

COM7940 Cloud Computing

2020/21 S2 Project

* Due day: 23:59, 20th Apr, 2020
* Submission method: Code on GitHub, Report to Moodle
* Group size: 1 to 3
* Total marks: 17%

**Objective:**

Based on the chatbot program used at lab, you are asked to further develop it to a more practical chatbot. Remember, this is not a programming course. We are looking at if you are excel at playing with cloud and related technology rather than making a stunning app.

**Context:**

People are gaining more awareness about their personal health. Many of them are looking for health advices in a convenient way, like a chatbot. Your task is to develop a chatbot that gives personal health advices to user, including but not limited to:

* Healthy dietary
* Weight losing
* Workout guide (Gym)
* or any other

Depends on the number of members in your group, you are going to prototype 1 to 3 features on your chatbot. A feature can be, but not limited to, one of the followings:

* Calculating calories
* Finding sportmates on map
* Tracking body weight

Note: the data of the chatbot does not need to be accurate or comprehensive.

**Technical Requirement**

Your project should fulfill the following requirements. Fail to comply will incur penalty:

* the chatbot must be on telegram;
* the app must consume an external service other than redis;
* the app must be host on a cloud platform other than Heroku;
* the app must be managed by git; and
* container technologies must be used.

Additional marks will be given to groups who are able to demonstrate:

* Good Practices of DevOps workflow;
* the Scalability of their app;
* the Load balancing of their app;
* the Orchestration of multiple containers;
* Security measurements of their app;
* or any practical consideration

Meanwhile UI/innovation/project completeness/etc will carry only a small fraction of marks.

**Deliverables and Dues**

* Grouping info: By 11/3/2021 (People who did not sign up will work individually)
* A running telegram chatbot: By the main due day, submit together with the report
* Code: By the main due day, hosted on Github and not modify after the due
* Report: By the main due day, must contain, but not limited to, the following items:
  + the ID of your chatbot;
  + full name and ID of all members;
  + a Summary of the app;
  + the Job division among members;
  + Evidences of fulfilling the technical requirements (capture your screen perhaps?);
  + references.
* Presentation: not required.

**Use of public resources**

You are allowed to use any public resources (both data and code) to construct your chatbot. However, you must cite those work properly. Although our project objective is to *play* with cloud technologies rather than coding, you should still try to integrate other resources into your base code (the code you received at lab) instead of directly hand in their code.