Grading Program 2

CS344 – Benjamin Brewster

This document details how to grade Program 2.

How to Get Student Submissions and Upload the Grades

Once you have finished grading the assignment, upload the score to Canvas in this manner:

1) Go to Canvas in your web browser of choice.
2) Click on Assignments on the left menu.
3) Click on Program 2 – adventure.
4) In the upper right corner, click on SpeedGrader.
5) Pick the name of the person you're grading, above. Note that you can use the left and right arrows, and the drop down list, to select between students.
6) Once you've chosen a person, check in the upper right that the LATEST version is selected. Read their comments below.
7) Download their zip file by clicking it in the list on the left. Follow the instructions below to assign a grade (in points).
8) In order to commit the grade to Canvas, come back to this assignment, and enter the point value in the Assessment field on the right, in the middle. Then:
    a. If the student lost points, record the reasons why in the Add a Comment Field.
    b. If the assignment was late by more than an hour past the due date, it will be marked as late. This is our policy from the Syllabus:

    "All assignments that are submitted late by less than 24 hours will have 10% deducted from their grade (e.g. an assignment submitted at 12:01pm, if it was due at 12:00pm, will be worth 90% of its graded value). Assignments submitted late equal to or more than 24 hours, but less than 48 hours, will have 25% deducted from their grade. Assignments may not be submitted late past 48 hours, and will be worth 0 points"

    Once you have generated the final points value, adjust it downwards, if necessary, according to the late percentages given above.

How to Grade

Here is the process:

1) Read the Assignment as given on Canvas.
2) Download the student's file. Rename it to "`<username>.adventure.c`".
3) Compile the program on the os-class server using this line:
    a. `%gcc –o <username>.adventure <username>.adventure.c`

4) If the program does not compile, the grade is zero. Please ask the student to resubmit within 3 days, or the grade will stand as a zero: it'll be late according to when it's finally turned in.
5) Once it has compiled, run the following command to start the game:

    a. `chmod +x <username>.adventure`
    b. `<username>.adventure`

6) Grade the program according to the criteria below.

Grading Criteria

There are a total of 160 points available for Program 2. My philosophy is that we should grade somewhat generously: give the student the benefit of the doubt, where possible.

Grade the program as follows. You should be presented with a prompt that looks approximately like this:

```
CURRENT LOCATION: <current location>
POSSIBLE CONNECTIONS: <connection to room 1>, <connect 2>, <connect 3>.
WHERE TO? >
```

1. The cursor should be placed right after the > symbol, on the "Where To? >" line, or on a newline just after. If you see this, the current location header is worth 10 points, the connection list is worth 10 points, and the prompt is worth 5 points.
2. Type in a room name that matches one of the connections given (see the assignment for an example). You should be presented with a NEW prompt that matches this new room, with its connections. If you see this new prompt, award 15 more points.
3. Type a room name that is NOT in the game. The program should tell you that that name can't be found, reached, etc. - it shouldn't crash, but should continue to run. If it crashes, or doesn't tell you there's a problem with the name, subtract 8 points off.
4. Next, attempt to follow connections repeatedly until you get to a screen that says you have won. It should then list the steps you took, and the number of steps you took, then it should exit to the shell prompt. Here are the points for those:
    a. Echo the ? variable (`%echo $?`) to get the exit value. It should return 0. If it does, award 10 points.
    b. If the number of steps is given, and correct, award 10 points.
    c. If the list of steps is given, and correct, award 15 points.
    d. If the program crashes during execution, or never ends in a win, attempt to continue the rest of the testing steps. If you can complete the rest of the steps (whether or not they get all of the points), subtract 15 points from the total at the end. If you cannot continue the steps, do the ones you can, awarding points as appropriate.
5. Once the program has exited, look for a directory of the form *<username>*.rooms.*<process id>*. If you see this directory, award 9 points.
6. Open up each file in the directory – there should be 7 files. The contents should match the text below. If they do, award 2 points for each correct file/room:
    a. ROOM NAME: *<room name>*
    CONNECTION 1: *<room name>*

…
ROOM TYPE: <*room type*>

7. Now, re-run the game: there should be a DIFFERENT path to victory, or at least a different set of connections between the rooms (it's unlikely, but possible, that the same connections are generated – re-run it, to check). If there is a different winning path, award 10 points.
8. Look for a DIFFERENT rooms directory, now: it should have a different process ID number in the name. If you find it, award 5 points.
9. Re-run the game a THIRD time. There should be yet a third DIFFERENT path to victory. If there is, award 5 points.
10. Finally, examine the game code. Look for a section that reads in the room files for use in the program. If you see it, award 10 points.

Grade comments generously. I expect to see comments describing what and why is happening frequently, as in every 4 or 5 lines, as appropriate. Fully commented code is worth 32 points. If there are no comments, the comment grade is 0 points. If there are comments, but not enough, give somewhere between 16 and 32 points, at your discretion.