

CS21 Final Project Spring 2013

You are free to choose your own final project. Your project may be an engineering or scientific application, a board or card game (with or without sound and/or pictures), related to some hobby, a set of activities for children (e.g., to learn physical science concepts, foreign language vocabulary, whatever), a data management system (e.g., keeping track of any kind of inventory stored in a file), a business application (estimating jobs for a construction site, creating billing or payroll,...) , animations, or whatever else strikes your fancy.

Up to 10% Extra credit will be awarded to any student who uses a MATLAB feature that we did not explore in class (sounds, images, a GUI feature we didn't get to, XLS files, etc).

By end of day Sunday, April 21st, submit your proposal via the dropbox. The proposal should the theme of the project and approximately one page describing what you hope to accomplish, in terms of functionality (i.e., what your project will actually do), planned use of any new tools (e.g., GUIDE, a particular Matlab toolbox or Simulink model), user interaction, data requirements (input and output), tables, graphs, other files you plan to create, etc.

The remainder of the semester will be dedicated to working on the final project. All projects must be completed and uploaded to Blackboard by end of day on Friday, May 3rd.

A few reminders:

1. Submit all .m files (scripts, functions), clearly documented – you may also need to include supporting files (.jpeg, .fig, etc)
 - At the top of each file, place comments describing the purpose of that file and include your name.
 - Name all variables in a meaningful fashion (e.g., finalTemp, numPlayers, leftLeg)
 - Add comments to each section of code to describe what this section is doing (e.g., % Test to see if player won)
 - Use user-defined functions to make your code more modular, and cleaner to follow.
 - Suitable places to call your own function include
 - When you're doing a multi-step process to prepare data or calculate answers
 - When you need to output a table (title, headers, detail, summary)
 - When you need to do the same thing over and over throughout your project, even with some variation.
 - Be sure whatever outputs (plots, tables, files) you've created are properly documented (title, labels, headers, ...)
 - Use for- and while loops, if and switch statements wherever appropriate.

DO NOT delay starting your project. I will review all project proposals on Monday, April 22nd. If you'd like a review of your proposal earlier, please submit to blackboard and send me an email.