

CCT College Dublin Continuous Assessment

Programme Title:	HDIP in Artificial Intelligence		
Cohort:	September 21 - PT		
Module Title(s):	Programming for AI		
Assignment Type:	Individual or Pairs – In class	Weighting(s):	40%
Assignment Title:	Vet Clinic System		
Lecturer(s):	Amilcar Aponte (amilcar@cct.ie)		
Issue Date:	13 th November 2021 @ 10:00.		
Submission Deadline Date:	13 th November 2021 by 14:00.		
Late Submission Penalty:	Late submissions will not be allowed as this is an in-class activity.		
Method of Submission:	Moodle		
Instructions for Submission:	You must submit your full NetBeans project in a compressed zip file including both the code provided to you and the code produced by you. This should be a working program. No debugging will be done.		
Feedback Method:	Results posted in Moodle gradebook		
Feedback Date:	10 th December 2021		

Assessment Criteria

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	CCT Performance Description	QQI Description of Attainment	
		Level 6, 7 & 8 awards	Level 9 awards
90% +	Exceptional	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
80 – 89%	Outstanding		
70 – 79%	Excellent		
60 – 69%	Very Good	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%	Good	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%	Acceptable	Attains all the minimum intended programme learning outcomes	
35 – 39%	Fail	Nearly (but not quite) attains the relevant minimum intended learning outcomes	Nearly (but not quite) attains the relevant minimum intended learning outcomes
0 – 34%	Fail	Does not attain some or all of the minimum intended learning outcomes	Does not attain some or all of the minimum intended learning outcomes

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.

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 experience of 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.

Assessment Task

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

You have been tasked to create a working program to demonstrate a “Vet Clinic” as a prototype.

You have been provided with some code that will generate two new CSV files with random data every time the program runs. This code must not be modified and should be included in your final Jupyter notebook or .py script. Using the vets and pets’ data supplied (in the CSV files dynamically generated by the code provided) your program should perform the following tasks.

- Randomly associate a vet (from the vets file) to each one of the pets (from the pets file). Each pet will have one vet assigned, but each vet could have multiple pets assigned.
 - The vet can only have assigned pets whose species matches their specialty.
 - This data must be saved to a new CSV file called “vet_pet.csv”. The structure of this file is for you to decide. HINT: Both vets and pets have a unique ID.
- After the vet-pet association has been done, you must provide a menu to allow a user to:
 - View all vets.
 - View all pets.
 - View vets from a specific specialty.
 - View pets of a specific species.
 - Find a particular vet given their ID and view all pets associated to them.
 - Find a particular pet given its ID and view its associated vet.
 - An option to close the program should be included in the menu. If this is selected the program should finish. The program should allow the user to see different analytics without having to run the program again.
- All user input must be validated.
- Your source code must be properly commented, and a reasonable explanation of your logic should be included. This explanation can be short and simple, but clear enough to demonstrate your understanding of your own code.
- The code provided will generate a random amount of data that will range between 500 and 1000 pets, and between 10 and 30 vets, so your program should be capable of dealing with any number of vets and pets.

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:

- Run correctly as no debugging will be done.
- Be submitted by the deadline date specified. No late submissions are allowed.
- Be submitted via Moodle upload.
- Use [Harvard Referencing](#) when citing third party material
- Be the student’s own work.

Additional Information

- This is an open-book activity, you may use all notes and online sources for help. Anything you use should be fully attributed to its original source.
- In any situation, the lecturer is entitled to call you in for further explanation of your code.

- 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 Schedule

Description	Weighting
<p>Appropriate data structures have been used to store the objects in memory.</p> <ul style="list-style-type: none"> - Vets - Pets <p>The structures allow to list all elements contained in it. Code is well structured and commented.</p>	10
<p>Correct association of vets and pets including CSV file creation. Code is well structured and commented.</p>	35
<p>Appropriate filtering of elements from the structures to display by groups.</p> <ul style="list-style-type: none"> - Vets by specialty - Pets by species <p>Code is well structured and commented.</p>	10

Appropriate searching has been utilised within the program to find specific elements in the structure: <ul style="list-style-type: none">- Specific vet by ID and associated pets.- Specific pet by ID and associated vet. This is working correctly. Code is well structured and commented.	20
User menus and validations. This is working correctly. Code is well structured and commented.	25
Total	100