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www.engr.uvic.ca/~seng321/courses1.csc.uvic.ca/courses/201/spring/seng/321

Announcements

- S2 & C2
 - Posted
 - S2 number of pages
 - Prototype sophistication
- Friday, Feb 26
 - Midterm spec will be discussed

- Midterm**
 - Wed, March 2

- Final Exam**
 - Sat, April 16
 - 19:00-22:00
 - ECS 125

Midterm

Format

- Wed, March 2
- In class
- Closed books, closed notes, no gadgets, no phones
- All the slides including lab slides

Topics

- Software life cycle models
- Software quality attributes
- Functional vs. non-functional requirements
- Prioritizing requirements
- Cost and value
- What vs. how
- Project & stakeholder types
- Customers, developer and links
- Fishbone diagrams
- Elicitation techniques — pros and cons
- Latent and tacit knowledge
- UML — 14 diagram types
- Structure charts

Item	Date	Activity	Weight
Qstr 1	Wed, Feb 24	In class	2% of course
Midterm (revised)	Wed, Mar 2	In class	14% of project
Deliverable S2a (revised)	Fri, Mar 4	S2a Detailed Feb spec, conceptual design	10% of project
Deliverable S2b (revised)	Tue, Mar 8	S2b Class presentation of S2a to customer	5% of project
Deliverable C2 (revised)	Thu, Mar 10	C2 feedback on S2a&S2b	5% of project
Deliverable S3a	Tue, Mar 15	S3a Technical Design Spec	15% of project
Deliverable S3b	Tue, Mar 22	S3b Manual	10% of project
Deliverable C3	Thu, Mar 24	C3 feedback on S3a&S3b	10% of project
Easter break	Mar 25-28	Fri, no class	
Deliverable S4	Mar 29-31	S4 project demo	10% of project
Deliverable C4	Mar 29-31	C4 feedback on S4	5% of project
Last Day of Classes	Fri, Mar 31		
Final Exam	Sat, Apr 16	19:00-22:00 ECS 125	35%

SENG 321
Calendar

Elicitation Techniques

- Reuse old requirements or existing system
- Questionnaire
- Interviews
- Observation and apprenticeship
- Ethnographic studies
- Brainstorming
- JAD: Joint Application Design
- Nominal group technique
- Delphi technique
- PIECES Approach

Midterm

- Brainstorming

Brainstorming

- Brainstorming consists of two phases:
 - The Storm:** Generate ideas
 - The Calm:** Prune the ideas to get a final list
- All stakeholders can participate in brainstorming sessions to generate unconventional ideas
- The sessions are held early on at the start of project *when there are many uncertainties and unknowns*

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Westcoast Trail



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Brainstorming Roles

- Assign two separate people the special role of:
 - Scribe**
 - writes down all ideas
 - can also contribute and ask clarifying questions during first phase, but not critical questions
 - Moderator / Leader** can be:
 - Traffic cop* enforces "rules of order", but doesn't throw his/her weight around otherwise.
 - Agent provocateur* assumes more of a leadership role, comes prepared with wild ideas and throws them out as discussion wanes. Looks for variations and combinations of other suggestions.

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Pack it in & Pack it out



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Brainstorming Phase I: The Storm

- Goal: generate as many ideas as possible
 - Quantity vs. Quality
- To encourage participation:
 - No criticism or debate is permitted
 - No names attached to ideas
 - Nothing said will be held against participants later on
 - Original idea list isn't circulated outside of the meeting
- Scribe writes down all ideas where all can see
 - Whiteboard, paper taped to wall
- Wild ideas are encouraged
 - Participants should NOT self-censor or spend too much time wondering if an idea is practical. Just shout it out

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Water and bridges



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Brainstorming Phase II: The Calm

- Goal:
 - Review, consolidate, combine, clarify and expand ideas
 - Prioritize and Prune ideas
- Explain ideas more carefully and categorize them into "maybe" and "no" using some pre-agreed consensus method
- Make sure meeting is at most 90-120 minutes (longer meetings tend to lose focus)

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Mudd



Pruning Ideas

- There are several choices to prune:
 - Vote with threshold or campaign speeches
 - Blend ideas
- To keep things friendly, it is desirable to decide on the pruning process beforehand.

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Ladders



Voting and Blending Techniques

- **Vote with threshold**
 - Each person has n votes
 - Keep ideas with more than m votes
 - Have multiple rounds with smaller n and m
- **Vote with campaign speeches**
 - Each person has $j < n$ votes
 - Keep ideas with at least one vote
 - Have someone who did not vote for an idea defend it for the next round
 - Have multiple rounds with smaller j
- **Blend Ideas**
 - Combine and remove too crazy ideas (not part of 1st phase)


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Water



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