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|  | **Information Technology** **VCE Unit 1 Outcome 3** |  |

**Outcome**: To contribute collaboratively to the design and development of a website that presents an analysis of a contemporary ICT issue and substantiates the team’s point of view.

**Beginning: Monday 23 May 2011 Due:**

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| **Task Description**Working in teams you will collaboratively contribute to the design and development of a website that presents an analysis of a contemporary ICT issue and substantiates your team’s point of view. The use of ICT frequently causes tensions and conflicts between the different people (stakeholders).These issues include:* E-commerce
* Social networking
* Computer gaming
* Robotics and Artificial Intelligence
* Cloud computing.

U1O3 Assessment Task focuses on working as part of a team in a co-operative manner. All members of your team must be seen as ‘team players’ contributing to the overall goal of your group ie completing this Assessment Task for the highest possible result.You will acquire data from both primary and secondary sources.Throughout this SAC you will primarily follow the Design and Development stages of the Problem Solving Methodology (ADDE) and use project management tools and techniques to coordinate the successful completion of the SAC.ICT Issues can be categorized as:* Social (impacts on people ie stakeholders)
* Ethical (appropriate behavior for society)
* Legal (conflicts with Privacy, Copyright, OH&S laws)
* Environmental (causes impact on environment)
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Robotics

**Social Networking**

COMPUTER GAMING

Cloud Computing

**TASK 1: INTRODUCTION (7 MARKS)**

Form a project team (3 members).

As a team discuss and agree on the contemporary ICT issue you wish to investigate. (There is more detail on these issues at Annex E.) Each issue will only be covered by one group. First group to select the issue does the topic.

Decide who will be surveyed using interviews, surveys and/or questionnaires.

You will hold a short team meeting at the beginning of each class to discuss your project’s progress and each lesson’s targets. The discussion at each of these meetings will be recorded as “Minutes of Meetings” (sample template attached at Annex D).

The team will review its performance and this may require some tough discussion of individual performance and group communication. Ensure you provide positive and constructive feedback on your team’s performance.

**Question 1**

Write a short report that discusses the project and what you are trying to achieve. (2 marks)

**Question 2**

Prepare an individual Teams Skills (Annex C) check to recognize different skills and abilities in your team. A sample is attached and needs to be modified and improved to suit your team. (1 mark)

**Question 3**

Prepare your first Minutes of Meeting (Annex D). It is expected that you will complete at least six Minutes of the Meetings.

(8 x 0.5 = 4 marks)

**TASK 2: PROJECT MANAGEMENT (7 MARKS)**

Develop a project plan to research, analyse and present the issue and your team’s viewpoint. Include the timeline and the various responsibilities of your team members. Each member can be allocated various parts of the analysis, design and development of the website. (Try and divide the tasks equally initially. You may need to reallocate tasks as this assessment task progresses.)

*Textbook reference: Pg 270 to 274*

**Question 4**

Prepare a listing of all tasks, durations, dependencies, milestones and resources. (2 marks).

**Question 5**

Prepare a Gantt chart that lists all tasks, durations, member responsibilities (resource allocation), dependencies and milestones. (A copy of Gantt Project is available for download on CCOLE. Use this software for your team’s project management requirements. (5 marks)

**TASK 3: ANALYSIS (12 marks)**

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| As a team, you are required to investigate a contemporary ICT issue. This means that you must gather data from both primary and secondary sources.**Primary sources** provide data that you have obtained through your own research ie first hand. (Eg surveys, questionnaires, interviews of stakeholders.)**Secondary sources** provide data which has been collected by others ie second hand. (Eg newspapers, websites, social networking sites, etc.) In any survey or questionnaire you should use a range of both open and closed questions (Pg 129 textbook).To quickly design a good survey, you should follow the guidelines on Page 128 of your textbook.*Textbook reference: Pg 125 to 135* |

**Question 6**

For this Assessment Task, you must acquire data from primary sources. This means you must conduct a survey or questionnaire, or interview stakeholders. (2 marks)

Some suggestions:

* Use the free trial version of Survey Monkey ([www.surveymonkey.com](http://www.surveymonkey.com)). Prepare an online survey that investigates your chosen topic. Your survey must use a range of different question types eg multiple choice, short answer, true/false, etc. Email the generated link to others in your Yr 11 classes and anyone else who you think should contribute. You will be expected to contribute constructively to other group’s survey just as they will contribute to your group’s survey.
* Prepare a written questionnaire or survey and distribute to different people.
* Using the Flip video cameras, interview at least one person. Record this interview and post it on the website.

**Question 7**

Use Excel to manipulate the primary data, and produce charts and graphic representations that analyze the data. (4 marks)

**Question 8**

Collect data from a wide range of secondary sources. (2 marks)

**Question 9**

Prepare a visual analysis of your ICT issue to record your research. (Use the example on Page 126 of your textbook as an example.)

The purpose is to refine and organize the data you have collected about the issue which will assist you in forming a team opinion.

(4 marks)

**TASK 4: DESIGN (8 MARKS)**

Design tools are used to represent the function and appearance of your website.

