

Assignment 1A – Cloud Technology Sharing Presentation

Version 0.10

Presentation Dates: November 26, December 3, December 5

In Fall 2024, presentations will be given by TCSS 562 student teams, while TCSS 462 students will participate by providing peer feedback.

Objective

Teams may elect to prepare a presentation focused on presenting a specific cloud technology or service. The technology could be associated with the team's term project, but it does not have to be. The cloud service or technology should be different than those covered in the course lectures and tutorials.

Cloud technology sharing presentations will have the following structure:

1. Slide presentation: technology overview
2. Demonstration
3. Q & A

For the cloud technology sharing presentation, groups will present in detail a cloud technology or service. Groups may elect to make a **higher level presentation of two or more** competing technologies, or a single **detailed presentation on one** specific technology. Groups should propose a unique topic for the presentation that is not a repeat of material covered in the lecture, and that is not covered by another group. The instructor will approve presentation topics. Group presentations should last approximately 20-25 minutes: approximately 10-15 minutes for the presentation, 5-10 minutes for the demonstration, and 0-5 minutes for questions. The total duration should not exceed 30 minutes including questions. Technology sharing groups should prepare approximately 10-15 highly informative, impactful slides to present the technology. The presentation is then followed by a demonstration that highlights key features of the cloud service or technology. Demonstrations should be carefully prepared to be completed in 5 to 10 minutes. LIVE Demonstrations that fail, or that drag on for significantly longer resulting from disorganization will result in the a loss of points. Groups are encouraged to make trade-offs in the demonstration and focus on highlighting key features as fully comprehensive demonstrations may not be possible in <10 minutes. Presenting select key features, or providing a use-case as an example is a best practice. The grading emphasis will be on **QUALITY** of content and presentation, ***not quantity!***

Presentations should be decomposed into parts, where each team member focuses on producing slides and presenting each part.

Three-person team

Team member #1:	Slides 1-7
Team member #2:	Slides 8-15
Team member #3:	Demonstration
Everyone:	Questions

Presentation teams consist of 1 to 3 members.

Groups should plan to speak at a slow pace throughout the presentation to enhance understandability! Be sure to speak clearly, while enunciating carefully. For speakers who may become nervous, or are custom to speaking quickly, it is recommended to take “*pauses*” to slow down the pace of the talk. The talk is not a race! Remember listeners need time to take notes, ponder what you’re saying, and formulate questions.

PRESENTATION FORMAT FOR FALL 2024

Groups are required to deliver in person presentations in Fall 2024. Delivering the presentation in-person is required. For MSCSS graduate students, the presentation is required because graduate students must demonstrate their ability to perform higher-level learning tasks as described by Bloom’s Taxonomy [1]. The design and delivery of the presentation specifically features analysis, evaluation, and creation. This activity is part of the learning goals and objectives defined in the TCSS 562 master syllabus.

Use of transcripts are encouraged: To support LIVE presentations at conferences and workshops, many of our students have used written transcripts to capture the speaker’s narrative. With a transcript, *the pressure is off* when delivering a LIVE presentation. The script can simply be read for a LIVE presentation. The speaker can then focus on being more relaxed during the delivery. In general students report the effort put into preparing a written transcript pays off significantly in improving the quality and ease of delivering a live presentation.

1 Technology Presentation Format

The structure below is recommended for the slide presentation. Groups should provide at least one slide for each of the topics. Additional slides may be included for each topic where appropriate. Groups **should not** have more than ~20 slides total, not including the technology demonstration.

It is recommended that the presentation be broken into parts. Each team member should present about ~5-7 minutes of content. Smaller teams may scale back the length of the presentation and demonstration accordingly (2-person: 15-20 minutes, 1-person: 10-15 minutes).

Recommended Presentation Format

Slide No.	Major Topic	Questions to Answer / Topics
Slide 1	Introduce the technology	What is it? What does it do?
Slide 2	History of the technology: Who	Who invented the technology? Are there any competing/similar alternatives?
Slide 3	History of the technology: Why	Why was the technology invented? What was the motivation for its development?
Slide 4	History of the technology: How	How has the technology evolved to date? What has driven the evolution of its features?
Slides 5-6	Features Summary	Provide a detailed description of the key features. Where possible discuss technical design of the technology as it relates to cloud computing, distributed systems, and web services.

Slides 7-8	Example Use Cases	Provide example use cases for the technology. These can be use cases invented by the group, common applications from industry, etc. Describe example deployments. For example, are there any industry specific use cases where the technology has been used, or deployed at a large scale?
Slide 9	Technology Advantages	Describe advantages the technology provides, and reasons to encourage its adoption. Consider providing examples where performance is good, or cost is low.
Slide 10	Technology Disadvantages	Describe disadvantages, challenges, or problems with the technology. These may be challenges identified by the group, or those cited from articles or publications. If there are few, consider potential disadvantages.
Slide 11	Usability	Describe initial impressions on ease of use, learning curve, and understandability of programming related APIs. Usability can be its own slide, or presented as part of advantages/disadvantages
Slide 12	Cost Discussion	What does the technology cost to use? Consider presenting some examples of different scales to gauge costs.
Slide 13	Cost Example	Example of cost for a specific use case
Slide 14	Conclusions	State any conclusions or summarizing remarks about the technology
Slide 15-19	Demonstration	Groups can give a UI demo, a CLI demo, or combine both. Demos can be live, or simply a set of screen captures presented and described using slides.
Slide 20	Questions	A break for questions.

