CSC290 Communication Skills for Computer Scientists

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Announcements

Today:

- Presentation Skills
- Design Review Presentation (handout is posted on the course website)

Tutorial:

- ► We'll go through
 - Setting up a GitHub repository
 - Using git commands for your project
 - Writing a git repository README
- ▶ Have at least 1-2 team members attend



What makes a good presentation?

Preparing for a presentation

SMCR Model of Communication

- Goal What are you trying to accomplish?
- Receiver / Audience: Who are you trying to communicate with?
- ► **Channel** / Medium : What does the medium communicate about the message?
- Message: What are you trying to communicate?
- ► **Sender** / Yourself: How well do you understand the message, audience, medium?

Remember to keep your audience in mind

Audience:

- What is useful to them? Why should they listen to you?
- ▶ What do they know already? How much details do they want?

Goal:

Your presentation should have a goal, and should change the audience's behaviour in some way.

Example Talk: Doodles

https://www.youtube.com/watch?v=7fx0QcHyrFk

- ▶ Who is the audience of this talk?
- ▶ What is its goal?

Topics for the rest of this class

- Structure
- Visuals / Slides
- Delivery

Presentation Structure

Typical structures:

- ▶ Intro: tell the audience what you're going to tell them.
- ▶ Body: tell them
- ▶ Conclusion: tell them what you told them.

Introduction

- ▶ Why is the audience here?
- Why should they pay attention?
- ▶ What's in it for them?
- ▶ Be engaging and "hook" the audience early on.

Agenda Slide

- ▶ It is a good idea to include an agenda slide in a technical presentation.
- Where are we going, and how far along are we?
- Not necessarily the first slide.
- Not necessarily in a very short presentation.

For your design review presentation, an agenda slide is optional. However, your audience should have a good idea of what to expect in the rest of your presentation.

Concluding Your Presentation

- Summarize or repeat your main point, drive home your objective.
- Don't introduce new information.
- End on a positive node.
- Conclude your presentation with a call-to-action.
- What do you want the audience to do now that you have told them something?
- ▶ What was the *goal* of the presentation?

Problem-Solution Structure

- ▶ Describe the problem (30-50% of your talk!)
- Provide the solution
- Call to action

Residual Method Structure

- Frame the problem (quickly)
- Present possible solution
- Present why it won't work
- Present possible solution
- Present why it won't work
- Provide your own solution.

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- Problem: (Why don't people doodle?)
 - ► The word "doodle" has unpleasant meanings.
 - Authority figures reject doodling.
 - Doodles might be "psychoanalyzed".
 - ► Society focus too much on (structured) verbal information.

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 - Society focus too much on (structured) verbal information.
- Solution: (Why should people doodle?)
 - New definition of "Doodle"
 - Doodling helps retention, stops you from losing focus.
 - Doodling engages multiple learning modalities.
 - Doodling is an instinctive, universal visual language.
 - Doodling is precursor to great works.

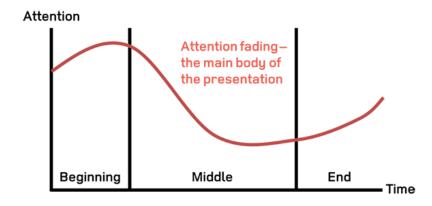
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- Conclusion: Doodling should be encouraged in high information density settings.

Lightning Talk

- ► Choose one of the following 5-minute talks from PyCon (Python Conference)
 - Restructing Data in Python https://youtu.be/bTAFI8P2DkE?t=1084
 - More Sustainable Open Source! https://youtu.be/bTAFl8P2DkE?t=2341
 - ► Code or die https://youtu.be/bTAFI8P2DkE?t=2531
 - Circuit Python https://youtu.be/bTAFI8P2DkE?t=2937
 - Towns https://youtu.be/bJmx0tcVubY?t=2138
- Answer the first two questions before watching the video

Structure for Engagement

Attention span for an adult: no more than 20 min



Important information should be at the beginning or end.

