



HY-351:

Ανάλυση και Σχεδίαση Πληροφοριακών Συστημάτων
Information Systems Analysis and Design

Πανεπιστήμιο Κρήτης, Φθινόπωρο 2005

Phase I

Conclusions / Recommendations

Ημερομηνία : 27 Νοεμβρίου 2005



Outline

- Locate an actual problem
- Define the problem's range
- Interview the people involved with the problem
- Study all relevant documents
 - if a previous system exists make sure that you know all about it
- Define alternative solutions
- Evaluate alternative solutions and set the evaluation criteria
- Create Use Case Diagrams
- Write a report
- Make a presentation



Locate an actual problem

- Something is wrong
- There is a lot of frustration going on about it
- You must emphasize the problem
- Make sure that everyone understands it
- Make sure that the solution resolves this matter without creating new problems



Define the problem's range

- Each problem consists of certain elements
- Some people may be involved with it
 - they may be responsible for it
- You must completely comprehend it
- You may even be required to do some background research on it



Interviews (1/2)

- Most important step of the process
- It is the task of consuming the interviewee's time and extracting the most valuable information out of him without making him/her bored or feel like they are on the spot
- The interviewer must be truly humble and modest and at the same time he/she must not lack in curiosity
- Be extremely cautious because "Curiosity killed the cat"



Interviews (2/2)

- If you are not socially "gifted" or lacking in experience it is best to prepare a questionnaire before going to the interview
- The questionnaire should be a guideline and the interviewee must be able to answer the questions without requiring your assistance
- this is proved to be useful if the amount of the people to be interviewed is large



Study all relevant documents

- If any previous work exists you must know about it
- if someone else tried to implement it and failed you must learn from his mistakes
- If something new is going to be developed for the matter at hand you must know about it
- If there is already a solution about the problem you must know about it



Define alternate solutions (1/2)

- Here you are asked to provide the most appropriate/feasible solutions regarding the problem
- Your solutions must not be limited by what you are required to solve or your abilities of software implementation
- You must be able to think "outside the box"
- You must also consider suggesting the use of "off the shelf" software that already meets the required needs



Define alternate solutions (2/2)

- "Off the shelf" software may be a good alternative
- In any case you must mention that it exists in order to deal with the competition
- Why should they choose your solution instead of the one that already exists?
- You must convince them
- Even if they don't choose your solution you may be rewarded by providing tech support for other people's software



Create Use Case Diagrams

- In this stage you must focus primarily on Use Cases.
- Make sure you mention them ALL
- Make sure you clarify ALL Actors
- In most cases Actors evolve to Classes and Use Cases evolve to Methods



Write a report

- The report must be complete and brief.
- It must follow a specific pattern.
- If it follows that pattern the reader won't be bored while reading it.



Make a presentation

- For starters the presentation must stress out how important the problem is.
- You must convince the audience that the problem is there and it causes frustration
- This is the dramatic part of the presentation but do not overreact
- Then when they are convinced about the problem hit them with the solution
- The solution should be valid and complete



Questions





References

- Προκυρήξεις:
 - Δημιουργία εκπαιδευτικών πυλών
 - Πληροφοριακό Σύστημα υγείας
- Οδηγός για τη δημιουργία ερωτηματολογίου
 - <http://www.surveysystem.com/sdesign.htm>
- Πρότυπη λύση