Assessment Task: Capstone Project Proposal

Title: The Correlation Between Food and Beverage Sales in Hospitality and The Weather

Introduction: One of the main objectives of any company is to minimise costs and subsequently maximise profits. The proper management of stock is key to achieve the right optimization: buying only the necessary amount, avoiding wastage and correctly predicting the volume of sales for each season. The company has more to consider than it looks, not only the inner aspects of itself but also the external factors such as the competition, the weather, big events in the city and so on. Food and Beverage is not the leading department in the hospitality industry but still has its importance in the sector, and it is the one that suffers* (check if I can use suffer for this, the idea is "prejudicado") the most if the optimization of the stock is not done properly due the nature of the goods that demands the right storagement and has the a limited (data de validade).

(Provide a brief overview of the project and its significance. Explain why the capstone project is important, relevant, and interesting. Mention any real-world problems or challenges that the capstone project aims to address. The capstone project should aim to develop possible solutions.)

Objectives: The project has the intention to help the hotel to improve the Food and Beverage sales through a better understanding of its demand. Exploring the data provided and find the existent correlations between inner factors, for example: the relationship between dishes and drinks, if there is a direct impact on the sales of certain drinks if one dish is sold more in the day and vice versa; (find more inner factors). Analyse the impact that external factors have in the sales: the weather, number of audiences in the courts, sports events and concerts.

(Outline the specific goals of your capstone project. What do you intend to achieve through this capstone project? Ensure your objectives are clear, concise, and aligned with the project's goals. You should have between three and five objectives. There should be a business objective or hypothesis (not a statistical test hypothesis) that looks to be explored.)

Problem Definition: Maybe my introduction is my problem definition.

(Clearly state the problem or challenge the capstone project seeks to solve. Discuss the context of the problem, its impact, and why it's essential to address it.)

Scope:

(There should be plenty of scope for the two-semester capstone project. Define the scope of the capstone project. What will be included and excluded from the capstone project, and who will do what? List the boundaries of the capstone project to avoid any ambiguity. Since this is a two-semester project, ample scope should be provided for in-depth analysis and exploration. Describe the planned methods, techniques, and approaches you plan to accomplish in the capstone project. What do you expect to deliver by the end of semester two? Provide a high-level timeline for the capstone project. Break down the project into phases or milestones and estimate the time required for each.)

Data Sources:

(Where will you get your data, and how much do you need? Specify the data sources you plan to use in the capstone project. Show evidence of any permissions to access the data and the use of the data.)

Ethical Considerations: Discuss any ethical considerations associated with the capstone project, especially if it involves sensitive data, user privacy, or potential societal impacts. This will include dataset permissions and use of data permissions. There can be no medical capstone projects.

Sample Ideas for Capstone Projects:
Predictive Analytics for Customer Churn in E-commerce.
Increasing company sales
Financial Fraud Detection (Anomaly detection)
Personalised pricing.
Event analysis
Sports predictions (games, players, plays)
Remember that these project ideas are just starting points. Ensure that your project proposal outlines a comprehensive and in-depth analysis that will occur over two semesters.

Individual Reflective Report:

- Regarding the individual reflective report, what were your contributions to all aspects of the project, from selecting the dataset to the final presentation and

report? Finally, what was your contribution to the creation of the code and report?

- In terms of team dynamics, how did you work well within the team and were able to leverage each other's strengths to deliver a high-quality project? How did you contribute to the communication and were able to communicate effectively, share ideas and provide constructive feedback to improve the quality of the group work? However, if there were some challenges in coordinating schedules and balancing workload, how were you flexible and adapting to changing circumstances?
- In terms of the learning journey, how did this project help you develop a deeper understanding of data analytics / AI?
- Overall, how did this project help you develop valuable technical and collaboration skills that can be applied in future projects?
- Minimum word count of 500.

Further details of the assessment:

- **Groups of two will be self-selected and put in Moodle. No one can leave a group or be kicked out of a group. If there is an issue in the group, all group members will need to meet with the programme lead or dean of CCT. Your lecturer cannot approve group changes. The maximum group size is 2.**
- **Support your analysis with references and properly reference ALL sources that you have used. <u>WARNING – If you do not support your work, you will not receive a high mark!</u>**
- WORD COUNT: 2,000 words. You may lose up to 10% of marks if your report is too short or long!

