CS499 Cloud Computing and Big Data Assignment 2 - JHipster with EC2/RDS

Due Date

Monday before class, Feb 6, 2017

Score

50

Questions and Directions

In this assignment, you need to use the great framework - JHipster to build an application. The main work of this assignment is to learn how to use JHipster: https://jhipster.github.io/

JHipster is a complete code generation framework for web services. It's based on Java Spring, and uses a number of the best practices and tools. You don't have write any code. You just need to design your data models and let JHipster to generate everything for you.

You need to accomplish the following using JHipster:

- 1. Generate the code base for a Monolithic web service
- 2. Choose relational database as your database option
- 3. For Production database, you should use MySQL. You need to run a MySQL RDS instance in AWS and use that database server in the Production mode.
- 4. For Development database, you can just use a disk-based or memory-based database
- 5. Use HTTP Basic authentication
- 6. Once the code base is generated, you need to generate some entities. You can design any application scenario, but you need at least 3 entities and at least 2 relationships. See https://jhipster.github.io/creating-an-entity/ for how to create entities.

Once you have generated everything, you should open the project in Eclipse/IntelliJ (In Eclipse you might see some errors from the web resource files, don't worry about those as long as you don't have errors in the Java source files). Run the project locally and verify if things are working in the localhost.

If everything works, you need to build the project with the Production mode, and deploy the service to an EC2 instance. You need to learn how JHipster is controlling the dev/prod build. You don't have to use those deployment/cloud/container options. You can simply generate a jar file and remotely copy (i.e., scp command) the jar file to your EC2 instance.

Submission

You need to submission the following:

- 1. The URL to your GitHub repo that contains all the generated web service source code (the whole folder).
- 2. In the root foler of the Repo, please add a readme.md file to explain the entities/relationships you have created in your application.
- 3. The URL to your web service in EC2.

Please use Turnitin to submit your URLs.