

## **Key Terms**

- Computer Application<sub>2</sub>
  - A computer software program that executes on a computing device to carry out a specific function or set of related functions.
- Systems Analysis,
  - Those system development activities that enable a person to understand and specify what the new system should accomplish.
- Systems Design,
  - Those system development activities that enable a person to describe in detail how the resulting information system will actually be implemented.
- Project<sub>2</sub>
  - A planned undertaking that has a beginning and an end and produces some end result.
- Agile Development<sub>2</sub>
  - An information system development process that emphasizes flexibility and rapid
    response to anticipate new and changing requirements during development.
- Iterative Development,
  - An approach to system development in which the system is "grown" in an almost organic fashion.
- Technology Architecture<sub>2</sub>



- A set of computing hardware, network hardware and topology, and system software employed by an organization.
- Application Architecture<sub>2</sub>
  - The set of information systems (the software applications) the organization needs to support its strategic plan.
- System Requirements,
  - All the activities the new system must perform or support and the constraints that the new system must meet (functional + non-functional).
- Functional Requirements,
  - The activities the system must perform to support the users' work.
  - o Describes what the system does.
- Non-Functional Requirements,
  - Required system characteristics other than the activities it must perform or support.<sub>2</sub>
  - Describes how the system works.
- FURPS,
  - An acronym that stands for functional, usability, reliability, performance, and security requirements.
- Reliability Requirements<sub>2</sub>
  - The requirements that describe system dependability.
- Performance Requirements,



 The requirements that describe operational characteristics relate to measures of workload, such as throughput and response time.

## • Security Requirements,

 The requirements that describe how to access of the application will be controlled and how data will be protected during storage and transmission.

# • FURPS+<sub>2</sub>

 An extension of FURPS that includes design constraints as well as implementation, system interface, physical, and supportability requirements.

#### • Stakeholders,

o Persons who have an interest in the successful implementation of the system.

## • Internal Stakeholders,

 Persons within the organization who interact with the system or have a significant interest in its operation or success.

## • External Stakeholders,

 Persons outside the organization's control and influence who interact with the system or have a significant interest in its operation or success.

## • Operational Stakeholders,

• Persons who regularly interact with a system in the course of their jobs or lives.

# • Executive Stakeholders<sub>2</sub>



 Persons who don't interact directly with the system but who either use information produced by the system or have a significant financial or other interest in its operation and success.

#### • Client,

- A person or group that provides the funding for the system development project.
- Open-Ended Questions<sub>2</sub>
  - Questions that encourage discussion or explanation.
- Closed-Ended Questions<sub>2</sub>
  - Questions that elicit specific facts.
- Model<sub>2</sub>
  - Representation or abstraction of some aspect of a system.
- Textual Models,
  - Text-based system models such as memos, reports, narratives, and lists.
- Graphical Models<sub>2</sub>
  - System models that use pictures and other graphical elements to create a diagram.
- Mathematical Models<sub>2</sub>
  - System models that describe requirements numerically or as mathematical expressions.
- Workflow,
  - A sequence of work steps that completely handle one business transaction or customer request.



- Unified Modeling Language (UML),
  - A standard set of information system model constructs and notations defined by the Object Management Group
- Activity Diagram,
  - A UML diagram that describes user (or system) activities, the person or component that completes each activity, and the sequential flow of these activities.
- Synchronization Bar<sub>2</sub>
  - An activity diagram component that either splits a control path into multiple concurrent paths or recombines concurrent paths.
- Swimlane<sub>2</sub>
  - An activity diagram component that divides the workflow activities into groups showing which agent performs which activity.
- Communication Requirements,
  - It determines the information that the stakeholders need and is acquired through interviews, workshops and even studying the lessons learned from the previous projects.

#### Works Cited

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- 3: "The Difference between Functional and Non-Functional Requirements." *ReQtest*, 20 Dec. 2018,

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