Final Computational Project

Criteria	Ratings			Pts
a MATLAB GUI created by you	**20 pts** **Full Marks**		**0 pts** **No Marks**	20 pts
applied to a scientific or mathematical topic of your choice applied to a scientific or mathematical topic of your choice, that is not part of any GUI examples already used or read ly available on the internet (e.g., bee simulation in CA5, sales tax calculation, and switching between surface, mesh, contour plotting are all off limits as the applications)	**10 pts** **Full Marks**		**0 pts** **No Marks**	10 pts
some input is collected from users	**10 pts** **Full Marks**	**5 pts** **input is collected but not used**	**0 pts** **No Marks**	10 pts
a least one MATLAB built-in function a least one MATLAB built-in function (e.g., lsqcurvefit, ode23, fsolve, etc.) should be used to calculate something or process the information from the input (e.g., solve a system of ODEs or linear equations, estimate parameters of a simple model, optimize an objective function, calculate statistics, etc.)	**10 pts** **Full Marks**	**5 pts** **function is defined but not used**	**0 pts** **No Marks**	10 pts
display some output in the GUI window (e.g., 2D or 3D plot, bar graph, table, etc.)	**10 pts** **Full Marks**	**5 pts** **output doesn't change with any user interaction with the gui**	**0 pts** **No Marks**	10 pts
package your GUI as a MATLAB app	**20 pts** **Full Marks**		**0 pts** **No Marks**	20 pts
verification compare your result to some known solution to verify that you indeed did your calculations correctly in the code. This could be through a solution in a textbook, research paper, or computational calculation example (MATLAB, Excel, etc.) from others	**5 pts** **Full Marks**		**0 pts** **No Marks**	5 pts
document your results purpose document your results in either a LaTeX .tex/.pdf file or README.md file in your bitbucket repository or a video screencast. Briefly describe the purpose of your project what calculations are done how your GUI results compare to the ver fication case	**2 pts** **Full Marks**		**0 pts** **No Marks**	2 pts
document your results calculations document your results in either a LaTeX .tex/.pdf file or README.md file in your bitbucket repository or a video screencast. Briefly describe the purpose of your project what calculations are done how your GUI results compare to the ver fication case	**8 pts** **Full Marks**		**0 pts** **No Marks**	8 pts
document your results verification document your results in either a LaTeX .tex/.pdf file or README.md file in your bitbucket repository or a video screencast. Briefly describe the purpose of your project what calculations are done how your GUI results compare to the ver fication case	**3 pts** **Full Marks**		**0 pts** **No Marks**	3 pts
version control g t for version control on bitbucket 3 or more commits, relevant files all on b tbucket	**2 pts** **Full Marks**	**1 pts** **either fewer than 3 commits or missing key file(s)**	**0 pts** **No Marks**	2 pts
				Total Points: 100