

**C-HACK 2021  
EVALUATION  
RUBRIC**

Students will be graded in part on the one page summary which they upload with their code at the end of the Hackathon - January 13th and in part on their oral presentation on January 15th. With the term PRESENTATIONS we refer to the oral presentation only and with SUMMARY&CODE we refer to the summary and code they submitted. Each evaluator will be assigned 6 teams.

POINT BREAKDOWN FOR EVALUATION OF TEAM WORK		
Refers to material submitted on the 13th	SUMMARY & CODE	TOTAL
	MAX NUMBER OF POINTS	
	coding	25
	data visualization (only for PROJECT 1)	20
Refers to the oral presentation on the 15th	PRESENTATIONS	TOTAL
	MAX NUMBER OF POINTS	
	oral presentation	15
	teamwork	20
	project results	20
	<b>GRAND TOTAL</b>	<b>100</b>

Criteria		Excellent (4)	Good (3)	Fair (2)	Poor (1)
PRESENTATIONS	Oral presentation	Speech is clear and concise. The presentation is well organized and shows a deep above average understanding of the content. Results are well represented by plots and visualizations. The work that was done is efficiently communicated to the audience.	Speech is mostly clear. The presentation is well organized and shows a good understanding of the content. Results are almost all accurately represented by plots and visualizations, could add one or two plots. The work that was done is mostly well communicated to the audience. Could add a more detailed description of the work.	Speech is a bit unclear. The presentation is not very well organized and shows an average understanding of the content. Some results are represented by plots and visualizations, but more would be required to gain a good understanding. The work that was done is communicated to the audience but the delivery was weak and could be improved.	Speech was unclear. The presentation lacked overall organization and showed a very low understanding of the content. Graphic visualizations and description of (if present) graphics were missing. It was clear that very little work had gone into preparing the presentation and that it should be improved
	Teamwork	From the oral presentation it is clear that students worked in a team and that they all provided an important contribution to the final project, summary and presentation. It was clear who worked on what task and all teammembers were aware of their co-team members work.	From the oral presentation it is clear that most of the students (at least 3 out of 4) worked as a team and that these students all provided a contribution to the final project, summary and presentation. It was mostly clear who worked on what task and almost all teammembers were aware of their co-team members work.	From the oral presentation it is clear few of the students (at least 2 out of 4) worked as a team and that only these students provided a contribution to the final project, summary and presentation. It was a bit unclear who worked on what task and only some of the teammembers were aware of their co-team members work.	From the oral presentation it is clear that the students did not work as a team. Further, many of the students in the team did not provide a significant a contribution to the final project, summary and presentation. It was unclear who worked on what task and most of the teammembers were unaware of their co-team members work.
	Project results	Results are clearly presented and supported and scientific deductions and conclusions are without error. Results are practical and demonstrate a clear purpose. A logical progression from the data to the final results is presented. Presented results fully answer the problem questions.	Most results are clearly presented and supported and most scientific deductions and conclusions are without error. Some of the conclusions could be redirected or need stronger evidence. Most of the results are practical and demonstrate a clear purpose. A logical progression from the data to the final results is presented. Presented results almost fully answer the problem questions.	Some results are clearly presented without error, others show error either in the results or in the scientific deductions and conclusions. Most of the conclusions could be redirected or need stronger evidence. Some of the results are practical and demonstrate a clear purpose. The progression from the data to the final results is not fully clear or logical. Presented results partially answer the problem questions.	Most results are not clearly presented and show error either in the results or in the scientific deductions and conclusions. The results are not practical and lack a demonstrated clear purpose. The progression from the data to the final results is unclear. Presented results do not or only barely answer the problem questions.

CODE & FINAL SUMMARY	<b>Data Visualization (Complete ONLY for PROJECT 1)</b>	<p>The team chose visualizations which gave a great overview of the available data. Multiple aspects (more than 3-4) of the data are represented in plots. Multiple types of plots or visualizations (more than 3-4) of the data are given. Their choice of visualization is logical, and enables an easy representative understanding of the data.</p>	<p>The team chose visualizations which gave a good overview of the available data. Many aspects (more than 2-3) of the data are represented in plots. Different types of plots or visualizations (more than 2-3) of the data are given. Their choice of visualization is logical, and enables an easy and mostly representative understanding of the data.</p>	<p>The team chose visualizations which gave a fair overview of the available data. Some aspects (more than 1-2) of the data are represented in plots. A couple types of plots or visualizations (more than 1-2) of the data are given. Their choice of visualization is mostly logical, and enables some understanding of the data if accompanied by an explanation.</p>	<p>The team chose visualizations which did not represent the available data accurately. Few aspects (less than 1-2) of the data are represented in plots. Only one type of plot or visualization of the data is given. Their choice of visualization is lacking logic, and does not enable a clear understanding of the data unless accompanied by an extensive explanation.</p>
	<b>Data Analysis &amp; Prediction (Complete ONLY for PROJECT 2)</b>	<p>The team took full advantage of the available data. Multiple aspects (more than 3-4) of the data are investigated when using prediction models. Multiple models (more than 3-4) of the data are tested. Their choice of model and input features is logical and efficient for the chosen purpose. It is both user friendly and very accurate in predicting impurities.</p>	<p>The team took full advantage of most of the available data. More than 2-3 different modes to predict impurities from the data are investigated. More than 2-3 sets of input features taken from the data are tested. Their choice of model is logical and efficient in terms of usability as well as to predict impurities accurately.</p>	<p>The team took full advantage of some of the available data. One or two different input features from the data are investigated when using models. One or two models are tested to predict impurities. Their choice of input features and models is mostly logical and somewhat efficient to predict impurities. The model is not the very user friendly - it is a bit complex to understand.</p>	<p>The team did not take advantage of most of the available data input features. Only one set of input features taken from the data to predict impurities is investigated. Only one model is tested. Their choice of input data and model is not logical and lacks efficiency for the chosen application - predicting impurities. The model is not user friendly - it is either unclear or too complex.</p>
	<b>Code Writing</b>	<p>The submitted code executes without error. The code can be easily understood based on explanatory comments throughout. The code is written efficiently and does not contain excessive or redundant lines or sections. All employed functions and packages are correctly used. A great understanding of the tutorial content is demonstrated.</p>	<p>The submitted code executes without error or only with one small error. Most of code can be understood based on explanatory comments throughout. The code is mostly written efficiently and does not contain excessive or redundant lines or sections. Almost all employed functions and packages are correctly used. A good understanding of the tutorial content is demonstrated.</p>	<p>The submitted code executes with some errors. About half of code can be understood based on explanatory comments throughout, more comments would be needed. Part of the code is written efficiently and does not contain excessive or redundant lines or sections. Some of the employed functions and packages are correctly used. An average understanding of the tutorial content is demonstrated.</p>	<p>The submitted code does not execute or executes with many errors. Almost none of code can be understood based on explanatory comments, many more comments would be needed. Most of the code is not written efficiently and contains many excessive or redundant lines or sections. None or almost none of the employed functions and packages are correctly used. A below average /low understanding of the tutorial content is demonstrated.</p>