Section 2. „Dockerfile Introduction”

Links:

https://github.com/pythonincontainers/flask-hello

Commands:

```
$ git clone https://github.com/pythonincontainers/flask-hello
$ cd flask-hello
$ atom .
$ docker run --rm -it -p 5000:5000 -v ${PWD}:/app python bash
# pip install Flask
# export FLASK_DEBUG=true
# python flask-hello.py
# exit
$ docker build -t flask-hello:1.0 .
$ docker run -d -P --name flask-hello flask-hello:1.0
$ docker ps
$ docker logs flask-hello
$ docker inspect flask-hello:1.0
$ docker rm -f flask-hello
$ docker rmi flask-hello:default
```

Image build algorithm:

```
Project = new_build_context(working_directory, configuration_files)

Code = new_code_files(desired_functionality)

Dockerfile = new_build_script(base_image, workdir, files_to_copy,
run_intructions, env_vars, expose_ports, entrypoint, cmd)

Image = docker.build(Project, Dockerfile)

Test_result = docker.run(Image, options)


While not good(test_result):

    Code.update(test_results)

    Dockerfile.update(test_results)

    Image = docker.build(Project, Dockerfile)

    Test_result = docker.run(Image, options)

Else:

    Image.push(repository)


Clean(the_mess)
```