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| Whitireia Logo_2010 | **Faculty of Business and Information Technology** |

**Certificate in Information Technology**

**IT5x83 Fundamentals of**

**Software Design and Development**

**Assignment One**

**Preliminary Investigation Report**

Due Friday 9th September 2016

### Course Information

**Title:** IT5x83 Fundamentals of Software Design and Development

Grade Weight: 20%

Assignment Marks: 100

Towards Final Grade: 20%

### Learning outcomes

On completion of the paper, the student will be able to:

1. Describe how the concepts of systems theory relate to business systems and computer systems.
2. Describe the objectives, people involved, tasks and deliverables of each stage in the systems development life cycle.
3. Apply a variety of logic depiction methods to appropriate simple tasks.
4. Implement depicted tasks in a programming language.

### Assignment One

Create an IT preliminary Investigation Report

### Assignment Due Date

The due date for this assignment is Friday 9th of September at 5.00pm.

### Assignment Overview

This assignment seeks to improve your systems analysis skills using establish software development techniques to build artefacts by initially using planning and analysis to produce a **Preliminary Investigation Report** for a website that fits a specific specification. Thereafter you will logically build the website using design theory before moving on to create an actual prototype.

### Assignment Case Study

You have received a systems request form from your manager requesting that you design and create a website for Dream Getaways Resort to promote the company’s activities. Dream Getaways is a tourism business who would like a website for their business that involves a booking systems for customers checking into the accommodation. The new system will also allow the customers to organise their experience plans such as attending biking, hiking and canoeing events as well as tending to departure plans of their customers providing shuttle services where required. Initially you need to produce a preliminary Investigation Report to determine if the manager’s request is feasible and to set out some initial project planning requirements.

Your customer has specified that the website must have a home page, and four associated pages which should contain the following information:

1. A home page with information about the store.
2. An about us page.
3. Experience page and the activities provided.
4. A contact us page which must include an email enquire form and a map of the resorts location.
5. You also need to include an additional relevant page proposed and designed by you. It is up to you to plan how you will determine any further requirements the client may have.

For the purposes of this assignment the lecturer is the customer. The site should be promoting The Dream Getaways Resort such as the key invents run by the resort.

This assignment focuses on the planning for the Dream Getaways website, in the other part assignments you will develop systems specifications and program the prototype. Notes: All content on your website must be appropriate and “safe for work”. No inappropriate language or images should be used. All images used must be either open license or referenced within all documentation.

Any hand drawn diagrams will need to be scanned, and included in the assignment documentation. Each part of your document should be numbered according to the question being addressed.

You should not exceed 15 pages with this assignment.

Your preliminary investigation report should include the following:

1. An executive summary summarising the content of the document. (5 marks)
2. Your understanding of the problem including an introduction which presents an overview of the document, briefly describing the proposed system, purpose and the scope of the project including any discussions with clients. (5 marks)
3. A plan that outlines how the requirements for the website are going to be determined. Plan must include a range of appropriate methods for determining system requirements, and include all the sources of information and methods used to collect it including a summary of risks associated with the website (10 marks):
   * Risks,
   * Constraints,
   * Scope
   * Scalability issues.
4. Fact finding of the project. (10)
5. A rich picture of the website and its associated parties (5 marks).
6. Analysis of project usability, cost, benefit and scheduling is available including:

* A list of the various roles associated with building the website (5 marks).
* A work breakdown structure for building the website (10 marks).
* A Gantt chart including a project timeline (10 marks).
* A PERT chart and a determination of the critical path (15 marks).

1. A discussion of the feasibility of the website including the four elements of operational, technical, economic and schedule feasibility exists (10 marks):
2. A conclusion including a recommendation about whether or not to proceed with building the website (10 marks), based on the contents of this report.
3. Presentation will also be marked, all parts of the assignment should be well presented and the contents page should be accurate, the report should also have an appropriate title page (5 marks).

Marking Criteria Assignment One

1T5x83 Fundamentals of Software Development

**Marking Guide**

**Name/ID No**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Item | Criteria | AvailMark | Mark |
| 1 | Executive summary content of document is appropriate. | 5 |  |
| 2 | **Understanding of problem** – An introduction to the proposed website provides an overview outlining purpose of system is clear and includes client discussions. | 5 |  |
| 3 | **Project scope and constraints are defined** - Plan for determining requirements is available. Scope of system is apparent with any constraints identified. | 10 |  |
| 4 | **Perform fact-finding** - A summary of issues related to risk, constraints, scope and scalability issues are well summarised with one or more relevant points. | 10 |  |
| 5 | Rich picture of your website project – include any and all associated items (people, software, hardware, data, processes). | 5 |  |
| 6 | **Analysis of project usability, cost, benefit and scheduling is available. This includes:**   * Project Roles Include a list of those who will take part in the project and what each person will do. | 40 |  |
|  | * Work Breakdown Structure. Structure is workable, items are relevant and time to completion is sensible |  |  |
|  | * Gantt chart including project timeline. Chart relates directly to the WBS, is accurately drawn. |  |  |
|  | * PERT chart **and** critical path determination. Chart relates directly to the WBS, is accurately drawn. |  |  |
| 7 | **Evaluate Feasibility** - Project feasibility is discussed in regards to operational, technical, economic and scheduling. | 10 |  |
| 8 | **Present results and conclusion** - Conclusion and recommendation. Recommendation is supported by other parts of the report. | 10 |  |
| 9 | **Presentation** - All parts of the assignment (including the diary) are well presented with good spelling and grammar, presentation is tidy and contents page is accurate. | 5 |  |
|  | **Total Marks** | 100 |  |