

## **CS577a Homework 4 Automated Testing (15 points)**

### **Instructions:**

- Please read the instructions **carefully**; there are **two options** that you can do!
- **Group of 3 or 2 within your team.**
- **Due date:** Monday, November 18, 2018 by 11:59 PM on DEN
- **Naming Convention:** Lastname\_Firstname\_HW4.zip

### **What to Submit:**

- All test cases/ test suite
- Any code you wrote (the easier way to do is zip the entire directory containing bookstore)
- Put them in a folder and zip the folder.

### **After submission:**

- We will let you know the time slots for you to sign up, so that you can come (can also do Google Hangouts for DEN students) and show us how to run your code. You will download your submission and run your code.

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## **Option1: Cucumber (15 points)**

### **Scenario:**

Assume that you are one of the lead testers in the company that sells books online. The project manager wants you to test the website before they launch it for the very first time. Your task is to generate test cases that will test some particular aspects of the website so that you can be sure that that part of the website operates as expected. However, the manager does not want you to test it manually since it is very time consuming in the long run. She wants you to do automated testing. Your tasks are to write test cases, create a bash script, and then use that bash script to run everything from start to finish in **one command**. Your script should also automatically fetch the results of your test cases (PASSED or FAILED) and write to a file.

### **For each scenario, create/run a feature that verifies the correct behavior:**

- ❖ Create a new user and verify that you can login with that account.
- ❖ Add two unique items in the shopping cart and verify that they are there in the shopping cart and that the total price is correct.
- ❖ Delete an item from the shopping cart and verify that it is no longer there.
- ❖ Admin can add a new book to the “New & Notable” section on the homepage, verify that the new book **does not** show up on the homepage after adding it.
- ❖ Verify that the guest user cannot access the Admin Menu.
- ❖ <Build your own test case - points for this based on the quality and usefulness of the test case - **this test should be a failed test!**>

### **Note:**

- In order to get a full score, each scenario has to be **independent** to one another. In other words, the order of running should not matter.
- Be sure to reuse steps!

- **Hint:** search for “*Capybara DSL cheat sheet*” for useful steps.
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### **Option 2: Test your own project (15 points)**

- You can form a group of 3 or 2 within your team and test your own project!
  - Create 6 test cases and be able to demonstrate the ability to (1) run these test cases automatically using a single command and (2) retrieve the result of each test case (PASSED/FAILED) automatically - write to a file.
  - These 6 test cases should **NOT** be the same as the test cases for other groups in your team (please discuss what your group will test among yourselves).
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### **Grading Criteria:**

#### **15 points**

- **2** points for each test case - these points depend on the quality of your test case, whether you do it correctly, whether you actually “*test*” anything, not just running the script, whether the test cases are independent of one another, etc.
- **3** points for the ability to run everything using one command (i.e., in terminal `./HW4`)
  - This includes: 1 bash script and the ability to retrieve the test results (either PASSED or FAILED) automatically (without hardcoding)