

Call for Proposals: COMP 4210 Term Project and Presentation

100 Points

Proposals Due: March 26, 2021

Projects Due: April 30, 2021

You will develop a Scala application that is creative, original, substantial and cool. At a minimum, your solution should require multiple classes. Use of Companion Objects, Traits, and Case Classes is encouraged where appropriate.

For ease of reference, I will refer to your solution as an app.

1. Your app must use both object-oriented and functional aspects of Scala and be written using normative Scala idioms. Beyond that, this assignment is pretty wide open. You could write a game: console, GUI, networked, single or multi-player. It could be a practical application – there are tons of utilities or data processing applications. You could develop a programmable Turing Machine that displays its state as it runs. An encryption simulator. A sort animator. Something you can use at work. An educational tutorial. A machine learning application. You will not be penalized for attempting but not completing an ambitious project as long as you can demonstrate significant progress and/or effort. **(75 points)**

2. Although your idea need not be original, your code must be original. It is OK to write your app to mimic an existing one, and it is OK to view the code from other projects, but you are responsible for composing your own solution. Be sure to credit your sources and inspirations. Scala uses the same comment syntax as Java.

3. Your code should be well-organized, nicely commented, and formatted to conform to the standards illustrated in the textbook. Additional documentation (e.g., user's guide) can be provided for extra credit. **(5 points)**

4. You will present your project to the class during either the last day of class (4/23) or our final exam period (4/26, 2:45-4:45pm). We will have 4 students present on Friday and the other 8 will present on Monday. A signup will be available ahead of time. Your presentation will be between 10 and 12 minutes long, including Q&A. **(20 points)**

Send me a proposal no later than next Friday March 26. Early submissions are encouraged. That gives you at least 28 days to complete the project.

Your proposal should be approximately one page, including: a title, an abstract (a 25 word or less summary of the project idea), a more detailed description of what the project will entail, and a timeline with weekly milestones of how you plan to work towards completing the project.