Faculty: Computing  Course: IPT  Year: 12

Assessment Task: Task 4 - Group Project

Assessment Weighting: 30%  Due: Term 3  Week 3  Date: 09/08/19 (SOLE room between 8:00-8:20am)

Task Type: Hand in Task ☒  In Class Task ☐  Practical Task ☐

Outcomes assessed (NESA)

H1.1 applies and explains an understanding of the nature and function of information technologies to a specific practical situation

H2.1 analyses and describes a system in terms of the information processes involved

H2.2 develops and explains solutions for an identified need which address all of the information processes

H3.1 evaluates and discusses the effect of information systems on the individual, society and the environment

H3.2 demonstrates and explains ethical practice in the use of information systems, technologies and processes

H6.1 analyses situations, identifies needs, proposes and then develops solutions

H6.2 selects, justifies and applies methodical approaches to planning, designing or implementing solutions

H7.1 implements and explains effective management techniques

Task Description/Overview

In groups of 4 (maximum) you will be allocated TWO weeks of class time lessons to complete the project.

Make sure you have a Team Leader that keeps the group on track. It is crucial that each team member is allocated an equal amount of the task to complete. You will need to maximise your time and work on your various parts separately and bring them together as a team.

Detailed Assessment Task Description

Part 1 – Website created utilising Dreamweaver (10 marks)

You are to create a website using Dreamweaver. The first page of your website **must be named as index.html**
The aim of the website is to help students learn about the unit Transaction Processing Systems. It is recommended that another Multimedia tool is utilised to create a multimedia product that can be embedded in the website.

Within the website you are to have the following:
- TPS topic content (described in part 2)
- Questions
- Examples of HSC style questions and answers
- Creative and innovative mechanisms for learning e.g. recordings, diagrams, resources personally made etc.

**Part 2 – The Transaction Processing Systems content of the website (20 marks)**

This website is to help IPT HSC students learn the topic. These are the topics and questions that need to be addressed within the website:

- What is a transaction?
- What is a transaction processing system?
  - Batch/Real time processing
- Automation of manual transaction processing.
- Components of transaction processing systems.
  - Participants
  - Data/Information
  - Information Technology (hardware and software)
- Data integrity, Data validation, Data verification and Data warehousing
- Backup procedures and System recovery processes
- ACID properties
- Real Time (On line) Transaction Processing
  - Reservation Systems
  - Point of Sale (POS) Systems
  - Library Loans Systems
- Design a Case Study (choose one of the following):
  - ATMs
  - Credit cards
  - Cheque clearance
  - Online business/e-commerce

Find an online/newspaper article that involves one of the above case study areas. Include the article and summary of the issue that occurred, along with social and ethical issues evident in the article. Suggest ways to eliminate/help solve the issues involved. Suggested length: 200 words.

**Part 3 - Quizzes created in Google Forms and embedded/linked in the website (10 marks)**

Using Google Forms (and clicking “blank quiz”) create at least FOUR quizzes that relate to various parts of the content. You can include formatting features such as colours and images to your quizzes.

There are various answer types in Google Forms e.g. Multiple Choice, Short Answer, Linear
You can embed the quizzes in your website pages, or link to them (make sure it’s a shareable link!).

**Part 4 – System Documentation (5 marks)**

1) A Gantt chart needs to be provided that will support you in keeping on schedule.
2) An ISC diagram is required that describes the Information System (website).
3) You are required to maintain a logbook that describes what work you completed, when and how long it took to complete each task. This is completed as a group and only one log book is needed for the team. Entries must be dated and organised from oldest to newest entry.

**Resources that will help you complete the assessment task:**

- Transaction Processing Systems booklet given in class
- Multimedia booklet given in class
- Canvas resources
- Online research and articles
- Podcasts for guidance: [https://anchor.fm/practice1](https://anchor.fm/practice1)
  This can be accessed on the website or on a device that has the Anchor app. You can use the app or browser.

**Total marks 45**

The assessment task is to be submitted via USB to your teacher in the SOLE room BEFORE roll call (between 8:00 – 8:20 am) on the due date.

You may hand in your USB earlier than the due date and any late submissions will result in a ZERO grade.

