Technology Project Description:
In the Technology Project, contestants must choose a problem that they would like to solve. Then, they will create a solution to that problem through the use of programming. Additionally, a device can be used/created that must be programmed in order to solve the problem (e.g., Arduino). They may use any programming language they desire. The criteria and detailed point breakdown for Technology project can be seen below on this page. The student will be required to show the actual program running through the means of pictures or video. They can do the same for submitting the code, and can submit the abstract as a PDF, picture, or video. The method the contestant chooses to submit will not impact how it is judged. The contestant only has to choose one method to submit, but can choose more if they want to.

Where to submit your project:
You can submit your video or picture or PDF to our email, contact@tsoaonline.org, if the file is less than 25 MB. If the file is greater than 25 MB, share it with our email account via Google Drive.

Technology Rubric

Criteria:	1st Judge	2nd Judge	Total
Abstract	__/15	__/15	__/30
Documentation	__/15	__/15	__/30
Efficiency of Code	__/10	__/10	__/20
Accuracy	__/15	__/15	__/30
User Interface	__/10	__/10	__/20
Difficulty	__/15	__/15	__/30
Tiebreaker: Formatting	__/5	__/5	__/10
Overall Total:	__/80 + __/5 (Only Add For Tiebreaker)	__/80 + __/5 (Only Add For Tiebreaker)	__/160 + __/10 (Only Add For Tiebreaker)

Point Breakdown:

Point Value (0-15)	Excellent (11-15)	Average (6-10)	Poor (0-5)
Abstract	Excellent summary of project and results of the program. Additionally, the project includes a concise problem statement, which is solved through the program. The length is also 400 words or less.	Summary of project and results of the program are present. Additionally, the project includes a problem statement, which is solved through the program. The length is also 400 words or less.	Poor summary of project and results of the program, and/or does not include a problem statement, and/or length is not 400 words or less. **OR** No abstract is present.
Documentation	Superb explanation of each part/section of the code. This should be in plain english, and in an effective and concise manner.	Explanation of each part/section of the code is present.	There is little explanation of each part/section of the code. **OR** No explanations are present.

Accuracy	The code functions correctly and has no errors in syntax. The code also solves the problem in the problem statement completely.	The code functions, however, there are a few syntax errors that hinder certain features of the program. **OR** The code only solves part of the problem statement	The code functions; however, there are many errors embedded in the code that hinder the overall purpose of the program. **OR** There is no functioning code present.
Difficulty	The project is done using a complex coding language (i.e., does not use a block-based coding language, such as Scratch). Additionally, the project is done while solving a difficult problem.	The project contains a few challenging aspects, but as a whole, the project is not very complex. This either means that the coding language used was basic and/or the problem solved was not very difficult.	The problem solved is not difficult, and/or the coding language is not complex. **OR** No code is present.

Point Value (0-10)	Excellent (8-10)	Average (4-7)	Poor (0-3)
Efficiency of Code	The code is concise in almost every aspect. There are almost no instances where there are more lines of code than needed.	The code is somewhat concise. There are some instances where there are more lines of code than needed.	Code is inefficient and uses many more lines of code than needed in multiple places. **OR** No code is present.
User Interface	The user interface provided by the code is visually appealing and very easy to use.	The user interface is average; common or bland, but is useful for its purpose.	The user interface is poorly designed; difficult to use/navigate and does

	The UI is effective for its purpose. **OR** The user interface is visually very unique, while being understandable (this applies to a device as well, if that is what is made).		not effectively serve its purpose. **OR** No user interface is present.

Point Value (0-5)	Excellent (4-5)	Average (2-3)	Poor (0-1)
Formatting (Tiebreaker)	Code is neatly organized (easy to read) and done so in a logical flow of progression.	Code has some spots in which it seems out of place and haphazard.	Code is messy and haphazardly organized. **OR** No code is present.

For projects in which a certain criteria is not present, that project will receive an automatic zero for that criteria.

If you plagiarize, you will automatically be disqualified.

If you have any additional questions/concerns regarding the TSOA Technology Project Rubric please reach out to us via email at: contact@tsoaonline.org