HOW TO BUILD AND TEST THE TEI / STYLESHEETS USING DOCKER

Step 1: first step is setting up the local development environment file clone the repositories , these are can be obtained from the following links

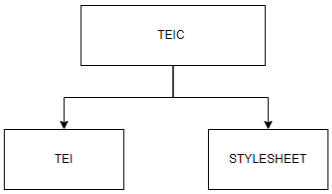
1. GitHub - TEIC/TEI: The Text Encoding Initiative Guidelines
2. GitHub - TEIC/Stylesheets: TEI XSL Stylesheets

We need to install bash shell i.e. git bash https://git-scm.com/ after installation bash shell we can clone the TEI and Stylesheet repositories using git bash command line follow the bellow command

1 . git clone https://github.com/TEIC/TEI.git

2.git clone https://github.com/TEIC/Stylesheets.git

It is probably good idea both repos in a same directory like this for example: c/TEIC



As you will see, it's a good idea to do this somewhere under the Users directory, whether you're on Mac or Windows. If you're running Ubuntu or some other Linux, you can put them where you like.

Step 2 : The TEI has set up a pre-built test environment in Docker that you can use. First, you should get Docker Community Edition (CE). On a Mac, go to https://docs.docker.com/docker-for-

mac/install/, on Windows, https://docs.docker.com/docker-for-windows/install/, and on Linux, choose your specific platform here: https://docs.docker.com/install/. Follow Docker's "Get Started" instructions for your installation to configure Docker and include the TEI repositories in your Docker container. Once you have Docker installed and set up, you can run the docker image and grab the copy of the pre buit image .

```
docker pull teic/teidev-docker
```

Step 3 : Now we are going to build and test the docker environment , before running the environment need to know the time zones ,you can look the up your time zone click the bellow link timezone . You need it because the default time zone of the container is UTC, which will lead to strange warnings when you run the builds unless you actually happen to be in sync with UTC, because the local time of your computer will differ from that set in the container. The directory containing your repositories will be mapped to a directory in the container (which is why it's easier to put them side-by-side).You'll run the test container with a command like:

docker run --name tei -v //c//TEIC:/tei -it -e TZ=Europe/Rome teic/teidev-docker

sometimes above command may not work based on your dependencies so feel free to add winpty before the command .

Winpty docker run --name tei -v //c//TEIC:/tei -it -e TZ=Europe/Rome teic/teidev-docker

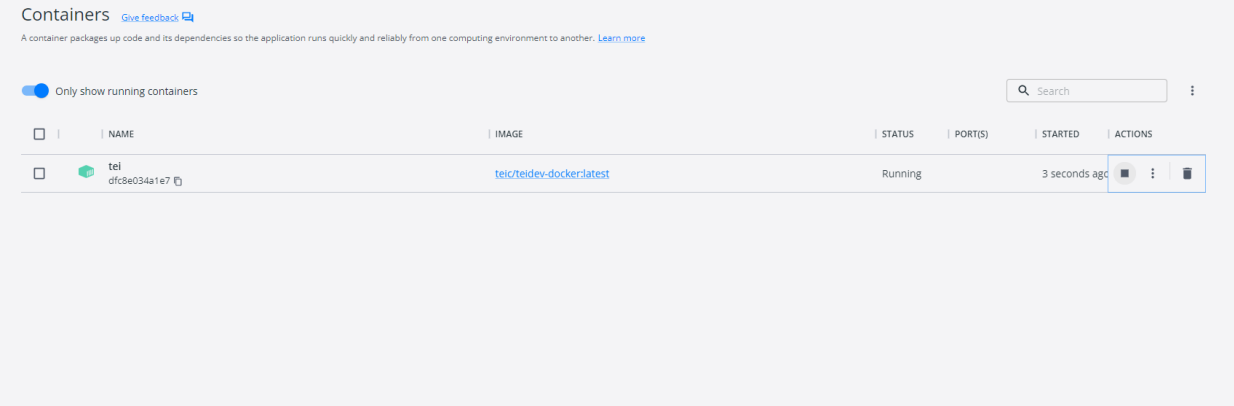
Step 4: now will explore the above command 'tei' means bashshell inside container (feel free to choose any name if you want) at root directory. The directory on your local file system where you cloned the TEI and Stylesheets repos is mapped to /tei in the container. //c//TEIC is your cloned repo . v is the volumes of your container . tz is time zone we set to Europe /Rome . and finally pre build image tag is teic/teidev-docker. If you to check the root directory you can check by flowing command i.e cd tei and then ls . you can find the repositories .