**Assessment Criteria**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Mark Range</th>
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</thead>
</table>
| Outstanding (O)  | Is a highly competent user of Dreamweaver: has a website containing various pages – follows the basic web design principles including: consistency, unity, balance, colour consistency, graphic selection, white space inclusion and typography  
|                  | Is a highly competent user of Google Forms by: providing 4 quizzes with various answer type options: E.g. Multiple Choice, Short Answer, Drop-Down Menu, Checkboxes, Linear Scale etc. It is evident the student used formatting options and the quizzes are highly applicable to the content.  
<p>|                  | Has provided all of the content asked demonstrating an outstanding understanding of the topic. Information                                                                                                           | 40-45      |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (H)</td>
<td>Is a competent user of Dreamweaver: has a website that contains various pages – follows most of the web design principles. Is a competent user of Google Forms by: providing at least 3 quizzes utilising some answer variety and questions are applicable to content. Has provided most of the content asked demonstrating a good understanding of the topic. Information researched was summarised and applicable to the topic. The information provided had a clear link to the quizzes. The quizzes complimented the information to further enhance the learning of the website. An accurate ISC diagram and Gantt chart with most of the components demonstrating some understanding of the stages in an information system. Log book is detailed and easy to follow.</td>
<td>31-39</td>
</tr>
<tr>
<td>Sound (S)</td>
<td>A reasonable website structure that contains some pages – follows some of the web design principles. Is developing skills in Google Forms by: providing some quizzes with basic applicable content. Has provided quality content demonstrating a satisfactory understanding of the topic. Most of the Information researched was summarised and some of the information was applicable to the topic. The information provided some link to the quizzes. The quizzes complimented the information to further enhance the learning of the website. An ISC and/or Gantt chart demonstrating good understanding of the information system. Log book contains relevant details.</td>
<td>22-30</td>
</tr>
<tr>
<td>Basic (B)</td>
<td>A basic website that contains some pages – follows some of the web design principles. Demonstrated basic skills in Google Forms by: providing some quizzes with basic applicable content. Has provided some of the content asked demonstrating a satisfactory understanding of the topic. Most of the Information researched was summarised and some of the information was applicable to the topic. The information provided some link to the quizzes. The quizzes complimented the information to further enhance the learning of the website.</td>
<td>10-21</td>
</tr>
<tr>
<td><strong>Limited (L)</strong></td>
<td>A simple website that contains one or two pages – follows few web design principles. Has demonstrated limited skills in Google Forms by: a quiz with limited applicable content and no formatting. Has provided little of the content asked demonstrating minimal understanding of the topic. Most of the information researched was not summarised or applicable to the topic. An ISC or Gantt chart demonstrating little understanding of the information system. Log book contains little to no relevant details.</td>
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<td>0-9</td>
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</tbody>
</table>
Log books will be used to look for evidence.

### The Website created utilising Dreamweaver (10 marks)

<table>
<thead>
<tr>
<th>Highly Competent</th>
<th>Competent 6-8</th>
<th>Developing 3-5</th>
<th>Experiencing difficulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC – Is a highly competent user of Dreamweaver: has a website containing various pages – follows the basic web design principles including; consistency, unity, balance, colour consistency, graphic selection, white space inclusion and typography.</td>
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<td></td>
</tr>
<tr>
<td>C – is a competent user of Dreamweaver: has a website that contains various pages – follows most of the web design principles.</td>
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<tr>
<td>D – A basic website that contains some pages – follows some of the web design principles.</td>
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<tr>
<td>ED – A simple website that contains one or two pages – follows few web design principles.</td>
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</tbody>
</table>

### Quizzes created in Google Forms and embedded/linked in the website (10 marks)

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<tbody>
<tr>
<td>HC – Is a highly competent user of Google Forms by: providing 4 quizzes with various answer type options: E.g. Multiple Choice, Short Answer, Drop-Down Menu, Checkboxes, Linear Scale etc. It is evident the student used formatting options and the quizzes are highly applicable to the content.</td>
<td></td>
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<tr>
<td>C – Is a competent user of Google Forms by: providing at least 3 quizzes utilising some answer variety and questions are applicable to content.</td>
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<td></td>
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</tr>
<tr>
<td>D – Is developing skills in Google Forms by: providing some quizzes with basic applicable content.</td>
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<td></td>
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</tr>
<tr>
<td>ED – has simple skills in Google Forms by: a quiz with limited applicable content and no formatting.</td>
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</table>

### The Transaction Processing Systems content of the website (20 marks)

<table>
<thead>
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<th>Experiencing difficulty</th>
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<tbody>
<tr>
<td>HC – has provided all of the content asked demonstrating an outstanding understanding of the topic. Information researched was summarised and highly applicable to the topic. The information provided had a clear link to the created quizzes. The quizzes complimented the information to further enhance the learning of the website.</td>
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<tr>
<td>C – has provided most of the content asked demonstrating a good understanding of the topic. Information researched was summarised and applicable to the topic. The information provided had a clear link to the quizzes. The quizzes complimented the information to further enhance the learning of the website.</td>
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<tr>
<td>D – has provided some of the content asked demonstrating a satisfactory understanding of the topic. Most of the Information researched was summarised and some of the information was applicable to the topic. The information provided some link to the quizzes. The quizzes complimented the information to further enhance the learning of the website.</td>
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</tr>
<tr>
<td>ED – has provided little of the content asked demonstrating minimal understanding of the topic. Most of the information researched was not summarised or applicable to the topic.</td>
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</table>
Satisfactory completion of courses
A course has been satisfactorily completed, when the student has:

- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes

System Documentation (5 marks)
HC – A detailed and accurate ISC diagram and Gantt chart with all the components demonstrating an understanding of the stages in an information system. Log book is highly detailed and easy to follow.
C – An accurate ISC diagram and Gantt chart with most of the components demonstrating some understanding of the stages in an information system. Log book is detailed and easy to follow.
D – An ISC and/or Gantt chart demonstrating some understanding of the information system. Log book contains some relevant details.
ED – An ISC or Gantt chart demonstrating little understanding of the information system. Log book contains little to no relevant details.

| Total Marks | /45 |