

CS 314 Black Box Testing In-Class Exercise and Post-Class Assessment

Assignment:

You must complete two tasks for this exercise:

Task 1. An **in-class** exercise done in **your team**, turning in the *Results Sheet* in this document at the end of class, and keeping a copy of the results to add to your A3 work.

Task 2. An **after class** short writing assignment done **individually**, with the results submitted to Canvas no later than 11:55pm Thurs, Feb 25, 2016.

The goal of Task 1 is to identify input domains for black box tests, equivalence classes for the domains, and boundary test inputs that you will use in Assignment 3. The goal of Task 2 is to evaluate your own learning regarding BB testing.

Task 1: Identify input domains, complete and non-overlapping domain partitions, and appropriate boundary conditions for a portion of the Adventure Game description and for a method in the Room class.

Instructions:

1. Put the names of each person in your group who participated in the in-class activity on the *Results Sheet*. Be sure to turn in this sheet at the end of class to receive credit.

From the pre-class document, here is the portion of the game description you will be using:

Some rooms have doors that are locked. To open locked doors, you must find the key to locked doors, which are placed somewhere in the labyrinth. As you go from room to room, you can

- go into an adjacent room or through an adjacent door,

2. Figure out the input domains for “going into an adjacent room or through an adjacent door”, their complete and non-overlapping equivalence classes, and their boundary conditions. Enter these in the table for #2 on the Results Sheet.

3. Consider the Room.getRoomContents() signature.:

```
public Item[] getRoomContents()
```

Figure out the input domains for this method only using its signature. You can also look at the class diagram for the game if this helps (hint: you can identify the specializations of the Item class from this diagram). Determine the input domains’ complete and non-overlapping equivalence classes and their boundary conditions. Enter these in the table for #3 on the Results Sheet.

4. Make sure you have a copy of these results and add them to your Assignment 3.

Task 2: Personal Learning Assessment

Instructions: Between today and 11:55pm Thursday Jan 28, write a “show and tell” – that is, explain the steps you would take to develop BB tests for the “Pick up an object in the room” capability in the game description to teach someone how to do this. You need to include 1-2 paragraphs to introduce the problem and your general approach, then you can include numbered steps if you want. You should also provide a concluding paragraph. Your writing should be **no longer than 1 page**, 12 point font.

Submit your writing to Canvas as either a pdf file or you can cut and paste into the Canvas text box. You must put your name in your uploaded file or it will not be graded and you will receive a 0 for this assignment.

Grading: This is a retrospective of your leaning of this topic. Your work will be graded for 2 things. First, how well you have identified the key steps in developing BB tests. Second, how easy it is for us to follow your steps and whether they will achieve the goal of developing BB tests for picking up an object.

Results Sheet – DS3 Black Box Testing – CS314 Spring 2016

Team members:

2. For each input domain of “going into an adjacent room or through an adjacent door” write the domain, its complete and non-overlapping equivalence classes and boundary conditions.

Domain Name	Equivalence classes	Boundary conditions

3. For each input domain of the Room.getRoomContents() write the domain, its complete and non-overlapping equivalence classes and boundary conditions.

Domain Name	Equivalence classes	Boundary conditions

Keep a copy of this information for Assignment 3