Step 5 :

There's one more piece of work to be done, and that's to tell the TEI guidelines build process where it can find your copy of the Stylesheets. You do that by adding a local.mk file in TEI/P5. So, (from /tei) do cd TEI/P5 and then **echo "XSL=/tei/Stylesheets" > local.mk.**

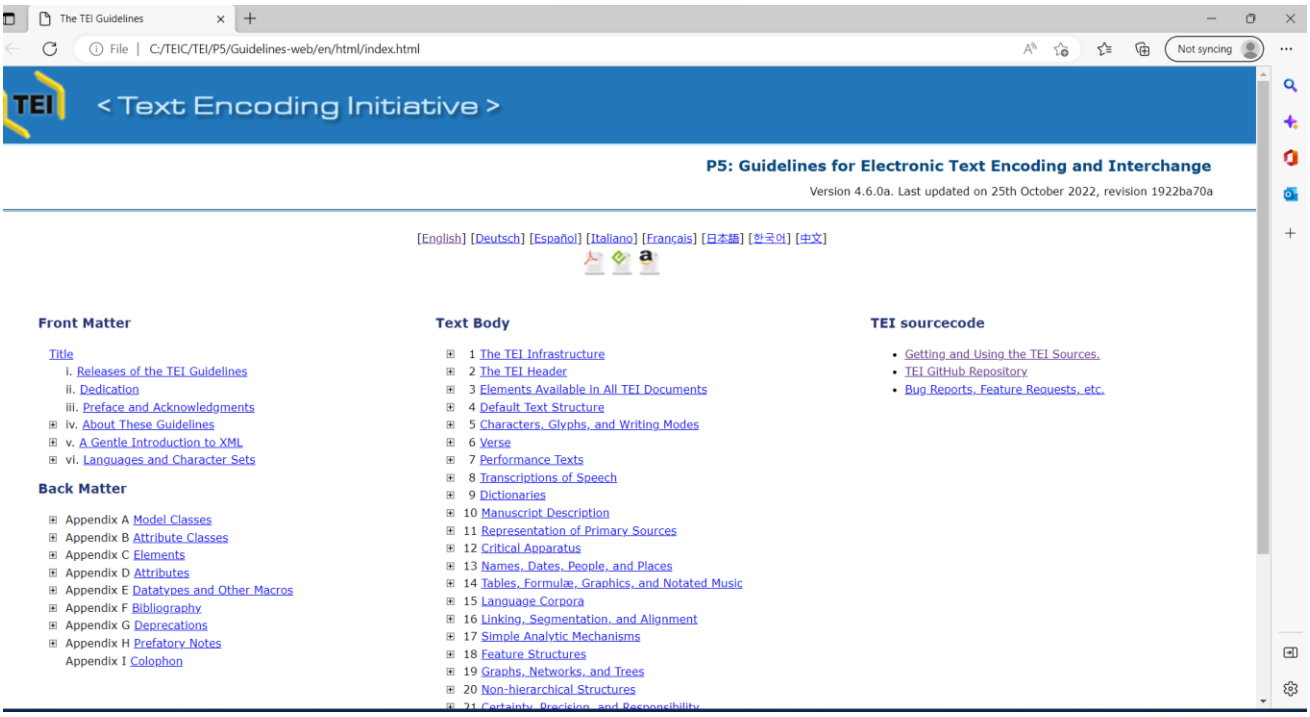
Step 6 : Now you can build things! And, what's more, you can work on the Guidelines and Stylesheets in your regular environment, and test them in Docker. The Docker command above will create a container named "tei", which you can return to later. Because it runs a Bash terminal, you can exit it by typing exit at the command prompt, and that will stop the container. You can restart it with a command like **docker start -ai tei** which will start the container and attach your terminal to it, with whatever state it was in when you left it.

Whe you start the container like docker start -ai tei automatically it will start your container will run like bellow image .



Step 7 : For instance, you can run (in /tei/TEI/P5) make html-web to create the HTML version of the TEI Guidelines. Once the procedure is complete, a directory called "Guidelines-web" will be created in your P5 directory. You may navigate to this folder from outside of your Docker shell, find the **index.html** file, and then use a web browser to view it. A program called "Make" is normally used to compile programs, but it can also be quite helpful as a kind of general batch scripting tool, which is how it is being utilized in this case. You should normally run Make inside the P5/ directory for the Guidelines, and you should run it in the Stylesheets directory at the top of the repository. Additionally, Make can be executed in any directory that has a Makefile. Be aware that the targets might change. Running make one level up from Stylesheets/Test is almost equivalent to running make test. If there are specific tests you want to troubleshoot, you can also

run individual test targets (for example, create test-oddity in Stylesheets/Test to test ODD-conversion techniques). The Makefiles contain a definition for each target.



You just skipped over the Using the https://tei-c.org/guidelines/p5/using-the-tei-github-repository/ document, which contains additional information on all the processes you can run as well as scant instructions on how to set them up. Along with the make targets mentioned there.