COLLEGE OF SCIENCE, TECHNOLOGY AND APPLIED ARTS OF TRINIDAD AND TOBAGO

SCHOOL OF BUSINESS AND INFORMATION TECHNOLOGIES

Motto: "Transforming Lives, Transforming Communities, Transforming the Nation… One Student at a Time"

SCHOOL OF BUSINESS AND INFORMATION TECHNOLOGIES

DEPARTMENT OF INFORMATION SCIENCE AND TECHNOLOGY

INDIVIDUAL ASSIGNMENT

Course Code and Title: ITEC245 - Intro to Scripting Languages

DATE GIVEN:	December 11th, 2020
DUE DATE:	January 8th, 2021 @ 5 pm
DEMONSTRATION DATE:	January 8th, 2021 @ 6 pm
TOTAL NO. OF PAGES (INCLUDING COVER PAGE)	7
ASSESSMENT WEIGHTING:	30% of Final Grade
LECTURER:	Alicia Dennis-Nagee
CENTER:	Online
CRN:	19087

COSTAATT Student Code of Conduct defines ACADEMIC DISHONESTY as "Engaging in activities which includes cheating, plagiarism or any other activity related to the misrepresentation of someone else's work as one's own or using tools or other resources to secure an unfair advantage during an assessment."

Below are two specific violations which are expanded upon for clarity:

1. **PLAGIARISM** is the act of taking another person's code, idea and passing it off as your own. This includes information from web pages, books, other students, or any other medium. Whenever you paraphrase, summarize, or take words, code, phrases, or sentences from another person's work, it is necessary to indicate the source of the information *within your paper* using an **internal citation (Harvard Web)**. It is not enough to just list the source in a bibliography at the end of your paper. Failing to properly quote, cite or acknowledge someone else's words or ideas with an internal citation is **plagiarism.** Suspected plagiarism will be investigated and if found to have occurred will be dealt with according to the procedures set down by the College.
   All code copied or amended from any source (e.g. internet, books, YouTube) must be prefaced by an HTML/CSS/JavaScript comment line stating the full reference to the source and the date referenced.
2. **USE OF TOOLS** in this assessment is limited to a code editor such as SublimeText3, Microsoft VSCode, Notepad++, Notepad, Atom, or any other non-WYSIWYG or Drag and Drop tool. i.e. **you are prohibited from using any tool which auto generates code such as WordPress, DreamWeaver, Weebly, Microsoft Expression Web or ANY similar tool.**

Coursework Submission Requirements

- Create a single web directory folder containing all the files pertaining to your website as well as the PDF copy of your report. Name the folder "**lastname_firstname_ITEC245_Final_Project**".
- The folder containing your entire project must be zipped and uploaded to e-classroom no later than the due date and time stipulated on the cover page.
- You must NOT submit a paper copy of this assignment.

Coursework Regulations

- This Coursework must be done as an **individual assignment**.
- Ensure that your web app or any part of it is not duplicated by another colleague. This will result in a percentage of zero (0%) assigned to all parties involved.
- You MUST demonstrate your website.
- **Late Submission policy – Assignments submitted after the deadline will accrue a 10% penalty for each day late up to a maximum of three days. No assignments will be accepted after Monday January 11th 2021.**

Assessment Objectives

After completing this assessment student are expected to be able to:

1. Dynamically manipulate web content using Client-side scripting
2. Use JS objects to manage related code and stateful information
3. Use JS functions to manage scope, employ code reuse, and code modularity
4. Manage data using arrays and objects
5. Listen for and handle mouse and timer events.

Project Specification

You have been hired by the Ministry of Culture, Community and Youth in Trinidad and Tobago to build a web application to promote our unique culture in the format of a game. The game is called **TriniTing** and invites players to guess the answers to clues given about Trinbago culture. The following are features your game must have.

