An academic rubric contains certain elements no matter what the subject. The rubric must contain, a series of traits that define what success is for the assignment, examples of what it takes to qualify for each trait, a scale of values for on which to rate each trait, and then different levels of excellence for each trait being graded. Any program that constructs rubrics would have to at a minimum be able to represent each of these things, as well as adding functionality and unique characteristics for different subjects that it is used for.

When creating a rubric for use in a CPS class, you need to add specifications that you would not need for say an ENG class. The main trait that the rubric would look for would be if the program would even compile. Secondly there should be a check that the program is well documented. Another check should be made for originality as well. Finally the rubric should take into account if the assignment was turned in on time.

The rubric itself should be programmed with reusability in mind as well as ease of use. The rubric should have an intuitive GUI that is easy to use and has the ability to be customized for each different assignment. The professor should also be able to insert their own auto-grading system, for example J-Unit testing, into the grading system, as well as manual testing or grading. The rubric should also be able to expand to meet other traits that the professor wants to be graded upon. After the system is done grading the assignment it should then upload it into a gradebook for the professor.