

Final Group Project Rubric

IT 202: Object-Oriented Programming
Professor Arcadio Matos

This is group assignment. You are allowed to collaborate within your group, but not with other groups. Please refer to the Syllabus for information regarding Rutgers' Academic Integrity Policy.

Purpose of Project

- To give you an opportunity to put into practice everything you have learned about object-oriented programming
- To let you express your creativity
- To give you a chance to experience what it's like to work on a software development team
- To practice giving oral presentations

Overview

This project will consist of 3 components:

- 1) Game Map – 20%
- 2) Source Code – 60%
- 3) Presentation Demo – 20%

Game Map – 20%

This assignment was turned in while your previous professor was still here and will be graded according to guidelines she put out.

Source Code – 60%

I understand that no rubric was given, so I will be flexible to a degree, but the following things **MUST** be included in your final code.

Program Details

- 1) The entire final project will be contained in a Java project named FinalProject and said project will contain:

- a. The PlayGame class which will have the following
 - i. Your main method that is used to start the game **MUST** be in this class. Do not write all your game code within this main method.
 - ii. A prompt will appear when the game is over asking if the user would like to play again
 - iii. This class interacts with the other classes in your project
 - iv. This class will start your game
- b. A StartAdventure class which will have the following
 - i. Contains the code used to create a new game object
 - ii. Creates the game “environment” whether it is rooms, campuses, etc. and fills those environments. If for example, you have the user answer questions, the questions should be generated by this class
 - iii. Displays relevant information to the user, such as “you are here” indicator
 - iv. Handles commands from the user (including those that cause exceptions)
- c. A Player class which will
 - i. Have all the relevant information you collect from the player such as location, name, etc.

Your assignment is to write an adventure game with your group. It should have:

- A general location (campus, the mall, the library, etc.)
- The 3 classes listed above
- The option for more than one player
- At least 2 examples of Overridden Methods (will be covered under inheritance)
- You **MUST** encapsulate your instance variables and use the least amount of public methods necessary
- README.txt – that explains the game concept, how to play, and a “cheat sheet” for me so that I can easily grade your assignment. This does **NOT** have to be displayed in the game.

Structure of the program

Everything listed above is required for your assignment. You may have additional classes and methods as needed, but it is up to you. Each class is worth an equal 20% of the overall grade and full credit is given **ONLY IF** all required classes are present and they all work with no errors. Please know that I will intentionally try to break your code, i.e. if prompted to enter an integer, I will enter a character instead. These types of things should be checked for and handled in your code. Failure to handle exceptions will result in loss of points.

General Grade Breakdown

Excellent code with no errors and all exceptions handled:	60/60
Great code with no errors and minor unhandled exceptions:	50-59/60
Average code with no errors and minor unhandled exceptions:	40-49/60
Code with errors or major unhandled exceptions:	0-39/60

For the purpose of this assignment I define errors in code as ones that keep your code from compiling and minor unhandled exceptions as ones that do not break the entire game. Anything that crashes your code, keeps it from compiling, etc. will be graded in the 0-39/60 point range.

Presentation Demo – 20%

The final day of class all groups will give presentations of their project that will last 5-8 minutes per group.

Presentation Details

I will be looking for the following things:

- Did everyone in the group speak?
- Did the presentation last between 5-8 minutes?
- Did the code compile and work?
- Was everything well thought out and prepared?

This is perhaps the most flexible portion of the project, and will allow all of you to be creative. Any PowerPoint, Key Note, Google Slides, etc. that are used for presentation must be turned in the same day as the final source code. Failure to do so will result in a loss of 5/20 of the possible points for this assignment. For example, if your group received a 19/20 but did not turn in any presentation materials, the grade will be lowered to a 14/20. In other words, the actual turn in of the presentation is 5% of the overall project grade and 25% of the presentation grade.

General Grade Breakdown

Everyone speaks, presentation falls within the proper length, code compiles, and the appropriate files were turned in on time	20/20
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Most or all group members speak, presentation is too short or too long, code compiles, and appropriate files were turned in on time	15-19/20
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Everyone speaks, presentation falls within the proper length, code compiles, and the appropriate files were not turned in	15/20
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Most or all group members speak, presentation is too short or too long, code compiles, and the appropriate files were not turned in or were late

5-14/20

Only a few group members speak, presentation is too short or too long, and the appropriate files were not turned in or were late

0-4/20

Due dates

Game Map

already turned in

Source Code Draft

22 November before midnight

Final Code and Presentation

13 December before midnight