- Category selection – Allow your user to select the category on which they will be quizzed. Some possible categories are: food, famous persons, politics, geography, celebrations, ancestry etc.
- Points – A player must be able to amass points as they play the game, with more difficult questions earning the player more points – think jeopardy.
- Fail out – A player will be challenged to maintain an answering streak, as if they answer three consecutive questions incorrectly their game must be terminated.
- Exit – A player should have an option to exit the game at any point. If they choose to exit, their final attained score must be displayed on the screen along with a parting congratulatory message.
- Win – A player wins the game if they complete the selected category by answering all questions correctly. Display a congratulatory message and final score to the screen
- Commendation – A player receives a commendation if they complete the selected category but had some questions incorrect Display a congratulatory message and final score to the screen. NOTE: A player who receives a commendation cannot have failed out of the category.

Level 1: Select category and start game (20 marks)

Upon opening the application, a user should be provided with input fields to enter their name, select the game category and press 'start'. Once the user starts the game the game board must be loaded with the first clue displayed. Your game board must have a dedicated 'display' area as well as a text field (into which the play will enter their answer), a total score area, and a submit button.

Level 2: Process the submission (40 marks)

Once the user has submitted their guess your application must do the following:

1. Check to see if the response is correct
    a. Correct

i. add the score for the current question to the total score
ii. if it is the last question in the category display appropriate message
iii. otherwise load the next question

b. wrong

i. note whether it is the first, second or third incorrect response (use a counter)
ii. if it is the third incorrect question display parting message and terminate the game
iii. if it is 1st or 2nd incorrect answer then leave score unchanged and load next question

Level 3: Make it pretty (20 marks)

You are expected to use your knowledge of CSS to make your game interesting and attractive. Use CSS to achieve your desired layout and small effects such as colour changes during the gamr based on player actions etc.

Level 4: Report & Demonstration (20 marks)

A **brief** report documenting your implementation of levels 1 through to 3.

This report must be a single PDF file containing the following sections IN THE ORDER given below. *Do not include any other information. Do not include all of your source code.*

- Project Summary - general overview of your application's purpose, audience, functionality, personal challenges and recommendations for future development.
- A statement of functionality – clearly state the level of functionality you have achieved in each level of your project specification. If you have not achieved all of a certain level, then clearly indicate what you have achieved e.g.
- Screen shots of your game in operation - Provide notes with your screen shots to explain how they illustrate the functionality that you have implemented.

Note: This report should contain sufficient information to allow another developer to quickly understand and maintain your work. Your report is expected to be **no less** than 10 pages long including screenshots, cover page and references.

Additional Notes

- **For full marks to be attained**, program design must include the use of objects to represent players, questions (minimum properties: text, answer, points) and ***optionally*** the game board itself (minimum properties: score display, question display, messages/feedback). Also loops should be implemented using the `forEach` HoF wherever possible.

Use of tools

Remember! You are expected to use web authoring tools such as a text editor (SublineText3, VSCode, Notepad++, Coda) ONLY to aid your productivity.

Grading Criteria

The specification is given at four levels and the weighting is repeated here for convenience.

- Level 1 – 20%
- Level 2 – 40%
- Level 3 – 20%
- Level 4 – 20%

Note that the level you achieve as defined in the specification sets the **maximum** possible mark. Remember you may get a mark **lower** than the maximum possible for the level you implement depending on how well your assignment meets the assessment criteria.

Borrowed material

Remember! If you find attractive functionality that we have not covered in class such as CSS transitions that you would like to add to your project as well as images or text you are free to do so. This borrowed content ***must*** be clearly identified, and copyright *must* be acknowledged where appropriate. Failure to correctly reference your sources may be considered as plagiarism!

Deliverables:

1. Give a demonstration of your game in operation and answer questions about it. This will be used to both assess the level of **functionality** and the **authenticity** of your work. ***Demonstration will be held on Friday January 8th 2021 starting at 6 pm.***

N.B: If you don't demonstrate your work you will receive no marks for the project.

2. A web app based on the aforementioned specification must be submitted.

3. A PDF copy of your report to be uploaded to e-classroom in the root directory of your website project folder