CSE1202 – Mathematics and Statistics for Computer Science

Assignment

Assignment Type: Individual

Assignment Weight: 25% of course grade

Instructions:

Using the Python programming language, you are required to build an application that demonstrates creative programmatic engagement with ONE of the following topic areas:

1. Number Theory
2. Trigonometry
3. Linear Algebra
4. Calculus

Your application must use the concepts associated with the chosen topic area to implement your 'creative' idea. While you are not limited to these examples, you may opt to build a game, simulation or an innovative tool to solve a problem.

To do well in this assignment, your use of the concepts should be integrated with your programme at the 'application' level. So, for example, a 'Maths and Stats Calculator' would not score as highly as a program that more artfully uses the concepts to implement features in a game, simulation or tool.

You are also required to present your application in a short video. You must pitch your idea, demonstrate it and link its functionality to concepts from the chosen topic area. Your video should not be longer than 10 minutes.

Marks will be awarded for:

- Creativity of the idea (e.g., a 'Maths and Stats Calculator' would be marked down for creativity while a game
- using the concepts would score higher marks);
- Sensible use and implementation of concepts;
- Ability to link functionality to concepts;
- Creativity and quality of video presentation.

Submission Medium: UG Moodle ONLY. Assignments submitted through alternative channels will be disregarded.

Zip your project folder and title it as follows: CSE1202_Assignment_FirstNameStudent_LastNameStudent_USI

e.g. CSE1202_Assignment_John_Doe_1234567 (Assignments that do not follow this standard will be penalised)

You may need to upload your video to Google Drive (or similar) and paste the link to the video in a .txt file in your project folder (Moodle site upload limit = 50mb). Ensure you enable permissions for viewing the file.

Plagiarism:

The university has a strict policy against plagiarism and it will be in effect - no exceptions. If you copy code from the internet, your assignment will be awarded 0. If you copy code from fellow classmates, your assignment will be awarded 0. If you share your code with fellow classmates, your assignment will be awarded 0. If there is any evidence of any sort to suggest academic malpractice, your assignment will be awarded 0.

Available From: 6th April, 2021

Due: 14th July, 2021 before 12 noon

If a student submits an assignment late without having made arrangements with the lecturer, 20% of the total points will be deducted for each day the assignment is late.

Special Considerations:

If you have specific resource challenges that will prevent you from completing the assignment, make them known to me as soon as possible. If you are in need of an extension, consult the 'Apply for an Extension' document on Moodle.

If you have any questions, send an email to: alicia.layne@uog.edu.gy