# Technical Demos and Presentations 101

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#### Importance of Presentation Skills

- You will do this often in the workplace, so get comfortable with it!
- •The more you practice presenting, the better you will get at it.
- •Communication and people skills are as important, if not more important than technical skills in many/most jobs!

#### What elements are in a technical presentation?

- Typically
  - A problem statement
  - An overview of the solution
  - A demo
- Depending on context and/or audience, may also include:
  - Design details
  - A comparison of alternative solutions
  - Key lessons learned
  - Future extensions of the project

#### Audience

- Rule #1: Know your audience!
- If the audience is non-technical, consider:
  - Using less jargon and clearly define all acronyms
  - Be less detailed in your explanations of the solution
  - Display architecture diagrams at a higher level
  - Make sure the demo is straightforward and user-friendly

#### Presentation Tips

- 1. Have your presentation and demo ready
  - When it's your turn, don't waste time looking for files
- 2. Make sure all presenters introduce themselves
  - Put all presenter names on the title slide
- 3. You can reuse content from your proposal or project plan

## Presentation Tips (cont'd.)

- 4. Slides should not be cluttered. Ensure all figures are easy to read.
  - Explain figures very clearly. You've had a lot more time to understand the figure than your audience, so walk them through the key information.
  - Use large font (above 30)
- 5. Put your names and a prompt for questions on the last slide.

## Presentation Tips (cont'd.)

- 6. Practice out loud (maybe in front of a mirror)
  - Consider recording your presentation and watching it
  - Know what the next slide is about before you see it
  - Don't memorize a speech, but practice it enough that you know what you're going to say.
  - Speak loudly and confidently with intonation and enthusiasm.
     Smile!
- 7. Practice with your team
  - All team members should know which parts they will speak to
  - Smooth out your transitions (don't say "next slide")
  - Unmute yourself a little in advance
  - Assign someone to watch the time

#### Demo

- 1. Make sure you have thoroughly tested your demo
  - If new code is committed to the repo, need to retest, even if it was a "harmless" commit
  - Plan for contingencies (i.e., what if the database server is down?)
- 2. Your demo does **not** need to cover every aspect of your project.
  - Pick the biggest 1 or 2 pieces of functionality you want to show off and do it from the user's perspective

# Demo (cont'd.)

- 3. Make your project looks easy to use
  - If you are entering info unprompted or the output is hard to comprehend, fix it before the demo
- 4. Have your demo ready to go in another tab and test it right before presenting. Don't waste presentation time trying to find or open your project.

#### Tomorrow's Presentation Details

- Assume a highly technical audience
- Allotted time 10 min
  - 8 minutes for presentation/demo and 2 minutes for questions
  - Address problem statement, description of the solution, and demo of the solution
- Demo needs to be done "live", not pre-recorded

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Project Problem Statement	Team states problem	Team states problem and explains why it is important to their community	Team states problem and explains why it is important to their community using citable facts/statistics
Project Alignment with Problem	Team's project is related to the stated problem	Team's project clearly addresses a part of the stated problem	Team's project could make a meaningful impact on the stated problem
Technical Presentation Storyline	Presentation addresses each component in a disjointed way	Presentation clearly builds, with nice transitions, from problem to solution	Presentation tells a compelling story of how the solution fully and simply addresses the meaningful problem
Technical Presentation - Overview of Project	Presentation illustrates some of the following:  - The use of an API - The architecture	Presentation illustrates all of the following:  - The use of an API - The architecture	Presentation clearly illustrates: - The meaningful use of an API - The thoughtful architecture
Technical Demo - Functionality	Main functionality of the project is shown from recorded demo without bugs	Main functionality of the project is shown live with minimal bugs	The project is shown live to be fully functional and has no noticeable bugs
Technical Demo - Ease of Use	The project seems challenging to learn and/or is missing relevant features	The project seems easy to use or features are well thought out	The project seems easy to use and features are well thought out
Overall Impression	Presentation was not polished	Interactive or seamless presentation	Memorable, interactive, seamless presentation

# Today's Activity

- No predefined activity for this module
- Consider using the time to prepare your presentation.
- You could "pair program" your slides or you could divide and conquer. Choose what works best for you.