ICT284 Systems Analysis and Design: Tutorial 2

**Initiating a systems development project and investigating system requirements**

**ABOUT THIS TUTORIAL**

In this tutorial we introduce the Conference Coordinator Information System case study, which we’ll use in the next few tutorials to give you practice in techniques in early systems analysis. The CCIS is a new information system required by the inaugural Conference on Green IT to handle its paper submission and review processes. In today’s tutorial, we’ll begin to investigate the requirements for the new system, by identifying the CCIS stakeholders and requirements, and determining the information-gathering techniques appropriate to the case.

**LEARNING OUTCOMES FOR THIS TUTORIAL**

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

* Define the triggers initiating a systems development project, its scope and expected benefits
* Identify and categorise the stakeholders involved in a particular IS project
* Determine functional and non-functional requirements using FURPS+
* Describe several information-gathering techniques and determine when each is best applied in a particular case

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

LO 4. Use a variety of techniques for analysing and defining business problems and opportunities and determining system requirements

**REFERENCE MATERIAL**

* Topic 2 lecture notes and recording
* Satzinger, Jackson & Burd, Chapter 2
* Conference Coordinator Information System Case study (on LMS)

**QUIZ**

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

# Conference Coordinator Information System (CCIS) case study

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 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.

The inaugural Australasian Conference on Green IT needs an information system that will (among other things) enable prospective attendees and presenters to submit papers for review, manage the reviewing process, and finally create the conference schedule and published proceedings based on the accepted papers.

***(See the separate document on LMS for the complete case study)***

1. Read the complete CCIS case study and answer the following questions.

* What is the **trigger** for the new system?

Problem - No

Opportunity – help in more accurate & faster paper submission & review processm scheduling etc. for a smoother running of the conference, leading to a better to a better reputation

Directive – No mandate

* What **benefits** could the new system bring?

Tangible - Time saving in terms of manhours for participants, more author submissions & paper presentations leading to a more bigger or wider conference, more citation from presented papers.

Intangible – Better Reputation for the conference

* Who are the main **stakeholders** in the new CCIS? What are their interests in the CCIS? Describe them according to the textbook classification.

|  |  |
| --- | --- |
| **Stakeholders** | **Interests** |
| Author | Uses the system to submit their papers, check status of papers, conference schedule etc.  Easy to use interface, faster and more accurate subission process, productivity improves. |
| Reviewer | Uses the system to view papers, submit their reviews etc. Easy to use interface, reminders etc. improve their efficiency. |
| Chairperson |  |
| Editor |  |
| Other involved researchers |  |
| Attendees |  |
| Sponsors |  |
| Universities / Institutions sending the researchers |  |

* The **scope** of the CCIS will (initially at least) be the part of the conference to do with the papers. List the activities that are within the CCIS scope. What activities would be outside the scope of the CCIS?

Within Scope:

- Paper submission and review

- Decision on paper and notifications/ reminders

- Managing the conference schedule

- Producing reports such as conference proceedings, list of papers / authors

Outside Scope

- Registration of attendees and payment

- Managing workshops, panel discussions, invited speakers

1. Work out an appropriate **strategy for collecting requirements** for the CCIS. Using the following list of information gathering techniques, determine which would be appropriate and explain how you would use it. What could you find out from each approach? Would any of them be inappropriate?

* Interviewing

Interview with chairperson is already done

Interview with editor

* Questionnaires

Authors & Reviewers can share requirements from the system.

* Reviewing documentation

No existing whose documentation can be reviewed.

Previous conference proceedings, if available.

* Observing business procedures

Not relevent

* Researching vendor solutions

Worth checking out

1. Using the **FURPS+** categories, and the case study information provided, identify the main **functional** and **non-functional requirements** for the CCIS.

**F**unctional Requirements:

System must be able to:

1. Allow authors to submit papers, and check if the paper satisfies the criteria.

2. Allow the editor to allocate the papers to reviewers

3. Allow the reviewers to upload their review comments

4. Send reminders to reviewers

5. Allow editor to record the decision to approve or reject a paper based on reviews

6 Send notifcations to corresponding author about paper status

7. Allow editor to create, update and manage conference schedule

8. Display/Generate conference schedule, conference proceedings and other conference documents (list of presenters / list of papers etc.)

9. Store information about authors, papers, reviewers etc.

Non Functional Requirements:

**U**sability: Web Interface available for different devices like laptop, desktop & tablet. Easy &intuitive to use as we cannot provide training for authors / reviewers.

**R**eliability: Papers & Reviews should be backed up. Must be online with very little downtime.

**P**erformance: Should be able to handle multiple submissions simultaneously without performance degredation or crash.

**S**ecurity: Highly secure as researcher’s personal details, as well as confidential research information is stored.

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Design Constraints: None in the case study

Implementation Constraints: None in the case study

Interface Constraints: Interface with Plagiarism check system e.g TurnitIn. Interface with Email System.

Physical Constraints: No

Support Constraints: Automatic updates, helpdesk or online support.

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

* Define the triggers initiating a systems development project, its scope and expected benefits
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* Determine functional and non-functional requirements using FURPS+
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**WHAT’S NEXT?**

In today’s tutorial, you identified several functional requirements of the CCIS. In the next tutorial, you’ll perform use case modelling in order to clarify these functional requirements and document what the new system must be able to do.