In-Class Exercise 2: Hosting Shape App on Heroku

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Course Website: https://www.clear.rice.edu/comp504

Goals for this exercise

- Understanding how to host your web app

Important tips and links

NOTE: The instructions below are written for Mac OS and Linux computers, but should be easily adaptable to Windows with minor changes. For example, you may need to use \ instead of / in some commands.

1 Checkout Github Classroom Exercise 2 Repo

First, you'll need to accept exercise 2 repository by visiting GitHub ex2. Check out your github classroom lab 6 starter code from the remote github repo in IntelliJ from either the "Check out from Version Control" option on the welcome screen or the "Checkout from Version Control" option accessible under the top menu's VCS tab. Use the plus button in the pop-up window to add your GitHub ex2 repo. You should see a ex2 directory created in your working directory with the source code for this exercise.

2 Exercise

In this exercise, you will host on heroku the hw 1 starter code. Heroku is a free web hosting service that we can use to host web applications. You will follow the instructions in lecture 6 and Spark Java on Heroku to host the ball world app. You will need to take the following steps:

1. Configure maven to produce a jar file and tell the archiver which main class to use. The main class should be your controller. You must specify the complete class name (including package).
2. Create a new Heroku application in your exercise 2 directory by executing `heroku create [name]`. The name should be [netid]-ex2-shape-world. You'll need to first open a terminal and navigate to the exercise 2 directory before you execute the command.
3. Configure the heroku plugin in maven to launch the app you just created. The version should be 2.0.3. The name of the jar file to launch should be ex2-1.0-SNAPSHOT-jar-with-dependencies.jar. Change the heroku plugin `appName` to the name created in the previous step.
4. Deploy the Spark Java app on heroku by following slides in lecture 6. When you use maven to deploy your web app on heroku, you may see some code style errors. The next section discusses how to resolve the code style errors.

2.1 Check Styling Rules

Software developers often have their own opinions on how code should be styled. However, when working in groups, it's important to continue to have uniformity in code style across all source files. Code style rules enforce code uniformity. The code style rules are in `checkstyle.xml` in your project resources folder. You may notice a few code style errors when you run the maven command:

```
mvn heroku:deploy
```

If you encounter code style errors, fix the errors and rerun the command again. When all the errors are fixed, you'll see a build success message. You should then be able to navigate to your heroku hosted web application at `https://[netid]-ex2-shape-world.herokuapp.com/`.

3 Submitting the Exercise

Place your name and the heroku app url In the README.md file. Please don't forget to commit and push your work to your github classroom repository. To perform a git commit, select VCS on the menu and click on "Commit...". Add a commit message and click on the `Commit` button. To push the local changes, select VCS on the menu, highlight the Git option and select "Push...".