What do you remember from the two presentations?

Structure for Long Presentations

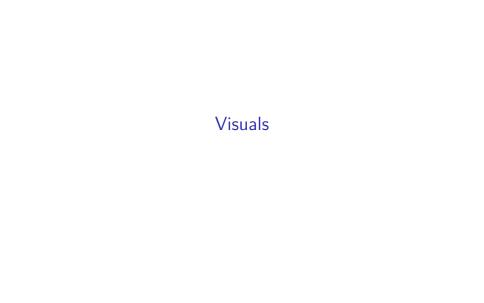
- Break the presentation into parts.
- ▶ Each part should be no more than 15-20 minutes long.

Structuring Your Design Review

- Introduction: What are you going to cover?
- What is your game? What are the game mechanics? How will your game look?
- What are the different logical components? (Why?)
- ▶ What part of the game will be hard to implement? How are you planning to implement those parts?
- Conclusion: What have you talked about? What is your call-to-action?

The Goal of the Design Review

- ► Get feedback from others regarding your design.
- Do people in the audience notice bugs or issues?
- ▶ Are there any part of the software that you are unsure about?



Presentation Slides

- ▶ Keep it simple and focused
- ▶ No excessive:
 - words
 - colours
 - images
- Presentation slides do not have to be standalone!

Presentation Slides vs Slides for Teaching

- ▶ I try to make my slides for courses somewhat standalone
- My slides are going to be wordier than yours
- Your presentation slides do not have to be standalone

Keep Slides Simple



Figure 1: Avoid using excessive colours and images

Keep Slides Simple (2)

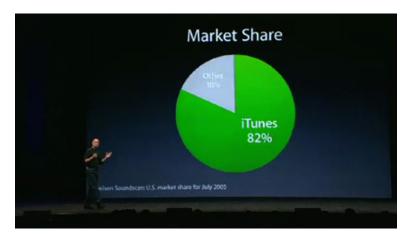


Figure 2: Keep your slides simple!

Keep Slides Simple (3)



Figure 3: Your slides are not your entire presentation.

One Idea Per Slide



Figure 4: One idea per slide

Slide Information

Try not to keep irrelevant slide or information on screen if you moved on.

Slide Font

- San Serif fonts are easier to read on a screen
- ▶ TEXT IN ALL CAPTIALS ARE HARDER TO READ
- ▶ Be consistent with font size, styles, layout

Slide Font Size

- Make sure your font size is big enough for the presentation medium
- ▶ When in doubt, use a bigger font
- ► Fonts in figures should be large enough too!

Presentation Delivery

Presentation Body Language



- ▶ Upright, open posture, facing the audience.
- Don't stand in front of your slides.

Eye contact

- ▶ Choose several "spot" in the audience.
- Establish eye contact for several seconds.
- ▶ Move on to the next "spot".
- Look at the whole audience.

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Design review presentation pitfalls:

- Only looking at the instructor/TA
- ▶ Looking mostly at the center monitor or other screens

When Team Members are Presenting...

- Don't look bored
- Don't look distracted
- ▶ Don't distracted the presenter

Cadence

- Speak slowly and clearly.
- Reword your sentences to be concise.
- Vary your pace. "Vocal Variety"
- Use appropriate length pauses.

Volume

- You should be audible from the back of the room too!
- ▶ It is always better to be too loud than too quiet.

Practice!

For a short presentation, every word and every pause should be rehearsed.

Practice until you sound spontaneous.

Examples:

- https://www.youtube.com/watch?v=8S0FDjFBj8o
- https://www.youtube.com/watch?v=cFLjudWTuGQ

Nervous?

- ▶ The audience wants you to succeed.
- Practice, practice, practice!
- ► Know your opening.
- Deep breaths.
- Drink water.

Presenting as a Group

Make sure that your presentation is coherent.

- Make adjustments after you rehearse together.
- ▶ Figure out how to transition from one person to the next.
- ► Familiarize yourself with all parts of the presentation.