[CMSC 455] Assignment #2: REST APIs

Due: End of Day, October 10th, 2021

The goal of this assignment is to explore implementing REST APIs, specifically, a microservice application that consists of two services communicating via REST. Below are the details.

1. The first of the two services is called `PingService` and the second `PongService`. The `PingService` has a HTTP GET endpoint called `ping` and the `PongService` a HTTP GET endpoint called `pong`. When `ping` receives a request (which does not contain any input data), it, in turn, makes a GET request to `pong`, records the time it takes to complete the request (in milliseconds) and returns a JSON payload with a single value `pingpong_t`. The other end point `pong` always returns a randomly generated integer value.

2. Both of the services use HTTP Digest Authentication, with a default username/password pair set to `vcu` and `rams`.

3. Both services are deployed to Heroku and available to be contacted from anywhere. You should be able to create a free Heroku account that would allow you to do this.

Submit: Submit 1) ALL of the application code required to run your application as a Zip file; and 2) the URLs to contact both of your services on Heroku; via Canvas by the deadline.