**Instructions:** Carefully read the scenario details listed below. During the final, at anytime you may ask the instructor questions, but there is no guarantee for answers. You must also work alone.

*Scenario Details:*

You have recently been hired on as the System Administrator for GrantIt Consulting Services, LLC. Sally, the IT Director (who is also your boss), has asked you to work on a collaborative project with Tony, who is the Director of Client Relations, and Ray, who is the Director of Marketing.

After nearly a 3-hour breakfast-provided meeting to discuss the project, here is a list of what decisions have been made so far:

* Sally said she doesn’t know much about databases, but she said using SQL and a database like **MySQL** would be a good way to store future client information. She suggested maybe **creating a script** that would setup the **gcstest database**, the **Clients table**, and the columns that go inside of it. Lastly, she said once the test information has been inserted…she would like a database backup so she can test it out on her computer.
* Sally also mentioned she would like you to spend some time writing some **system documentation**, that would help explain where the test data comes from, any specific steps you had to complete, and anything else you feel she should know (try to impress her!)
* Tony is all for better organization and he is excited to see something where he can get rid of the old spreadsheet way of doing things! He said due to the sensitive nature of the information, he can’t provide real data, but he was able to share column names he is currently using: **id**, **first\_name, last\_name, city, state, postal\_code, email, and phone**.

Note: Use Mockaroo (<http://www.mockaroo.com)> to generate some test data to use. Also, note you can change the format to SQL and you can leverage what it generates.

* Ray said that he would like an internal API or data service built, so that they could integrate it with their current CRM software. Also, he is thinking a possible company website redesign would be a possibility (Any suggestions for him?). For now, he suggested that you talk to Matt, an external IT Consultant, about this next step.

*Grading Details:*

Creation of script:

* Creates gcstest database \_\_\_ / 5
* Creates Clients table and uses listed column names \_\_\_ / 5
* Test data has been inserted into the table \_\_\_ / 10
* Database backup (dump file) has been created \_\_\_ / 10

System documentation:

* Attention to detail (business, technology, etc.) \_\_\_ / 10
* Good use of technology and tools \_\_\_ / 10

Running container instance of local test data API \_\_\_ / 20

Total points: \_\_\_ / 70