

Project Construction, Presentation and Report Rubrics used to evaluate the project

Construction Rubric

1. (10 pts) Construction/assembly was done partially or completely during class sessions and intermediate steps and progress was shown to the instructor
2. (10 pts) Project physical layout is neat and attractive, avoids the use of breadboard and haphazard and/or loose jumper wires, uses proper wiring color code scheme
3. (10 pts) Project is demonstrated in class and everything works according to the project proposal and project requirements and/or management plan

Presentation Rubric

1. (10 pts) Technical content and proper sequence shown below
 - a. *introduction*: abstract or summary or intro (with picture or block diagram of project)
 - b. *hardware design*: component list, project construction steps, block diagram, schematic diagram, which of the 10 sub-systems are involved in making the computer controlled system
 - c. *software design*: activity diagram (flow chart) and/or state diagram to show how code works, which lines of code correspond to each sub-system (do not paste entire code into slide(s))
 - d. *troubleshooting*: hardware and/or software troubleshooting or design changes done to make the project work
 - e. *conclusion*: real world usefulness, practical application(s), future work/extension
2. (10 pts) Presentation delivery
 - a. presentation is rehearsed / practiced beforehand
 - b. group members take turns and describe their individual contributions
 - c. presenter(s) are loud and clear and address the audience
 - d. presentation text is not read off the slides
 - e. presentation is lively and interesting
3. (10 pts) Slide and presentation style
 - a. Slides use a professional, attractive, uncluttered style and layout
 - b. Slides have more visual (diagrams, pictures and bullet points) than textual content
 - c. Slides have attractive color scheme and proper font size and contrast
 - d. Proper pace and timing of presentation within allocated time
 - e. Presenters have non-casual/professional attire and demeanor

Report Rubric

1. (10 pts) Report follows provided report outline and format and includes complete code shown with mono-space font, color syntax highlight and proper indentation
2. (10 pts) Report has block diagram, schematic diagram, software activity (flow chart) and/or state diagram and measurements (from serial monitor)
3. (10 pts) Report discusses the design of computer controlled system (provides electrical/physical specs of subsystems and how subsystems work together with the help of corresponding lines of code)

Bonus Points

(10 pts) awarded at instructor's discretion for any aspect of the project that exceeds expectations

Total Points (100)