ICT284 Systems Analysis and Design: Tutorial 1

**Overview of Systems Analysis and Design**

**ABOUT THIS TUTORIAL**

In the first tutorial, we will introduce some basic concepts about information systems, systems development, and the role of the system analyst. We’ll use a simple example to give you some practice in thinking about the activities involved in undertaking a systems development project. The example will introduce in quite an informal way some of the techniques and models we use for representing systems analysis and design activities, and we’ll return to these in more detail throughout the unit.

**LEARNING OUTCOMES FOR THIS TUTORIAL**

**After completing this tutorial you should be able to:**

* Explain what an information system is
* Describe the various job titles and roles associated with analysis and design work
* Identify the phases of the systems development life cycle (SDLC)‏ and their purposes

**This tutorial addresses the following learning outcomes of the unit:**

LO 1. Explain how information systems are used within organisations to fulfil organisational needs

LO 2. Describe the phases and activities typically involved in the systems development life cycle (SDLC)

**REFERENCE MATERIAL**

* Topic 1 lecture notes and recordings
* Chapter 1 worked example

**QUIZ**

This week’s quiz includes some questions relating to material covered in this tutorial.

# 1. DISCUSSION QUESTIONS AND ACTIVITIES

1. What is an information system? What are the main components of an information system? Describe some information systems that you have used.
2. What is systems development? What kinds of activities does it include?
3. What do systems analysts do? What is their role in systems development?
4. What job titles cover the work involved in systems analysis? Use the Internet (e.g. www.seek.com.au ) to search for some job descriptions and related job titles. What are the duties/responsibilities involved, and what skills and experience are required?
5. <https://www.payscale.com> lets you investigate different job descriptions, career paths and different skill sets that can influence salary.

# 2. EXAMPLE: The Conference Coordinator Information System (CCIS)

An academic conference is an opportunity for researchers in a particular field to gather together for a few days to share and discuss the latest research in their area. At a conference a number of papers are presented by their authors to an audience of other researchers. The papers are written especially for the conference and must go through a peer-review process before they are accepted. Conferences typically include many other activities such as workshops, panel discussions, invited speakers and social activities, but the main part is always the paper presentations, which occur in a number of sessions, each devoted to a particular track (topic) within the main conference theme. An example of an IT conference is HICSS (https://hicss.hawaii.edu/).

We’ll use the example of a conference coordinator information system as a running case study throughout many of the tutorials. Today, we just want to get a general idea of what such a system might involve, and how we might go about analysing the requirements and work towards a design.

Think about and discuss the following questions:

1. What is the main functionality the conference system needs to handle?
2. Who are the main stakeholders?
3. What information would be needed?
4. What are the main steps that would need to be taken in the analysis and design of this system?
5. Suppose you are following an **iterative development methodology** to develop this system. What iterations might you identify within the overall project?

**REVIEW: WHAT SHOULD I NOW BE ABLE TO DO?**

* Explain what an information system is
* Describe the various job titles and roles associated with analysis and design work
* Identify the phases of the systems development life cycle (SDLC)‏ and their purposes

**WHAT’S NEXT?**

Now that you have an overview of the systems analysis process, we’ll proceed to examine the phases, models and techniques involved in more detail. In the next tutorial, we’ll look at investigating system requirements.