

JUDGING CRITERIA

The challenge is to hack a problem whose solution requires the integration of physics, programming, artistic expression and communication. The judging criteria highlights these facets of the hackathon.

A description of the judging category and associated scoring criteria is given below. Each category is scored as a 1,3, or a 5 with 5 being the best score. A possible score of 6/5 can be given in a category when the teams exceed expectations.

As a general rule one may consider these scores to reflect whether the highest standards of the criteria have been met or not such that 1 = no, 3 = almost, 5 = yes and 6 = wow, that blew the judges away!

Hackathon participants will be given feedback and mentorship to help advance their ideas, and craft their presentations in order to address these competition criteria.

COMMUNICATION

How effective/engaging/coherent is the presentation overall? Is there a good rapport in the team? Is the presentation of the physics and the methods used to present the problem solution clear and understandable? In cases where demos didn't quite work, reward also clear understandings of the physics and the reasoning of what failed and how one would properly address the associated issues.

1 - The presentation overall was not clear nor engaging. - The demo presentation obscured the underlying physics/was not working but the team did not explain this very well. - The team did not seem to have a good rapport.

3 - The solution/idea was well-presented but the methods were not quite clear. - The demo was not quite working but the team accounted for this. - The team rapport was very good.

5 - The team clearly and effectively presented the problem and the demo in an engaging manner. - The demo failed to achieve the stated goal but the high-level presentation of the physics, the reasoning behind the proposed solution and the overall clarity and engagement was superb. - There was excellent rapport in the team.

TECHNICAL ACHIEVEMENT/EXECUTION

Did the participants solve a difficult technical problem? Did they get a working demo completed within the allotted time? Does it seem remarkable that someone could achieve this hack in just a day or two?

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TECHNICAL ACHIEVEMENT/EXECUTION

For cegep and highschool students: the standards for sophistication of the physics and the computational techniques used are greatly reduced. Instead, focus will be on execution of the idea.

- 1 - The solution did not address the problem. - Demo not working. - Demo nearly working but the computational methods are simple enough that it should be possible to have a working demo.
- 3 - Demo works/solution very simple. - Demo not quite working/computational methods used are sophisticated.
- 5 - The technology/design of the solution is technically sophisticated and works very well.

CREATIVITY/INNOVATION

Refers to the scale/ambition and novelty of the problem being explored. Is the solution novel? Does it solve a problem in a creative/innovative way? Consider the relationship between the underlying physics of the problem and the computational methods used.

- 1 - There are already existing solutions for this problem that are identical or very similar.
- 3 - The problem idea is interesting/novel but the solution doesn't quite live up to that promise.
- 5 - The solution attacks an entirely new problem, and provides a good solution. - The solution provides a novel and creative spin on a known problem.

AESTHETIC

Is the solution beautiful/elegant/polished? Is it visually appealing to the viewer/-judge?

- 1 - The solution was not at all aesthetically pleasing.
- 3 - The solution was visually interesting, but lacked polish.
- 5 - The solution was very polished and aesthetically pleasing.