Lecture 13: Presentations

CS 5150, Spring 2025

Lecture goals

- Give effective presentations to stakeholders
- Solicit feedback on user interface designs

Presentations

Presentations in Software Engineering

- Important in every project phase
  - Marketing to potential clients
  - Reporting progress to senior management
  - Reports and demonstrations to clients
  - Communication with colleagues on dev team
- Important for career growth
  - Unlikely to achieve leadership position if you cannot give decent presentations

Not everyone is born a great presenter, but everybody can be well-prepared
  - If you are uncomfortable, take every opportunity to gain experience

Planning for presentations

- Know your purpose, audience, and resources
  - What is the presentation meant to achieve?
    - Confirm understanding?
    - Obtain client approval?
    - Propose new feature?
    - Solicit feedback on prototype?
    - Build excitement/buy-in?
    - Request assistance?
    - Report progress?
    - Train users?

- Who must attend the presentation for it to achieve its purpose?
  - Prospective clients?
  - Project management?
  - System users?
  - Other developers?
- How is your presentation constrained?
  - Time available
  - Projector/screen sharing?
  - Internet access?

Time management

- **Midpoint**: 5 min for presentation, 1-2 min for questions
- **Final**: 15 min presentation, 15 min for questions
- Expect interruptions (presentation must serve the audience; is not an end in itself)

- Have an agenda that fulfils the presentation's purpose

- Rehearse your presentation on the clock!

Topics

- Topics on agenda should serve purpose of meeting
  - Description of what you have agreed to deliver to your client (shared definition of success)
  - Summary of progress since last presentation/report
  - Unexpected events and risks
  - Overview of remaining plan to complete and deliver project

- Test plan and test cases
- Results of user testing
- Technical hurdles (if client is technical)

- Demonstrations are always welcome
  - *Show* mock-ups / demonstrations / prototypes *before* talking about them

CS 5150 topics

- Early-stage topics
  - Confirm agreement on scope and goals
    "The project will be a success if …"
  - Progress to date
    "This is our understanding of your requirements…"
    - Mock-ups, designs, etc.
  - Schedule and plan
    "The main risks are…"
    - What has changed since feasibility study?

- Mid-stage topics
  - Demonstration of operational prototype or delivered features
  - Results of user studies

Visual aids

- Slides
    - Common, but not required (and can be a liability)
    - Keep things simple (purpose is conveying information, not entertainment)
    - Must be legible
        - Large fonts (including in figures!) – 20pt minimum
        - Dark text on light background
    - Use to facilitate presentation, not as a reference source
- Handouts
    - Can accommodate more simultaneous detail than a slide
    - Beware potential for distraction

Preparations

- Must have a rehearsal
  - Include all demos and visual aids; don't skip anything
  - Use same laptops as you plan to use later
  - Any unrehearsed changes are a risk – minimize them
  - Time each section
- Plan presenter coordination
  - Option 1: Moderator calls on each presenter
  - Option 2: Each presenter introduces the next
- Test equipment in location if possible
  - Projector connection, network connection, power availability

Presentation behavior

- Presenter (1) should stand; others should sit
- Appoint a recorder
- Briefly introduce each team member
- When asked a question,
    - If presenter knows answer, answer it
    - Presenter may ask another team member to respond
    - Okay to make note and reply later
- Never interrupt your colleagues
    - If you have information to add, raise your hand, allow presenter to decide if/when to call on you

Demonstrations

- Require preparation and practice to be successful
- Technical preparations:
  - Load and configure all software before presentation. Test it, then change nothing
  - If you need test data or accounts, create them in advance
  - If complex commands must be typed, create a cheat sheet or shell script. Ensure they work verbatim
- Prepare a script
  - Include setup, list of examples, task assignments, and cleanup
- Tell audience what they are seeing
  - Production-ready code? Mock-up? Proof-of-concept?

Presentation tips

- Not a lecture!
  - Also not an advertisement
- You are not the audience
  - Try to imagine the client's perspective
- Not an end in itself
  - Be able to articulate its purpose
- Not a controlled document
  - Should not serve as primary documentation

- Not about showing off
  - Don't mislead audience or overpromise
- Explain purpose of topics, figures
  - Why should the audience pay attention to this?

Looking ahead: CS 5150 final presentation

- Goals
  - Personal & team satisfaction from handing over good work to client
  - Complete course in good style with good grade
  - Clean handover without loose ends
  - A good basis for future involvement with client, team, or project

- Audience interests
  - Client: has invested effort in this project
    - Is it ready for production?
    - Should they invest more to deploy/maintain it?
    - Should this approach be abandoned?
  - Course staff
    - What has been accomplished?
    - What has been learned?
    - Is the client satisfied?
    - Are you handing over a maintainable system?

Final presentation components

- Demonstration of operational system
  - Walk through scenario
  - Be honest about gaps, weaknesses
- Presentation
  - Brief review of context, goals
  - Honest summary of achievements and misses
  - Summary of what is being delivered

- Time for discussion

- Must fit within 15 min
  - Cannot walk through everything