

# 2023 CSTA/ACM: Cutler-Bell Rubric

	Criterion	1	2	3	4	5
1	<b>Description of Video &amp; Project</b>  <i>Provide a short video showing and describing your project.</i>	No video is available.  OR  The video lacks either a description or a demonstration of the project.	The video features both an explanation and demonstration of the project, but either the explanation or demonstration is not understandable.	The video explanation and demonstration are both presented in understandable terms.	The video explanation and demonstration use clear visual aids to convey the project in action.	The video includes an outstanding demonstration and explanation. The call to action is strong.
2	<b>Essay #1: About the Project</b>  <i>1. Give an overview of your project, describing what you created and its intended purpose.</i>  <i>2. Describe the process you used to design your project.</i>  <i>3. Describe the problem or issue your project addresses.</i>	Student includes minimal detail and insight.  OR  The essay is missing answers to any of the prompts.	The student answers all three of the prompts but there is a significant lack of detail and/or insight about the project.	The student <b>clearly</b> describes some of their vision for the project, mostly explains the problem(s) they were trying to solve and gives a clear overview of their design process.	The student <b>thoroughly</b> describes every aspect of the project: the vision for the project, the problem(s) they are trying to solve and their design process.	The student presents an outstanding description of the vision for the project, the problem(s) they are trying to solve and their design process.  The student presents the relevance of the project in a persuasive way.
3	<b>Essay #2 Parts 1-2: Impact of the Project</b>  <i>How will your project contribute to the current and future world of computer science? (250 words)</i> <i>Describe what makes your project innovative (250 words).</i>	Essay is missing a reasonable response to one or more of the prompts	The project is not an innovative solution to the problem/issue. It repeats or models solutions that are already being used.  OR  The project design is not applicable beyond this award.	The project is similar to other solutions that address the problem/issue, with some small innovative adjustments that make little impact OR includes few details that support the project's contribution .	There is evidence of innovative work that improves the overall impact of the solution. There are details in the project demonstrating that it legitimately contributes to current/future ideas of computer science.	The project thoroughly addresses the problem/issues AND the project design is broadly useful and includes specific and realistic details that support the project's contributions to current/future ideas for computer science.
4	<b>Essay #2 Part 3: Deployment of the Project</b>  <i>How have you deployed or could you deploy this project to make a difference in your community?</i>	Essay fails to provide a reasonable deployment plan or description.	Essay provides a vague plan or goal for deployment without details of implementation OR fails to adequately explain the potential impact to the community.	Essay includes some details on how the project solves the problem and presents realistic plans for how it can be implemented.	Implementation plan or description is easy to understand and could be used to successfully impact a defined population.	Implementation plan or description is well organized including details of both physical and human resources needed and available in the community. The difference being made to the community is both significant and the number of people affected is large.

5	<b>Essay #3: Technical Components of Project</b>  <i>1. Give technical details showing the computational logic you used to create or to plan this project.</i>  <i>2. Describe any technical challenges you faced in your project as well as the way these problems impacted the results.</i>  <i>3. Provide details relating to the plans you made, including algorithms and other abstractions.</i>	<p>Essay includes vague references to the use of computer science concepts but lacks specificity and detail.</p>	<p>Essay explains how the project was created using computer science concepts.</p> <p>Essay provides few details related to the technical processes used in constructing the project. References to technical challenges are weakly presented.</p>	<p>Essay clearly explains how the technical details support the project's purpose, describing the development process and the way technical challenges culminated in a completed project</p>	<p>Essay responses are all complete and the discussion of algorithms and/or abstractions adds to the readers' understanding of the project.</p>	<p>Essay responses regarding technical details including technical challenges and algorithms and/or abstractions provide a cohesive story that a technical reviewer can follow.</p>
6	<b>Source Code</b>  <i>Provide project source code and executable code.</i>	<p>A working code sample is not provided,</p> <p>OR</p> <p>Code sample demonstrates simplistic computer science concepts, and presents little legitimate response to the problem the student is addressing..</p>	<p>Code sample addresses the stated problem, but demonstrates weaknesses that prevent it from achieving the goals of the project.</p> <p>OR</p> <p>Code sample has little or no understandable documentation.</p>	<p>The code sample effectively reaches the goals and documentation is present.</p>	<p>The code sample is technically precise and effectively reaches the goals presented in the project using the best available tools and techniques.</p>	<p>The code sample is both technically precise and effective and is presented in a way that is easily navigated and understood by a technical reviewer.</p>

Hello High School Senior!

The CSTA/ACM Cutler-Bell Prize in High School Computing recognizes talented high school students in computer science. The intent of the program is to promote and encourage the field of computer science, as well as to **empower students like you** to pursue computing challenges.

Eligible applicants include those students that are:

1. Graduating High School Seniors
2. Students that reside in and attend high school in the United States
3. Students who plan to continue studying computer science

The challenge will focus on developing a project that uses modern computing technology and computer science.

Judges will be looking for you to develop a project that engages modern computing technology and computer science in addition to demonstrating:

- ingenuity
- complexity
- relevancy
- and originality/innovation

Up to four (4) winners will each be awarded a \$10,000 prize and a trip to the CSTA/ACM's Cutler-Bell Prize Reception! We look forward to reading your application so please use the attached rubric to ensure that you understand and meet the project requirement! If you have questions please do not hesitate to contact the CSTA Awards Team at [awards@csteachers.org](mailto:awards@csteachers.org). We will make every effort to get back to you in 24 hours!

We wish you the best of luck!

Notes:

(1) The award is financially supported by a \$1 million endowment from the Gordon Bell and David Cutler Endowment Fund.

(2) **CSTA** stands for Computer Science Teachers Association, <https://csteachers.org/page/csta-acm-cutler-bell-prize>

(3) **ACM** stands for Association for Computing Machinery, <https://awards.acm.org/cutler-bell>