**Program Code Grading Rubric**

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| --- |
| Program Elements  |
| Score  | Possible  |    |
|    | 12  | Includes 3 from list (8 pts for two, 4 for one)  |
|    |   | for loop  |
|    |   | while loop  |
|    |   | at least one list, array, vector, or matrix  |
|    |   | at least one *if* decisional structure with at least one *else* or *elseif/elif*  |
|    |   |    |
|    | 5  | Nested structures (loops in loops, if’s in loops, loops in if’s)  |
|    |   |    |
|    | 12  | Functions  |
|    |   | 4 pts – at least one function outside of main program  |
|    |   | 4 pts each for two functions within main program or outside main  |
|    |   |    |
|    | 6  | Input and output (3 pts input, 3 pts output)  |
|    |   |    |
|    | 6  | Error checking (3 pts for each error check)  |
|    |   |    |
|    | 10  | Incorporated a new feature, library or module  |
|    |   |    |
|   | 4  | Comments and Descriptive Variable names  - includes 1) academic integrity statement, 2) name and collaborators, 3) descriptions of key components of the program, 4) descriptive variable names  |
|   |   |   |
|   | **55**  | **Total**  |

**Lines of Code**

-15 points deducted if 85-100 lines in MATLAB or 70-85 lines in Python

-30 points deducted if less than 85 lines in MATLAB or 70 lines in Python

**Running**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria**   | **Fully Achieved**  **(25 pts)**  | **Mostly Achieved** **(20 pts)**   | **Partially Achieved** **(10 pts)**   | **No Attempt**  **(0 pts)**  |
| **Code Running**  | Runs successfully with no errors.  | code runs with error but has a work around to make it run or needs code changed during execution.  | code runs partially but errors prevent from completing.  | code will not run.  |

**Report Grading Rubric**

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| --- | --- | --- | --- | --- |
| **Criteria**  | **Fully Achieved**  | **Mostly Achieved**  | **Partially Achieved**  | **No Attempt**  |
| **Title page**   | Title page includes name of author, section-team number (e.g., LC1-00) and title of program.  **(2 pts)**  |    | Includes name but missing name of program or section-team number or both.  **(1 pt)** | Missing name.  **(0 pts)**  |
| **Introduction to the program**    | Introduction is clear, includes motivation for the project and explains how it is connected to your interests, future career or major. It is free of spelling and/or grammar errors. **(4 pts)**  | Introduction is mostly clear, but does not include connection to interests, future career or major or contains more than two spelling and/or grammar error.  **(2 pts)**  | Introduction is not clear or contains more than 3 spelling and/or grammar errors. **(1 pt)**  | No program Introduction is included.  **(0 pts)**   |
| **Description of the inputs and outputs**    | Clear overview describing what the programs do along with its inputs and outputs and is free of spelling and/or grammar errors. **(4 pt)**  | Incomplete overview missing overall description, inputs or outputs or contains more than two spelling and/or grammar errors. **(2 pts)**  | Minimal description that does not provide enough substance to understand the inputs and outputs or contains more than 3 spelling and/or grammar errors. **(1 pt)**  | Overview is not included. **(0 pts)**   |
| **Description of user-defined functions**    | Clearly describes all user-defined functions.  **(4 pts)**  | Clearly describes some user-defined functions but either does not include all functions or description is not clear for some functions or contains more than one spelling and/or grammar error. **(2 pts)**  | Mentions that there are user defined functions but does not describe them or contains more than 3 spelling and/or grammar errors. **(1 pt)**    | Does not mention user defined functions.  **(0 pts)**   |
| **User Manual**  | Clear and easy to understand user manual with concise descriptions and screen shots of the user interaction. **(6 pts)**  | Incomplete or hard to understand manual that either lacks clear instructions and/or does not include screen shots or contains more than 3 spelling and/or grammar errors. **(4 pts)**   | Started a user manual but is missing many required aspects. **(1 pt)**  | No user manual is included.  **(0 pts)**  |
| **Appendix** (with code files)  | Complete code is included in appendix  AND  all code files are uploaded to Gradescope **(3 pts)**  |     | Partial code or no code is included in appendix but all files are uploaded to Gradescope  OR  full code in appendix but all code files are not uploaded to Gradescope. **(1 pt)**  | Code is not included in appendix AND no code files are submitted on Gradescope.  **(0 pts)**   |
| **Submission**  | Submitted in .pdf format to Gradescope. **(2 pts)**  |    |    | Not submitted to Gradescope as a .pdf  **(0 pts)**  |