Instructions: You must work on the final project <u>entirely</u> on your own (although you may ask me or another faculty member for help). Any books (including textbooks!), articles, or websites that you use should be cited.

For your final project, come up with a project that shows off your interests! Whether it's teaching MATLAB to play a game, ciphers, simulations, or coming up with algebra or calculus demonstrations, it is up to you. Be sure to come and talk to me about your project ideas. A written plan of the project that includes some pseudocode of your programs are due by **Wednesday, April 25 at 10 AM.** If you are choosing one of the projects from the website, stating this suffices.

You are expected to turn in a copy (on paper or electronically) of your report describing the program which includes history (if applicable), instructions, and examples. You should include several examples of different types, if appropriate. The report should conclude with future directions/applications of your program. Think of the report as a user's manual. The report should be typed and double-spaced with 12-point font and turned in at the **beginning** of the final exam time (**Friday, May 4 at 6:30PM**) by uploading it to Moodle.

Some people have published a portion or all (if appropriate) of their final report that would include running different examples, etc. That is fine, too. If that is the case, you should have your published document include links at the bottom to the original m-file, the URL, and the date/time published similar to your homeworks. Copy/paste **the URL as a clickable link** to Moodle by the due/date/time. In addition, your program(s)/functions/script files should be uploaded to Moodle by the due date/time.

What should be included in the final report? It depends on what type of project you have.

- All of your reports should include a user's guide. For those of you coding games, this would include the rules of the game and also how to play the game within MATLAB. For those of you creating demos, the report should explain how to run the MATLAB code to create various demos.

- For those of you coding games, examples do not need to be included in the written report. Examples are really for those of you that are coding something mathematical (give examples with different functions and/or domains, etc.), ciphers, etc.

- All of your reports should include future directions. This would include if given more time/programming knowledge, how could you make your code fancier/more complex? This could include implementing more options, GUIs, modifications of rules, etc.

- Remember that any sources you've used to help you with this (which includes websites) should be referenced. If you used MATLAB's help and their online documentation form mathworks.com, you do not need to be very specific but note that you used it.

Be prepared to give a 5 minute presentation of your project and programs. This presentation does not need to be formal with slides, etc.; it should be a brief explanation and demonstration of your code. The presentations will be Monday, April 30 during class and during our final exam period (**Friday, May 4 at 6:30 PM**).

You will be graded using the following UPDATED point system (MODIFIED ON APRIL 24):

Points	Out of	Description
	10	Written plan/pseudocode of program(s) (due April 25 at 10 AM)
	25	Report (description of program(s) and how to use them, examples, conclusion, etc.)
	25	Code (including commenting and formatting)
	15	Aesthetics of the program output (formatting of text and plots, realism; e.g., can we tell what is happening with the computer's turn in a game, scores clearly formatted, game stops when won, etc.)
	20	Presentation
	5	Difficulty of Project
	100	**TOTAL**

If you are having a hard time coming up with your own project, you can choose to do one of those that are posted on the website.