

Homework 5 – Advanced Software Service Engineering (Fall 2017)

Deadline: Nov. 24th, 2017 at 10:59 AM.

Solution code **MUST** be submitted to Moodle¹ as a single *surname_name_hw5.zip* file.

All submissions will be checked for **plagiarism**. Plagiarised solutions will be awarded with an F (0) grade.

Exercise – Write a Dockerfile to build a Docker image that runs the cowthink+ app.

The image shall exploit `ubuntu:latest`, run all necessary commands to install the required applications and come with a Bash² script `entrypoint.sh` that acts as `ENTRYPOINT`³ when starting a container from the image.

The `entrypoint.sh` script shall be copied into the container and perform:

1. `fortune | cowthink` when the number of arguments (`$#`) passed to the script is 0, or
2. `cowthink` over all arguments passed in to the script (`$@`).

Submit the Dockerfile, the `entrypoint.sh` script, along with a brief report (200 words at most) in which you describe them, and you show the result of building the image and running containers from it (testing both 1 and 2).

Learning Outcomes

- ✓ Learn on Docker basic commands.
- ✓ Run Docker containers.
- ✓ Create Docker images using Dockerfiles.

¹ <https://elearning.di.unipi.it/course/view.php?id=106>

² <https://www.gnu.org/software/bash/manual/bash.html>

³ <https://docs.docker.com/engine/reference/builder/#entrypoint>