SFWR ENG 3RA3 Summary

Author: Kemal Ahmed

Instructor: Dr. Ryszard Janicki

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*Math objects made using* [*MathType*](http://www.dessci.com/en/products/mathtype/)*; graphs made using* [*Winplot*](http://math.exeter.edu/rparris/winplot.html)*.*

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# Lecture 1

And so it begins…

# Lecture 5

## Defining Requirements

Types of projects:

* Rabbit:
  + Agile
  + Short life
* Horse:
  + Fast, strong, dependable
  + Most common in corporate
  + Medium longevity
* Elephant:
  + Solid, strong, long life

**Artifact-driven**: basing the requirements on data collection, questionnaires, etc.

* You can often collect too much data
* Only keep what you need to know
* *prune* the document space, so you only keep the useful data.

**Scenario**: similar to *storyboards*…

**Positive Scenario**: behaviour system should cover

* **Normal Scenario**: everything proceeds as expected
* **Abnormal Scenario**: a desired exception

**Negative Scenario**: behaviour system should exclude

## Knowledge Acquisition

**Stakeholders**: important to identify when determining who to customize the project towards

* Who is responsible for funding/using/managing the project?
* Caution: interactions with them must be done carefully

**Domain expertise**: what does the domain know / qualifications? Domain is who the project is directed towards

# Lecture 6

**Stakeholders-driven Elicitation Techniques**: methods of knowledge acquisition

* Interviews
  + Single interview for multiple stakeholders: faster, but less involving
  + Steps:
    - Select stakeholders
    - Background study
    - Predesign sequence of questions, focused on concerns of present stakeholder(s)
    - Begin by asking easy questions
    - Keep focus during interview
    - Ask ‘why’-questions
    - Record answers and reactions
    - Write report from transcripts
    - Confirm report with stakeholders interviewed
  + Types:
    - **Structured**: predetermined set of questions
    - **Unstructured**: free discussion of current system
    - Optimal: start with *structure*, then do *unstructured*

# Lecture 6

Observation:

* people behave differently when observed
* slow & expensive

Group sessions: more than 4 people

**Inconsistencies**: conflicting views or incorrect

### e.g.

**Boundary Condition**: the sample of instances where conditions conflict

**Divergence**: when two viewpoints have boundary conditions; they must be clarified