Seminar Objectives

At the end of this seminar and studio you should be able to:
1. Understand the need for quality documentation.
2. Discuss the various forms of system documentation.

Overview

CROSS LIFECYCLE ACTIVITIES
- Group work (seminar 5)
  > What is a group? What is a team?
  > What makes an efficient team?
  > Types of teams
  > Technology and teams
- Communication (seminar 5)
  > Personal skills
  > Team skills
- Project Management (seminar 6 and 7)
- Documentation (seminar 9)
- Efficiency tools (seminar 8)
Importance of good systems documentation

• Is the major mechanism of communication among various members of the project team
• Provides an orderly progression through the operations, processing and maintenance of a system.

Purpose of a document

To correctly understand the purpose of a document you need to answer two questions:
1. What are the specific issues you are addressing?
2. What questions will the audience want answered?
Types of systems documentation

Documentation contains both narrative and diagrams, and can be

1. System documentation records detailed information about a system’s design specifications, its internal workings, and its functionality
   a) External includes the outcome of the structured diagramming (eg DFD, ER, structure charts etc)
      • The functional specification documents the logical system, ie WHAT the system does.
      • The design specification documents the physical system, ie HOW the system operates – the code, hardware, software, screens etc.
   b) Internal
      • Remarks within the program code

2. User documentation consists of written or other visual information about an application – how it works and how to use it.
   • Print
   • Hypertext
   • Screen text
   • Training
   • Automated (eg Microsoft Assistant)

Documentation is used to

• inform – user manual
• communicate – system specifications
• convey knowledge – DFD, ER Diagram
• authorise – credentials, ID
• control or regulate relationships between people - contracts
• represent an action or deed – meeting minutes
• provide evidence – system manual
Typical IS documentation

- Feasibility report
- System requirements specifications
- Data dictionary
- System manual
- User manuals, help files
- Process models – DFD
- Data models – database schema, entity-relationship diagrams
- Progress reports

Document types

- Manuals
  - Specific and non trivial
- Brochures
  - Main points highlighted, simple and elegant
- Quick reference guides
  - Simple summary card of main functions
- Help
  - Based on manual, is often searchable

Document formats (dis/advantages)

- Paper-based
- Electronic and online
- Multimedia
Good documentation [1]

- can improve a product's reputation - for a user, the system is only as good as the documentation describing it
- reduces the need to refer problems to system developers
- overcomes users' fears of equipment and software
- ensures successful first encounters with a system which lead to greater acceptance and use of the system
- enables users to find what they want and understand it when they find it
- is accurate and complete

Good documentation [2]

- grows with the readers
- allows easy access to the appropriate level of detail
- has more than one navigational path
- provides easy access to additional relevant information
- decreases reading time, error rates, application support
- increases use of application functionality
- improves efficiency, as people understand the system they are working with
- increases user satisfaction
- is written for the intended audience and purpose

Good documentation [3]

- has a consistent layout that clarifies the structure of the document
- uses an appropriate layout for the type of material
- highlights important points
- avoids jargon, or where jargon is necessary gives definitions or explanation uses clear examples that are easy to visualise
- is neither wordy and verbose nor too brief and concise
- has good reference aids (table of contents, index, cross-referencing)
- is easy to update
- is produced in an easy-to-manage physical format.
Layout and Pagination

- **Layout**
  - Be consistent in your layout ... the user develops a model that, if consistent, helps them to guess what will come next.
  - Use type size or bolding to indicate relative importance or weight; categorising your information aids the design of the documentation hierarchy.

- **Page**
  - Use a page size suited to the environment that the document is going to be used in.
  - Do not ‘orphan’ headings or the first few lines of a paragraph.

Preparing documentation

Documentation is part of the product delivered to the client, and should be developed at the same time as the product is being developed.

- Use correct English (or required language)
- Check spelling
- Proofread the document
- Follow guidelines, use templates
- Avoid unnecessarily long explanations
- Do not use humour unless it is appropriate to the type of documentation.

Planning your documentation

- **Consider**
  - Audience; sets the tone, style, language and emphasis
  - Purpose; identifies the content, indicates the level of detail required
  - Medium; paper-based, online, aural and visual
The documentation process

1. Specify the document
2. Draft and edit the document
3. Review the document
   • NOT OK
   • OK
4. Publish the document
5. Maintain the document

Poor documentation

- Confusing, inconsistent layout
- Inappropriate layout for the material being discussed
- Important points buried, not highlighted
- Insufficient reference aids
- Insufficient consideration of the intended audience, purpose
- Use of jargon, without definitions or explanation
- Verbose, or too brief
- Difficult to update
- Bulky – overwhelming physical format

Documentation checklist

- Objectives stated clearly
- Target audience identified
- Consistent approach used (in language, content hierarchy, typography and typology)
- Version control processes in place
- Maintenance process in place

(Typography relates to page layout. Typology relates to font)
References

- There are many books on how to write documentation