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**CCT College Dublin Continuous Assessment**

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| **Programme Title:** | Higher Diploma in Data Analytics for Business / Higher Diploma in AI Apps | | |
| **Delivery Mode:** | Online | | |
| **Cohort Details:** | Higher Diploma Data Analytics Sep2025 FT/PT Semester 1 | | |
| **Module Title(s)**: | Strategic Thinking | | |
| **Assignment Type:** | Individual | **Weighting(s):** | 20 % |
| **Assignment Title:** | CA 1 – Capstone Project Proposal | | |
| **Lecturer(s)**: | Taufique Ahmed | | |
| **Issue Date:** | 22nd Sept 2025 | | |
| **Submission Deadline Date:** | 29th October, 2025 at 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%** of the mark awarded.  Submissions received more than 5 calendar days after the deadline above **will not** be accepted and a mark of 0% will be awarded. | | |
| **Method of Submission:** | **This assignment is submitted via Moodle.** | | |
| **Instructions for Submission:** | Your work must be uploaded to Moodle.  • Capstone Project Proposal in Word format ONLY. The word count is 1,000.  • Ethics form signed by all students and submitted as PDF.  • ZIP or RAR files will not be accepted. Files must be submitted separately. | | |
| **Feedback Method:** | **Results posted in Moodle gradebook** | | |
| **Feedback Date:** |  | | |

Strategic Data Analysis for Student Retention in Jiu-Jitsu Academies

**Introduction**

The expansion and viability of a Jiu-jitsu academy depend essentially on the ability to keep students engaged and committed. Compared to other business models with continuous income, student loyalty is key to reducing churn and ensuring the academy's long-term economic stability. This project aims to put data analysis into practice to convert customer relationships from reactive to proactive.

**Problem Definition**

The high student turnover rate is a commercial weakness that has an immediate impact on the academy's financial organisation, resulting in extra costs such as marketing and attracting new students. The threat of attrition is amplified by the fundamental principle of Customer Relationship Management (CRM), which posits that the cost of acquiring a new customer can be up to five times higher than the cost of retaining an existing customer (Dyche, 2002). This problem is most evident at the base: ‘the biggest and most immediate retention opportunity for most academies is definitely in retaining white belts’ (JJGF, n.d.)

**Objectives**

This Capstone project aims to analyse strategy gaps through thorough data analysis in order to accurately predict which students are highly likely to drop out. The goal is to enable the creation of a new methodology for the engagement and retention programme that is economically sustainable and focused, improving investments in CRM.

Scope of the Project

The scope of the project focuses on using data analytics techniques and predictive models to identify risk patterns based on engagement metrics such as average class attendance and contract duration. The main area of focus will be to concentrate retention efforts on groups of students recognised as high risk, confirming the strategic value of Data Analytics in the sustainability of ongoing service businesses.

## Grading Criteria

This grading rubric sets out the marking criteria for your assignment.

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| **Criteria** | ***Project Proposal*** | ***Scope and Methodology*** | ***Data and Ethical Considerations*** |
| **Weighting per criteria** | **40%** | **40%** | **20%** |
| *Excellent (+70%)* | Clear, well-structured overview with clear, concise objectives and a well-explained problem definition. | Scope and methodology are very well-defined, with appropriate methods and detailed timelines for each stage. | Excellent identification and explanation of data sources. Ethical considerations are thoroughly addressed. |
| *Very Good (60 - 69%)* | Good overview with clearly stated objectives and mostly well-explained problem definition. | The scope and methodology are well-defined, but minor details are missing. The timeline effectively covers all main tasks. | Data sources are identified with some explanation; ethical considerations are adequately addressed. |
| *Good (50 - 59%)* | The overview and objectives are clear but lacking in detail. The problem definition may be vague. | Scope and methods are sufficiently defined but lack depth or detail. The timeline covers most tasks. | Data sources are listed with a basic explanation. Ethical concerns are briefly mentioned but not fully explored. |
| *Acceptable (40 - 49%)* | Objectives and problem definitions are present but underdeveloped and lack clarity. | Scope and methods are minimally addressed. The timeline is incomplete or lacks important details. | Data sources are vaguely mentioned. Ethical considerations are minimal and need more depth. |
| *Fail (< 39%)* | Little to no explanation of objectives or problem definition. | The scope and methodology are unclear or missing. No clear timeline. | Data sources and ethical considerations are either missing or not addressed at all. |

**The Irish Grading System**

The grading system in CCT is the QQI percentage grading system and is in common use in higher education institutions in Ireland. The pass mark and thresholds for different grade bands may be different from what you have experienced in the higher education system in other countries. CCT grades must be considered in the context of the grading system in Irish higher education and not assumed to represent the same standard the percentage grade reflects when awarded in an international context.

Please review the CCT Grade Descriptor available on the module Moodle page for a detailed description of the standard of work required for each grade band, and review the marking criteria outlined in this assignment brief for a breakdown of the marking criteria for this specific assignment.

**Additional Information**

* 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.
* For additional support with subject matter content students are advised to contact the [CCT Student Mentoring Academy](https://moodle.cct.ie/course/view.php?id=827)
* For additional support with IT subject content, students are advised to access the [CCT Support Hub](https://moodle.cct.ie/course/view.php?id=1861).