Preparing People to Lead Extraordinary Lives
LOYOLA
UNIVERSITY
CHICAGO

DEPARTMENT OF
Computer Science

Comp 170 – Custom Project Proposal Assignment

You must complete the proposal following the outline to get full points. No extra credit opportunity with this assignment.

You will define, create, invent, program, test, and review a java program to do something you pick! You can use all the java features we have covered to date. What will you do (some possible ideas will be provided in class)?

Logistics:

1. Teamwork: optional, you may be alone or teams of up to 4. Teams must do more work than individuals. If a team you will need to define how to divide the work.
2. Progress Reports: may be required during work time on the project. See the schedule in Sakai including the due date for the full project.
3. You present and demonstrate your final project to the class.

Technical Requirements:

1. You must structure your code into separate methods or functions that show good design and information handling. An individual

project should have at about 7 functions with good division of work between them.

2. You **may** divide your code into separate classes but not required. Separate classes are especially useful when multiple people are working together (each person does their part in a separate class and you agree on the functions you provide for others to use).
3. Each method must have pseudo code and use appropriate programming style as used in class.
4. You **may** use Java features we have not yet covered in class if you know them or are ahead. Arrays, text files, and Object Oriented Design can be used. However, you can do interesting projects with none of these.
5. You need to have a way to run and demonstrate your code. Inputs and outputs must be understandable to others.

Grading rubric:

1. This proposal (20 points) – points for each item in the outline (below); minus up to 5 points for any missing section or incomplete details
2. Midpoint deliverables (10 points) – see details in the assignment; minus up to 5 points for any missing section or incomplete details. The goal of this is NOT to fill out the outline, but to have some progress to show on your project.
3. Project demo, presentation, and code (40 points) – see details on project completion; minus 10 points for no presentation materials; minus 20 points for no presentation; minus up to 5 points for missing topics in the presentation; you can add other topics as you wish. For project code, review technical requirements in the project proposal assignment. Minus a minimum of 10 points for lack of

pseudo code / clear design and division of code. Minus up to 10 points for poor programming style. Minus up to 10 points for any missing technical requirements.

4. No points for code which does not compile and run in the standard tools used in class (compile and run your code often, not just when you are finished).
5. Do NOT COPY your project from materials on the web; to do so is a violation of the course academic integrity policy. If you want to use something you find elsewhere or adapt some existing code, ASK AHEAD OF TIME.

Structure of Proposal:

Follow this outline for completing this assignment. Turn in a suitable text file in word, or pdf.

Project Title (make it interesting)

Project Definition

A paragraph or two describing what the app does and why it's interesting. Some also call this your "elevator pitch" - if you happen to bump into someone in the elevator and you have 30 seconds before they get out, how do you sell them on your great idea for an app.

Team or Individual

If you plan a team, list all members and possible roles on such things as design, programming, team coordination, documentation, testing, final report creation.

Design

1. What are the key components you plan to use? What kinds of input and output will you need from the user? What are some possible functions you will use to divide up the program?
2. What will the user interface look like? You can mock it up in text to give an example use case.
3. Anything you are not yet sure how to do?

Schedule

Make a detailed schedule, show at least each week and key activities during the time available for the project. In addition to this proposal there are mid point deliverables (a progress report), presentation materials, and turning in your final code. See your class schedule and Sakai for due dates.

Testing

How will you test your app? Do you plan to have anyone other than you try it (you should!)? How will you decide what input to use for testing? How will you know if your code gives the right output?

If you want to try out some software engineering concepts, keep a list of each of the bugs your find while testing and how long you spent testing. Make that part of your project demonstration.