SOFTWARE QUALITY ASSURANCE

Lecture 6
(27-March-2013)

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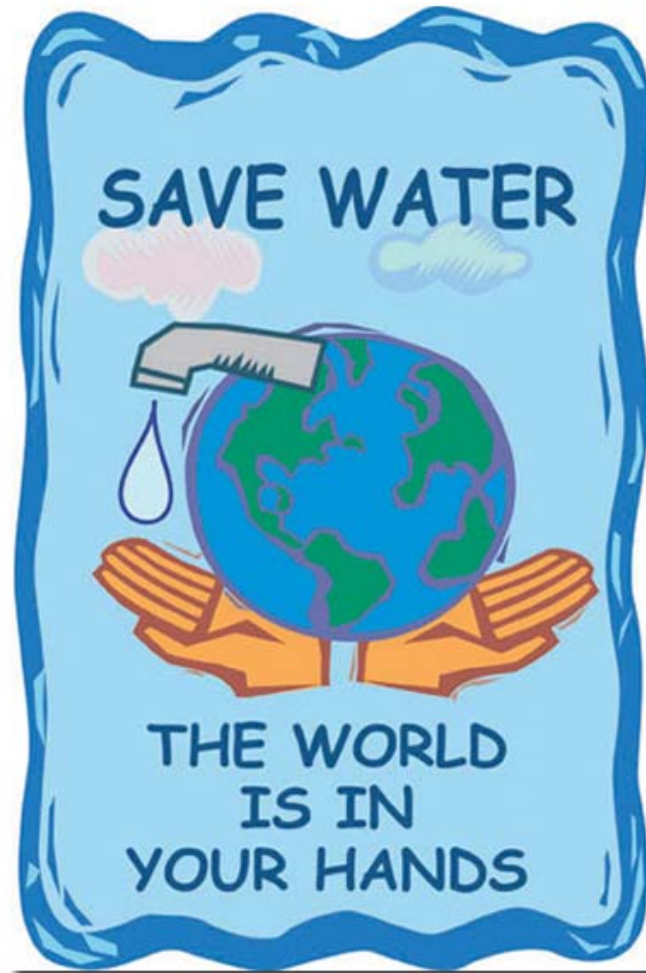
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Switch off mobile phones during lectures, or put them into silent mode

SAVE WATER, SAVE LIFE!
THE WORLD IS IN YOUR HANDS

CONTENTS

❑ Requirement Engineering and Software Quality

TERM PAPER

- Finalize Group Members 26-Feb-2013
- Finalize Topic 12-Mar-2013
- Search Papers and Sort Selected (TODAY) 20-Mar-2013
- **Go Through the Abstract and Introduction of Selected Papers27-Mar-2013**
- Submit a Summary and Comments on related papers **10-Apr-2013**
- Submit Initial Draft **TBD**
- Final Paper Submission **TBD**
- Final Presentation **TBD**

Please note that Every Phase has Marks

SURPRISE

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Any Idea?
Are You Ready?

Presentation of Your Work

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Surprise Presentation

Present your Topic
Steps

- Introduce your self (Your Group)
- Your Topic
- Have you found the related material?
- Have you finalized your Objectives
- Give an overview of work done till today with references
- Will you be able to publish your work

INTRODUCTION

○ Requirements form the basis for all software products

○ Requirements engineering is the process, which enables us to systematically determine the requirements for a software product

REQUIREMENT

- Something required, something wanted or needed
  - Webster's dictionary
- Difference between *wanted* and *needed*

IMPORTANT

- We are discussing requirements with reference to quality assurance and management

IMPORTANCE OF REQUIREMENTS

- The hardest single part of building a software system is deciding what to build…No other part of the work so cripples the resulting system if done wrong. No other part is difficult to rectify later
  - Fred Brooks

SOFTWARE REQUIREMENTS - 1

- A complete description of *what* the software system will do without describing *how* it will do it

- External behavior

SOFTWARE REQUIREMENTS - 2

- Software requirements may be:
  - Abstract statements of services and/or constraints
  - Detailed mathematical functions
  - Part of the bid of contract
  - The contract itself
  - Part of the technical document, which describes a product

IEEE DEFINITION

- A condition or capability that must be met or possessed by a system...to satisfy a contract, standard, specification, or other formally imposed document
  - IEEE Std 729