Design tools for web sites include annotated diagrams/mock ups, storyboards, site maps and layout diagrams.

Textbook references: pp150-164, 292

It is important to ensure that all team members contribute to the overall “look and feel” of the website. This includes discussing the formats and conventions, design elements and any file management techniques that must be followed.

**Question 9**

As a team, prepare **one** sitemap that shows how the web pages are linked (including any external sites). (2 marks)

**Question 10**

Each team member is to produce one storyboard for a different page which depicts the features of each individual page. (3 marks)

**Question 11**

Each team member is to prepare an annotated diagram/mockup for one web page. (3 marks)

**TASK 5: DEVELOPMENT (20 MARKS)**

**Question 12**

Using web authoring software tool, create a website to present the data, the analysis and your team’s point of view. In particular it should address each of these key areas:

* The information technology that is being investigated (2 marks)
* The key stakeholders/people involved (1 mark)
* The advantages and disadvantages for the various stakeholders (2 marks)
* The data you have gathered (0 marks, awarded earlier)
* The legal, social, environmental and/or ethical considerations associated with the issue (4 marks)
* A range (4) of feasible and possible solutions (1 mark)
* The advantages and disadvantages of each solution (4 marks)
* The preferred team solution and explanation of why it was chosen (4 marks)
* How the issue can be resolved (2 marks)

**TASK 6: EVALUATION (OF TEAMWORK) (8 MARKS)**

**Question 13:**

Each team member is to produce an evaluation based on their team’s activities. Use a variety of formats (eg mindmap, written report, poster, visual presentation) to answer these questions.

a. Outline how you supported the work of your team and how you made a constructive contribution to your team’s goals and tasks. (2 marks)

b. Outline how your group could improve next time and the improvements that would be necessary. (2 marks)

c. List some of the expectations you had for others in your team. (2 marks)

d. List some of the issues, problems and areas of conflict that arose. How were these issues and problems resolved? (2 marks)

**TASK 7: OVERALL PRESENTATION (8 marks)**

An additional **8 marks** will be awarded for presentation of your final report and solution. This should contain a front cover, contents page, consistent fonts and styles, good use of tables and other page layout features, header & footers as required and a bibliography of resources and web sites used.

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|   | **Information Technology****Unit 1 Outcome 3** |  |

Name:

TASK EXPECTATION SHEET (Annex A)

**Total marks:** 50 marks **Task Duration:** 400 minutes (8 lessons)

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|  | TASK COMPONENT | **MARKS ALLOCATED** |  |
| 1 | **Introduction (7 marks)** |  |  |
|  | Discussion of project and what you are trying to achieve | 2 |  |
|  | Individual Team Skills checklist (one per person) | 1 |  |
|  | Minutes of at least six Meetings | 4 |  |
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| 2 | **Project Management (7 marks)** |  |  |
|  | Tables listing tasks, durations, etc. | 2 |  |
|  | Gantt chart showing tasks, durations, milestones, resources, dependencies | 5 |  |
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| 3 | **Analysis (12 marks)** |  |  |
|  | Collection of primary data | 2 |  |
|  | Production of charts, etc. | 2 |  |
|  | Collection of secondary data | 4 |  |
|  | Visual analysis of the issue | 4 |  |
|  |  |  |  |
| 4 | **Design of the Solution and Output (8 marks)** |  |  |
|  | Preparation of one sitemap by team | 2 |  |
|  | Preparation of one storyboard by each member (individual mark) | 3 |  |
|  | Preparation of one layout mockup by each team member (individual mark) | 3 |  |
|  |  |  |  |
| 5 | **Development of Information Product (20 marks)** |  |  |
|  | **ICT** |  |  |
|  | Description of the IT under investigation | 2 |  |
|  | **Stakeholders** |  |  |
|  | Identification of the different stakeholders  | 1 |  |
|  | Advantages and disadvantages for each stakeholder | 2 |  |
|  | **Data Gathered** |  |  |
|  | Primary and secondary data gathered and presented visually (marked in Analysis) |  |  |
|  | **Legal, Social, Economic and Ethical factors** |  |  |
|  | Reasons for these issues arising | 4 |  |
|  | **Possible Solutions** |  |  |
|  | A range of possible solutions (4) to the issue | 1 |  |
|  | Advantages and disadvantages of each solution | 4 |  |
|  | **Group’s Point of View** |  |  |
|  | A summary of the group’s point of view including preferred solution | 4 |  |
|  | **Resolution of Issue** |  |  |
|  | Explain how issue can be resolved | 2 |  |
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| 6 | **Evaluation (8 marks)** |  |  |
|  | How you supported the team and constructive contribution | 2 |  |
|  | Improvements that are necessary | 2 |  |
|  | Team expectations | 2 |  |
|  | Issues, problems and areas of conflict | 2 |  |
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| 7 | **Overall Presentation (8 marks)** | 8 |  |
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|  | **TOTAL** | **70** |  |

