

CCT College Dublin Continuous Assessment

Programme Title:	CrossPlatDev_BScCompIT_Sept20		
Cohort:	FT		
Module Title(s):	Cross Platform Development		
Assignment Type:	Group (max: 2)	Weighting(s):	30%
Assignment Title:	Theory and practical		
Issue Date:	21 th April 2022		
Lecturer(s):	Dr Muhammad Iqbal		
Submission Date:	20 th May 2022	Feedback Date:	Results will be announced after the approval from exam board.

Learning Outcomes:

Please note this is not the assessment task. The task to be completed is detailed on the next page.

This CA will assess student attainment of the following minimum intended learning outcomes:

MLO 4 - Design and implement applications that utilise local hardware and include local (Linked to PLO 4 (Stage 1/2 SLO 4))

Attainment of the learning outcomes is the minimum requirement to achieve a Pass mark (40%). Higher marks are awarded where there is evidence of achievement beyond this, in accordance with QQI

Assessment and Standards, Revised 2013, and summarised in the following table:

Percentage Range	QQI Description of Attainment	
	Level 6, 7 & 8 awards	Level 9 awards
70% +	Achievement includes that required for a Pass and in most respects is significantly and consistently beyond this	Achievement includes that required for a Pass and in most respects is significantly and consistently beyond this
60 – 69%	Achievement includes that required for a Pass and in many respects is significantly beyond this	Achievement includes that required for a Pass and in many respects is significantly beyond this
50 – 59%	Achievement includes that required for a Pass and in some respects is significantly beyond this	Attains all the minimum intended programme learning outcomes
40 – 49%	Attains all the minimum intended programme learning outcomes	
35 – 39%	Nearly (but not quite) attains the relevant minimum intended learning outcomes	Nearly (but not quite) attains the relevant minimum intended learning outcomes
0 – 34%	Does not attain some or all of the minimum intended learning outcomes	Does not attain some or all of the minimum intended learning outcomes

The CCT Grade Descriptor describes the standard of work for grade boundaries summarised below. The full descriptor is available on Moodle. Understanding grading in the Irish Higher Education context is available at

Grade	90-100%	80-89%	70-79%	60-69%	50-59%	40-49%	35-39%	<35%
Performance	Exceptional	Outstanding	Excellent	Very Good	Good	Acceptable	Fail	Fail

Assessment Task

Students are advised to review and adhere to the submission requirements documented after the assessment task.

Development Environment: The application should be developed using Node, NW.js or Electron frameworks.

Part I

- 1) Design a cross-platform desktop application for electricity users using a wireframe or any other appropriate design technique.
- 2) Develop and implement an application using nw.js or electron framework that calculates the electricity bill by adding VAT (13.5%) and Standing charges (4 cents per day).
- 3) Calculate the electricity bill using a unit rate (flat rate of 20 cents per unit), add standing charges at a rate of 4 cents per day and apply the VAT tariff at a rate of 13.5% to the total amount. The example for the calculation is mentioned below
 - **Input/ Output for Electricity Bill**
 - Number of Units: 225
 - Billing Period (Days): 60
 - Amount of Bill without VAT: $225 * 0.20 + 60 * 0.04 = 47.4$
 - Total payable amount including VAT (13.5%): $47.4 + 47.4 * 13.5/100 = 47.4 + 6.40 = €53.80$
(Rounded values up to 2 decimal places)
- 4) Execute the application on your system (Windows/ Linux/ Mac) and provide the screenshots in the report.
- 5) The desktop application should show the title with your studentIDs, the images for the folder and files in this Electricity application.
- 6) Provide a clear strategy for testing desktop applications using Unit Testing or any other related technique/tool and validate for the users.
- 7) Demonstrate the desktop application code (JavaScript, HTML, package.json and CSS files) and its working functionality using a video presentation.

(80% Marks)

Part II

- 1) Indicate clearly what each team member contributed to this continuous assessment.

(20% Marks)

Submission Requirements

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

All assessment submissions must:

- **Only one zip folder** including MS word/ pdf file with all screen shots inside the file as a report, desktop application code and video recording file.

- Do not upload separate files on Moodle.
- Demonstrate your understanding using a video (5 to 7 minutes duration)
- Be submitted by the deadline date specified or be subject to late submission penalties
- Be submitted via Moodle upload.
- Use Harvard Referencing when citing third party material.
- Be the student's own work.
- Include the CCT assessment cover page.