execute:

```
cd node_modules/@polymer
ln -s ../@webcomponents/shadycss/
```

And now execute:

```
npm run build
```

when completed, all compiled files will be located under the *build* folder.

Testing

You can copy build content to a web server such as Apache HTTP Server and open your favourite internet browser to open IVA.