

## [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.