

SYS366

Requirements

Gathering using OO

Models

Lecture 1-1 – Role of the Systems Analyst

School of Information and Communications Technology Seneca College

- The Role of the Systems Analyst

- The Programmer/Analyst

Systems Analyst

- An IT professional involved in the development of a computerized solution to a business problem
- Requires extensive technical, business and people knowledge, communication, business and technical skills
- Is fundamentally *curious* to explore how things are done with a desire to make them work better
- Focuses on understanding the business problem
- Focuses on the approach to be taken to solve the business problem

Problem Solving Approach

1. Research and understand the problem
2. Verify that the benefits of solving the problem outweigh the costs
3. Develop a set of possible solutions (alternatives)
4. Decide which solution is best and make a recommendation
5. Define the details of the chosen solution
6. Implement the solution
7. Monitor to make sure that you obtain the desired results

“Must thoroughly understand the problem the system will solve”

Systems Analyst Skills

- Technical Knowledge and Skills
- Business Knowledge and Skills
- People Knowledge and Skills
- Integrity & Ethics

Technical Knowledge and Skills

- Computers and how they work
- Devices that interact with computers, including input devices, storage devices, and output devices
- Communications networks that connect computers
- Databases and database management systems
- Programming languages
- Operating systems and utilities
- Tools and techniques for developing systems
- Tools for developing systems
 - Tools are software products that help develop analysis or design specifications and completed system components
 - Databases for developing systems
 - Integrated development environments (IDE's) for specific programming languages (Java, C++)
 - Distributed processing, Cloud computing
 - CASE tools to store information about system specifications, e.g. Rational Rose
 - Program code generators, testing tools, (Rational suite) project management tools (MS Project)

- Techniques for developing systems
 - Techniques are used to complete specific system development activities
 - Project planning techniques
 - Systems analysis techniques
 - Systems design techniques
 - System construction and implementation techniques
 - System support techniques

Business Knowledge and Skills

- What the specific organization does
- What makes it successful
- What its strategies and plans are
- What its traditions and values are

People Knowledge and Skills

- How people think
- How people learn
- How people react to change
- How people communicate
- How people work (in a variety of jobs and levels)
- Must be able to listen well

Typical Job Titles for Analysts

- Computer consultant;
- computer systems analyst;
- informatics consultant;
- informatics security analyst
- information systems business analyst;
- information systems quality assurance analyst;
- IT (information technology) consultant
- management information systems (MIS) analyst;
- systems auditor;
- systems consultant;
- systems security analyst.

Job prospects for the Analyst

[Demand for Skill Set](#)