

Scoresheet for Open Innovation

This sheet must be filled and retained by judges. Participants may request organisers for scanned digital copies after the event is complete, which will be supplied in PDF format.

Team name: _____

Team number: _____

Judge name: _____

Date: 21 September 2024

	CONDITION	NOTES		SCORE
	<i>Development of solution</i>			/ 18
A)	A broad ¹ and relevant ¹ problem is stated, outlining one situation ¹ , one drawback ¹ , and two or more impacts ² .	Broad: Many parties affected. Relevant: To these parties in the present or near-future. This does not refer to relevance to the theme, as that is a separate rubric.	<div> <div>_/ 1</div> <div>_/ 1</div> <div>_/ 1</div> <div>_/ 1</div> <div>_/ 2</div> </div>	<div> <div>_/ 6</div> </div>
B)	A broad ¹ solution is proposed; this is broken into two or more steps ² with a clear links ² between each step.	Broad: From start to end, i.e. from present scenario to ideal scenario.	<div> <div>_/ 1</div> <div>_/ 2</div> <div>_/ 2</div> </div>	<div> <div>_/ 5</div> </div>
C)	Any one step ¹ is chosen from the above and at least one ¹ relevant ¹ assumption is stated.	Relevant: Assumptions of costs, technology, manpower, or other factors.	<div> <div>_/ 1</div> <div>_/ 1</div> <div>_/ 1</div> </div>	<div> <div>_/ 3</div> </div>
D)	Any one theme ¹ is chosen from the 3 themes provided. This theme connects to the problem ¹ and this connection is sufficiently justified ² .	Justified: Is the problem really within the chosen theme? Use personal discretion.	<div> <div>_/ 1</div> <div>_/ 1</div> <div>_/ 2</div> </div>	<div> <div>_/ 4</div> </div>
	<i>Functionality of robot</i>			/ 18
E)	Robot fulfils sufficient number of tasks ³ within chosen step-of-solution.	Fulfil: To successfully demonstrate to the judge. Sufficient number: Use personal discretion.	<div> <div>_/ 3</div> </div>	<div> <div>_/ 3</div> </div>
F)	Robot successfully fulfils: - two or more user inputs ² - three or more logical states ³ - text output for end user ¹ - telemetry data for developers ¹ - other unique features ²	User inputs: Multiple questions in series, e.g. name, age, email... should be counted as one input. Logical states: Like idle, armed, moving, calculating, sensing... Telemetry data: May include current state, sensor readings, other important variables...	<div> <div>_/ 2</div> <div>_/ 3</div> <div>_/ 1</div> <div>_/ 1</div> <div>_/ 2</div> </div>	<div> <div>_/ 9</div> </div>
G)	Any one robot error ¹ is considered and solution ¹ is implemented.	Robot error: Such as low battery, scanner fault...	<div> <div>_/ 1</div> <div>_/ 1</div> </div>	<div> <div>_/ 2</div> </div>
H)	Any one user error ¹ is considered and solution ¹ is implemented.	User error: Such as misinput (e.g. text in age field) or mishandling (e.g. bad placement).	<div> <div>_/ 1</div> <div>_/ 1</div> </div>	<div> <div>_/ 2</div> </div>
I)	Any one runtime error ¹ is considered and solution ¹ is implemented.	Runtime error: Environmental, like wind, water, dust... or other uncontrollable factors.	<div> <div>_/ 1</div> <div>_/ 1</div> </div>	<div> <div>_/ 2</div> </div>

	<i>Critical thought process</i>			<u> </u> / 14
J)	A rationale-of-choice questions is asked and answered for each: - mechanical part ³ - electrical part ³ - sensor or controller ³	Rationale-of-choice: Some part is chosen (1 mark). Rationale is given of why this part is used instead of some other part (1 mark). Rationale is valid and relevant as per personal discretion (1 mark).	<u> </u> / 3 <u> </u> / 3 <u> </u> / 3	<u> </u> / 9
K)	Three or more quantitative decisions ³ are justified.	Quantitative decision: Like power constraints, operating conditions, space limitations...	<u> </u> / 3	<u> </u> / 3
L)	Sufficient non-quantifiable factors ² are considered.	Non-quantifiable factors: Visual elements, UI/UX, or other factors of qualitative measurement.	<u> </u> / 2	<u> </u> / 2
	<i>Consistent documentation</i>	See Resources to Submit section. Judges must omit this section .		<u> </u> / 10
M)	All ¹ rationale-of-choice questions are documented ¹ in the correct format ² .	All: As described in (J). Document: To be submitted by the team prior to the event.	<u> </u> / 1 <u> </u> / 1 / 2	<u> </u> / 4
N)	Source control pipeline exists ¹ with three or more substantial commits ¹ and is updated ¹ .	Substantial: Commits that do not add new substance to the project do not count.	<u> </u> / 1 <u> </u> / 1 / 1	<u> </u> / 3
O)	Overview document ¹ is submitted with correct format ² .		<u> </u> / 1 / 2	<u> </u> / 3
	<i>Penalties</i>			<u> </u> / -15
P)	Presentation exceeds allowed time by more than 30 seconds.	Penalise when time is exceeded. Discretion to be used.	-2	Y / N
Q)	Presentation exceeds allowed time by more than 1 minute.	Penalise when time is exceeded. Also award above penalty.	-3	Y / N
R)	Presentation exceeds allowed time by more than 2 minutes.	Penalise when time is exceeded. Also award above penalties. Interrupt presentation, score, and take signature.	-5	Y / N
S)	One or more resources are not submitted by deadline.	Judges must omit this section . Discretion to be used.	-5	Y / N
	Judge Grand Total	Sum of scores (A) to (L) and penalties (P) to (S).		<u> </u> / 50
	Grand Total	To be entered by organisers.		<u> </u> / 60

By signing, you agree that the scores entered in (A) to (L), the penalties awarded in (P) to (S), the total scores for each criterion, and the Judge Grand Total are all correct. If you wish to appeal these scores, omit the signature and request to speak to the Event Supervisor.

Sign of Participant 1: _____

Sign of Judge: _____

Sign of Participant 2: _____

Sign of Participant 3: _____

Date of signature: _____