Rochester Institute of Technology
Golisano College of Computing and Information Sciences
Department of Information Sciences & Technology

Research & Report

ISTE-121 – Homework 09

Homework Objective:

This homework is unlike previous programming homework’s. For this homework you will be researching a Java ‘class’ or related topic we have not covered in the previous classes. In rare instances, you can choose an unusual method we haven't seen before. For example if someone wants to talk about JFrame, the String class or methods, we will say forget-it! If you want to talk about the ‘Robot’, or 'Class' class, good! If you want to talk about a Java concept like Callbacks, Better! If you want to talk about an IDE’s that could be used for Java development, talk with the instructor about this, as under certain conditions this is acceptable. This homework will be assigned as an individual or 2-person team assignment. Larger teams may be formed, once discussed and received the OK from the instructor.

Our TA will keep the list of people/teams and a list of the ‘Class’ you choose. This is to eliminate duplicate classes. Registering your class with our TA before the deadline is 20% of the grade. Anything other than a ‘class’ or classes, see the instructor.

Your deliverable is a 5 to 10-minute presentation on the 'class' to your class of fellow students. The presentation should include these items:

- Chosen topic name. Write your name and ‘class’ on the whiteboard
- Short description in your own words. Don’t read the Java Docs to us!
- What or why the class is useful, give multiple examples where possible
- Show an example of the usefulness through a coding example that you wrote, not a copy/paste from an internet search.

Preparation and Research:

You may use the book, JavaDocs, the internet or other means to research. However, any code you may find must be cited as the basis for your example in your source code, and you must only use the code you find for concepts. You **must write original code for the demo**. The code does not have to be long or complicated, just enough to show off the ‘class’ and usage you are trying to make.

Presentations:

The presentations of the classes will also be spread out over several days, starting after practical 2. You should pick a date to present. I encourage those that choose the easier classes, or people that want to get it finished, to go first; the more involved class choosers can go later as they may need more time. If no one chooses the early day, you may be assigned an early date.

Grading:

You will be graded to reflect your effort on these items:

- Overall presentation flow
- Description of the class you picked
- Telling the class why this is an interesting class to use
  - Tell how or the many ways it can be used
- Demonstrate how well the code shows the feature(s) you described
- Explaining the interesting parts of the code that we just saw. If the code is long, do **not** do a complete code walk through line by line, only the interesting parts.
- Your grade will reflect your effort. This means: (and this is the grading rubric)
  - 40% for demo of Googled, Java tutorial, or book copied code
  - 70% for a 40% code that is customized showing more than what was given.
  - Full credit for a custom built demo, showing many of the functionalities of the class(es) you chose
- Early/Later vs. Easy/Hard class:
  - You are taking your chances with an easy class, however, should you present first with an easy class, your evaluation will be higher, than presenting an easy class later. So there is the difficulty level vs. time being considered
- Code must be sent to the homework dropbox
- Code must be sent to the discussion area so all can learn from you.

- **All referenced code must be given in Java comments at the beginning of the main code**

Notes:

Should you choose a complicated implementation of a class and need to show more than just the code, drawing on the board, PowerPoint / UML, or other instructional method may be used. Remember you have about 5 to 10 minutes, though many go longer.

Research & Report Name(s) : ___________________________

Grading topic	Points	Earned
Topic: ______________________ (Registered with our TA before the deadline) • an unusual method we haven't seen before • a class like 'Robot', or 'Class' that we haven't seen before • a Java concept like RMI, or Callbacks • a Topic in J2ME or J2EE	20	
Difficulty level • 1 (easy) vs. Presentation day • 10 (hard) vs. Presentation day	10	
Code • 40% for demo of Googled, Java tutorial, or book copied code (5 points) • 70% for a 40% code that is customized showing more than what was given. (15 points) • Full credit for a custom built demo, showing many of the functionalities of the class(es) you chose (20 points)	20	
Presentation • Overall presentation flow • Description of the class you picked • Telling the class why this is an interesting class to use • Tell how or the many ways it can be used • Demonstrate how well the code shows the feature(s) you described • Explaining the interesting parts of the code that we just saw. If the code is long, do **not** do a complete code walk through line by line, only the interesting parts.	 5 5 5 5 5 5	
Submit to • discussion and • dropbox	 5 5	
Comments giving: References or // no references • Source for all referenced code must be given in Java comments at the beginning of the main code. Any code used, must have a reference comment before it.	10	
Total	100	