**Some References (Annex B)**

**Social Networking**

<http://www.youtube.com/watch?v=lB95KLmpLR4>

<http://www.optimising.com.au/interview-with-corey-homicide-williams-on-social-media/>

<http://www.optimising.com.au/interview-on-social-media-with-melbourne-rapper-360>

**Robotics and A.I.**

<http://chayden.net/eliza/Eliza.html>

[*www.****cleverbot****.com/*](http://www.cleverbot.com/)

<http://www.nytimes.com/interactive/science/rock-paper-scissors.html>

**Legal**

[www.privacy.gov.au/publications/npps01](http://www.privacy.gov.au/publications/npps01)

[www.privacyalliance.org](http://www.privacyalliance.org/)

**Teamwork**

<http://www.dlsweb.rmit.edu.au/eng/BENG0001/learning/teamwork/index.html>

<http://www.youtube.com/watch?v=1qzzYrCTKuk>

<http://www.youtube.com/watch?v=jF80RqLkl6E>

<http://www.youtube.com/watch?v=EPO20PkSztE&feature=related>

 **INDIVIDUAL SKILLS CHECKLIST (Annex C)**

**Name:**

**A skills analysis is performed to identify the different skills and abilities in the team.**

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| **Required Skills** | **Level of Skill Identified****(1 is the lowest and 5 is the highest)** |
| **1** | **2** | **3** | **4** | **5** |
| **Photo editing**  |  |  |  |  |  |
| **Web authoring**  |  |  |  |  |  |
| **Sound/video editing**  |  |  |  |  |  |
| **Word Processing** |  |  |  |  |  |
| **Spreadsheets** |  |  |  |  |  |
| **Using a scanner** |  |  |  |  |  |
| **Designing layouts/st5ucutre charts** |  |  |  |  |  |
| **Graphic design**  |  |  |  |  |  |
| **Writing** |  |  |  |  |  |
| **Research and analysis** |  |  |  |  |  |
| **Evaluation** |  |  |  |  |  |
| **Communication** |  |  |  |  |  |
| **Problem Solving** |  |  |  |  |  |
| **Team work** |  |  |  |  |  |
| **Project management** |  |  |  |  |  |
| **Conflict resolution** |  |  |  |  |  |
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**Minutes (Annex D)**

**Date: / / 2011 Lesson number \_\_\_\_\_\_\_ Team \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Chairperson (team leader)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Minute taker\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Present Absent**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Agenda Item** | **Minutes** | **Action by** |
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**ICT Issues (Annex E)**

**Issue 1: Computer gaming**

"Games are largely misunderstood in our society. They aren't necessarily trivial or sophomoric. Gaming is just a young medium," says Suzanne Seggerman, president and cofounder of *http://gamesforchnge.org* a resource and support clearinghouse for game developers, nonprofit organizations, and educators. "They're a great way for people to explore serious issues."

Better yet, they make that exploration fun, even addicting, according to Scapoose sophomore Ashley Amick, who played PeaceMaker at school last year. "I never wanted to go to my next class, because I hadn't won yet, and I wanted to see what would happen when I did," she explains. "We usually learn from textbooks or worksheets, but because you automatically learn while you play it, even my classmates that don't like school had fun."

Visit the website: http://www.edutopia.org/serious-games-computer-simulations

While computer gaming can have an addictive dark side they can also have great educational value. Explore the issues of computer games at your school. Collect data from surveys of local students and gaming websites to presents your team’s point of view.

**Issue 2: Social networking**

For a variety of reasons, many companies and schools block access to social networking sites such as Facebook, Beebo and MySpace. While there is much research to show the benefits of working collaboratively, organisations prefer not to engage with these sites but develop other websites such as a company wiki or blog. What are the problems of Social Networking and the workplace? Collect data from your surveys and secondary sources to develop your viewpoint.

**Issue 3: Cloud computing**

Google Docs has become the standard in cloud computing office suites but there are a number of others also entering the market place. Research cloud office applications and compare them as to cost, provision of online space, capabilities and ease of collaboration. List the advantages and disadvantages of working with a cloud office, in particular those that relate to legal or social issues. Which one would your team recommend?

**Issue 4: Robotics**

*“IBM's Watson supercomputer defeats humans on game show*“ so reads the Deccan Herald Feb 26 2011. What is so extraordinary about this is that in the game ‘Jeopardy’ the computer had to beat two other contestants to phrase a question from a verbal clue. The ability of Watson to process language has marked a new stage in artificial intelligence (AI). Your team is to research the development of AI and produce data showing its scope and development. Who is presently leading the world in the development of AI? What are the social and ethical issues surrounding AI.

**Issue 5: eCommerce**

The Internet has once been described as ‘the wild west’ in the sense that there is a good deal of unrestricted freedom. This is both a positive and a negative and is especially true of ecommerce. While ecommerce has opened up world markets and has increased the distribution of goods, there are some problems with buying and selling online. In your teams, develop a report on online traders. Collect data to show which countries are the leaders in ecommerce. What are the legal implications of dealing with online traders in other countries and how can we be protected?