

Virtual Robotics Remix Standards Rubric

Standard	Basic (3)	Proficient (4)	Mastered (5)
Documentation			
3A-AP-23 Document design decisions using text, graphics, presentations, and/or demonstrations in the development of complex programs.	Incomplete documentation.	Documentation provided for each process.	Documentation provided for each process. Evidence of revisions and improvements made.
Algorithms and Programming			
3A-AP-14 Use lists to simplify solutions, generalizing computational problems instead of repeatedly using simple variables.	No use of lists where appropriate.	List used somewhat inconsistently.	Lists are correctly used to make code more efficient.
3A-AP-17 Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects.	No procedures; procedures not named appropriately.	Procedures used and named correctly in most instances.	Procedures used efficiently to organize code and reused as needed.
3A-AP-18 Create artifacts by using procedures within a program, combinations of data and procedures, or independent but interrelated programs.	No procedures; procedures not named appropriately.	Procedures used and named correctly in most instances.	Procedures used efficiently to organize code and reused as needed.
Computing Systems			
3A-CS-02 Compare levels of abstraction and interactions between application software, system software, and hardware layers.	No hardware used; hardware does not collect or exchange data correctly.	Hardware and software components incorporated; collects and exchanges data inconsistently.	Hardware and software components are incorporated; collects and exchanges data consistently.
Collaboration			
3A-AP-19 Systematically design and develop programs for broad audiences by incorporating feedback from users.	No peer review completed.	Project underwent peer review. Feedback was not incorporated.	Project underwent peer review. Each piece of feedback was evaluated for its merits and incorporated when appropriate.
3A-AP-22 Design and develop computational artifacts working in team roles using collaborative tools.	Team members did not work together; strengths or suggestions of each member were not incorporated.	Team members usually worked effectively as a team; strengths and ideas of each member were incorporated somewhat unequally.	Team members worked together equally and effectively; the strengths and ideas of each member were incorporated.
Debugging			
3A-CS-03 Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.	Code bugs not identified; little or no documentation of fixes.	Code bugs mostly identified and fixed; adequate documentation of fixes.	Code bugs identified and fixed; extensive documentation of fixes.
Presentation			
3A-AP-15 Justify the selection of specific control structures when tradeoffs involve implementation, readability, and program performance, and explain the benefits and drawbacks of choices made.	All team members are not able to describe program development and choices.	All team members are able to explain most program development and choices.	All team members are able to extensively explain program development and choices, as well as demonstrate each component and line of code.