

How to customize and deploy the MEC tool which is driven from TEAMMATES.

- Prerequisites

- Knowledge of Java Programming for backend customization
- Knowledge of Web development for frontend customization
- Google Cloud Account to deploy the app

In order to make any customization or new feature on the tool, the guides should be followed which are provided by open source project, it is called Teammates.

- All guides and instructions regarding to Teammates is also valid for MEC.
- All documentation regarding to Teammates development could be found here:
<https://github.com/TEAMMATES/teammates/blob/master/docs/README.md>

In addition to those documentation, following information could be used to make rapid customization in UI side and integrate your own mailing service into MEC tool.

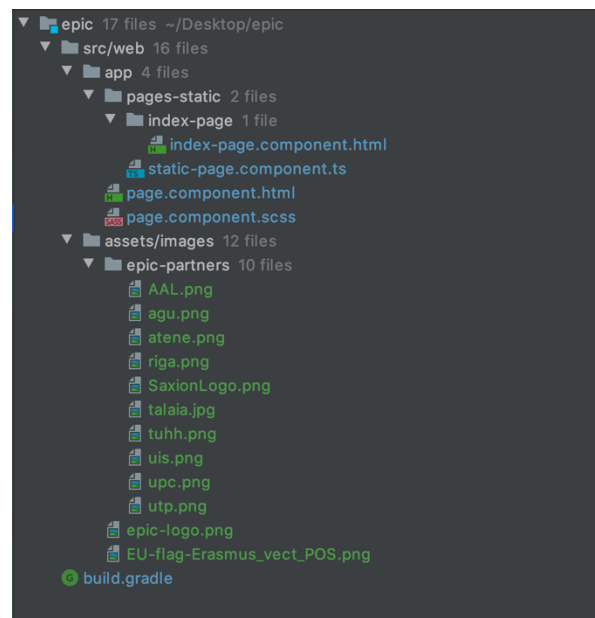
Front and Backend Customization

- The customization is very abstract word to use, since it may differ one person to another, in this section, only basic UI customization will be discussed and if you are interested on how to make customization on backend functionalities of MEC, tips will be given.

As you would guess, in order to make changes in frontend, you may need to implement those changes in the displayed files. (- right side -)

Indeed, there are plenty of HTML and CSS files in the project, you can change them according to your wishes and see changes in your local development environment by running project in development mode. How to run frontend and backend components of the project in development part is given here;

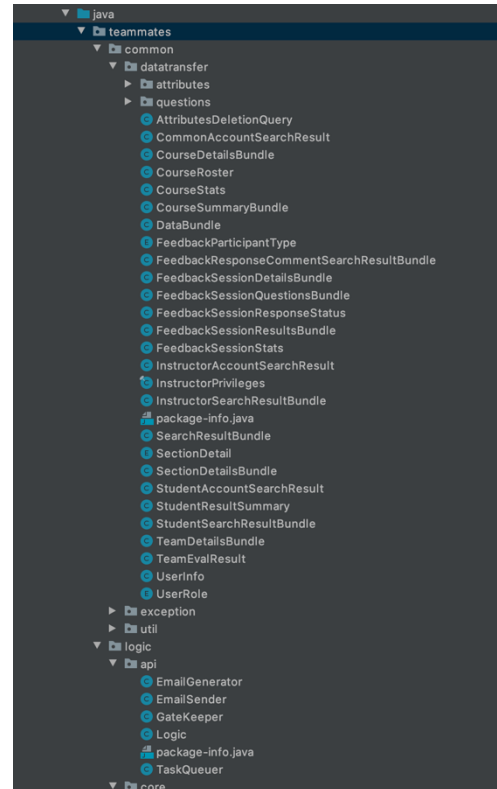
<https://github.com/TEAMMATES/teammates/blob/master/docs/development.md#managing-the-dev-server-front-end>



These changes can only effect frontend component part of the project, if you would like to deal with backend component of the project you may need to change following files in given the picture below.

Note that MEC is only UI customized version of Teammates project, there are enormous of different things that you can implement by adding or removing features from Teammates using Java development knowledge.

All necessary support, aid, and updates could be watched by following this repository ; <https://github.com/TEAMMATES/teammates> It is official repository of Teammates project.



Ready to deployment? [Follow the steps below]

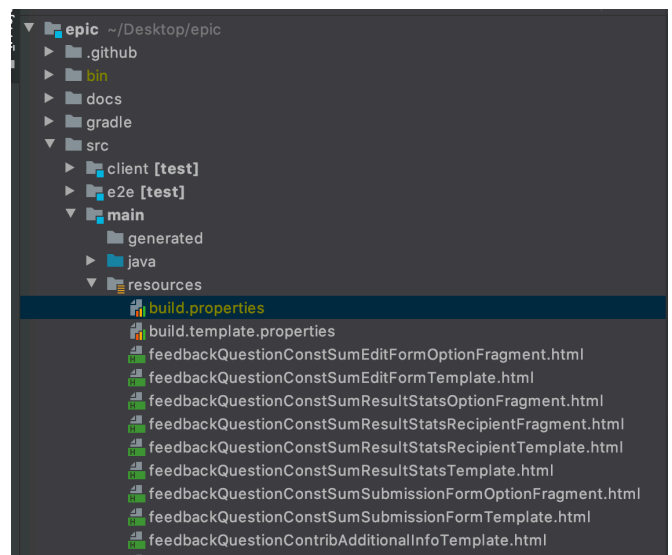
1. Change default values in build.properties

In the following screen shot, you are seeing **build.properties** file which is a configuration file for your web application, it is used for deployment and development, in that file all the fields are important to care.

In **build.properties** file, all necessary information has been provided as comments, if you would like to deploy it without any further customization, you just need to change all required fields which are

[**app.id**, **app.version**, **app.frontenddev.url**,
app.production.gcs.bucketname,
app.backup.gcs.bucketname,
app.email.sendername, **app.email.service**,
app.mailgun.apikey]

You need to define them according to your wishes, emailing service should be configured before deploying your application into Google cloud, you can buy some emailing service from one of listed providers in **build.properties** file.



Once you are done with all necessary steps, you should configure Google account to have the application in your Google account.

2. Setup Google Account

This is a basic setup for web application which runs on Java 8, you can see how you can setup your google environment from Google official documents described here:

<https://cloud.google.com/appengine/docs/standard/java/tools/uploadinganapp>

After you have setup your development environment ready for deploy as described here;

<https://github.com/TEAMMATES/teammates/blob/master/docs/development.md#deploying-to-a-staging-server>

3. Deploy

You can deploy the application with only one command, it is ;

```
./gradlew appengineDeployAll
```

Before issuing this command, please be aware that you have done with **build.properties** file and you have configured your development environment with google CLI tool as described in given Google Cloud link above.

This command will render all files related to backend and frontend, eventually deploy your customized version of the tool to Google Cloud. Your Gmail account will be Admin account for your deployment.

If you encourage with any problem you can refer Teammates official repository or contact with us by emailing epicproject2020@gmail.com , if your question is very specific.