Submission Requirements
All assessment submissions must meet the minimum requirements listed below. Failure to do so may have implications for the mark awarded.

- Submissions must be completed by 29th October 23:59.
- Capstone Project proposal report in PDF or Word format of about 1,000 words.
- Individual Reflective Report in PDF or Word format of about 500 words.
- You must submit your work by the deadline date specified. Otherwise, you will be subject to late submission penalties.
- Use Harvard Referencing when citing third-party material.
- Make sure you submit your own work. **No plagiarism will be tolerated.**
- Include the CCT assessment cover page.

Additional Information

- In any situation, the lecturers are entitled to call you in for a further explanation of your code/report/slides.
- Lecturers are not required to review draft assessment submissions. This may be offered at the lecturer's discretion.
- In accordance with CCT policy, feedback to learners may be provided in written, audio or video format and can be provided as individual learner feedback, small group feedback or whole class feedback.
- Results and feedback will only be issued when assessments have been marked and moderated / reviewed by a second examiner.
- Additional feedback may be provided as individual, small group or whole class feedback. Lecturers are not obliged to respond to email requests for additional feedback where this is not the specified process or to respond to further requests for feedback following the additional feedback.
- Following receipt of feedback, where a student believes there has been an error in the marks or feedback received, they should avail of the recheck and review process and should not attempt to get a revised mark / feedback by directly approaching the lecturer. Lecturers are not authorised to amend published marks outside of the recheck and review process or the Board of Examiners process.
- Students are advised that disagreement with an academic judgement is not grounds for review.
- For additional support with academic writing and referencing students are advised to contact the CCT Library Service or access the CCT Learning Space.
- For additional support with subject matter content students are advised to contact the CCT Student Mentoring Academy
- For additional support with IT subject content, students are advised to access the CCT Support Hub.

Marking Scheme Summary

Description	Weighting
Project proposal. ● Introduction: clear overview of the capstone project. ● Objectives: Objectives aligned with the capstone project's goals. Inclusion of objectives and hypothesis. ● Problem definition: context and impact of the problem explained effectively.	20

Scope and Methodology ● Scope: Well-defined scope of the capstone project with boundaries and limitations. ● Methods: Well-explained proposed methods suggested for meeting the capstone project's objectives. ● Clear timeline: A high-level timeline of what is planned to be done and by whom.	20
Data and Ethical Considerations ● Data sources: clear identification of data source(s) and evidence of permission for data use. Also, consider the quantity of data required. ● Ethical considerations: a thorough consideration of ethical aspects related to the capstone project. This should include awareness of any privacy concerns, bias and fairness. ● Harvard referencing and in-text citations have been done correctly for all aspects of the proposal.	20
Individual Reflective Report ● What was your contribution to the project? ● How did you work well within your team? How did you contribute to the communication and share ideas with the team? ● What was your learning journey? How did you develop a deeper understanding of data analytics / AI? ● What collaboration skills did you learn? How can these skills be applied to future projects?	40
TOTAL	**100**

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CCT College Dublin Continuous Assessment

Programme Title:	Higher Diploma Data Analytics for Business		
Cohort:	Full Time Sep2023		
Module Title(s):	Strategic Thinking		
Assignment Type:	Group / Practical	**Weighting(s)**:	20 %
Assignment Title:	CA 1 – Capstone Project Proposal		
Lecturer(s):	James Garza (james@cct.ie)		
Issue Date:			

Submission Deadline Date:	29th October 2023 23:59
Late Submission Penalty:	Late submissions will be accepted up to **5** calendar days after the deadline. All late submissions are subject to a penalty of **10%** <u>of the mark awarded</u>. Submissions received more than 5 calendar days after the deadline above **<u>will not</u>** be accepted, and a mark of 0% will be awarded.
Method of Submission:	**Moodle**
Instructions for Submission:	Your work must be uploaded to Moodle. ● Capstone Project Proposal in Word or PDF format ONLY. The word count: ~1,000. ● Individual Reflective Report in Word or PDF format ONLY. The word count is ~500.
Feedback Method:	**Results posted in Moodle gradebook**
Feedback Date:	