2 Technology Demonstration

The technology demonstration can present: (1) the User Interface (UI) of the technology, (2) the Command Line Interface (CLI), and/or (3) an example use of the technology's Programming API. An interesting demo might use the GUI to configure an example resource, and then demonstrate the use of the CLI or programming API to interact with it. Teams can provide PDF files (1-2 pages) that will be distributed on the course webpage to provide a "**cheat sheet**" as a resource to the class for working with the technology. This could include quick-start documentation for using the CLI or programming API, etc. Having a high-quality PDF to augment the presentation can help offset potential deficiencies in the presentation. Additionally, groups could also create an online how-to wiki providing documentation to augment the presentation. Good demonstrations will leverage a use case or example to demonstrate how to use the technology.

Demonstrations can be "static", where screen captures are used in lieu of a LIVE demonstration. Recorded demonstration videos can be played back in lieu of a LIVE demonstration to avoid potential pitfalls. Martin Fowler once coined the "Law of Demos" as being "The chance of a demo going wrong are directly proportional to the importance of the audience" [2].

The key with demonstrations is not to exceed 10 minutes in total duration. In cases where the technology cannot be demonstrated, either through a live demo or a recorded demo, existing material found online can be used as needed. This includes presenting screen captures and/or video using slides.

When other's work is needed to demonstrate the technology, the group should cite the use of external references to receive full credit.

(e.g. include clear citations to websites, papers, etc.)

3 Grading Rubric

[15% of course grade]

Cloud technology sharing presentation grades will be broken into five components:

15% Design quality of presentation/slides

This is the overall quality of the presentation materials. Factors considered include the formatting and design of the slides. Slides should not have long sentences, but phrases which summarize key points. Slides should be designed to encourage speakers to naturally present material, as opposed to reading the material. **Slides should include slide numbers** to help speakers keep pace during the talk.

Corrections can be made AFTER the presentation. Final slides are due by Friday December 6th. Only the final version of the slides is considered when evaluating design quality of the slides.

10% Early review of slides

Groups presenting on a Tuesday should submit slides via Canvas by Sunday @ 11:59p to receive constructive feedback and suggestions from the instructor. The instructor will try to provide feedback by late Monday or very early Tuesday. If slides are available sooner, and the group requests early feedback (by email), review will be provided earlier. For a Thursday presentation, slides should be submitted by 11:59p on Tuesday. Draft slides are not graded. 10% credit is awarded for providing a draft of the slides in advance to receive feedback before the talk. The draft slides will be posted on the course website for sharing with the class. Due to the time required to review and provide feedback for slides, slides submitted less than 24 hours prior to the talk may not be reviewed in time, and the 10% could be forfeited.

25% Technical content

The technical content grade will be evaluated by considering the in-class presentation and the content provided on the final slides submitted after the presentation. Both the technical content of the slides and demonstration will be considered. All groups have the opportunity to improve technical content of slides for final submission by Friday December 6th. OPTIONAL: Providing a technology "cheat sheet" (PDF file) that guides users to quickly try out the technology, can help improve the technical content score.

25% Technology demonstration

The technology demonstration can consist of a live demo, screen captures, video, etc. produced or assembled by the group. The best demonstrations will combine UI + CLI, or UI + API. Effort should be made to focus the demonstration on a short example or use case. The entire demonstration should be no more than 5-10 minutes. Groups with a shorter talk, should plan a longer demonstration. Groups with a longer talk, a shorter demonstration. OPTIONAL: Providing a technology "cheat sheet" (PDF file)

that guides users to quickly try out the technology, can help improve the technology demonstration score.

25% **Presentation quality, clarity, understandability**

The overall clarity and understandability of the presentation is worth approximately 25%. Clarity and understandability are improved by speaking slowly, deliberately, looking at the audience, pausing, as well as having well designed slides, and having practiced the presentation prior to class. Use of a transcript for the talk can improve the presentation. Groups can submit the written transcript to CANVAS to demonstrate effort to encourage a higher grade. The instructor will try to deliberately slow down presentations to help improve group grades by interjecting when possible. The use of notes, notecards, or a transcript is suggested to prevent excessive reading from the laptop screen. Slides should consist of short bullets with only phrases, not complete sentences. The slide design should discourage presenters from simply reading slides. Use of notecards, can help with practicing the presentation. **Presentations should last no more than ~25 minutes. Presentations extending beyond 30 minutes will be abruptly cut-off due to time limitations.**

For TCSS 462:

In lieu of an in-class presentation, students enrolled in TCSS 462 will submit peer reviews of class presentations (**TCSS 462 peer reviews are 100% of the class presentation grade**). To receive full credit, students should submit a minimum of 4 peer reviews of the presentations. Presentation peer reviews will be completed using a peer-review worksheet provided by the instructor. In addition to the reviews, students will write two questions about content in the presentation. These can be questions to help clarify content from the presentation that was not clear, or any related questions inspired by the presentation. To ensure intellectual depth of questions, **questions should not have simple yes-no answers.**

All presentation peer reviews are due by Friday December 6th @ 11:59pm.

Students are ***highly*** encouraged to participate in the class presentations by asking questions at the end of each group's presentations in class.

4 Notes about the presentation grading

Groups who's in-class presentation is scheduled early may be graded less rigorously in a qualitative manner as needed to encourage groups to volunteer to present first. It is expected that the first presentations on day 1 are less polished than those on the last day, after the class has become familiar with the presentation format and approach. For example, if your group is the first presentation, there is more leeway to make mistakes, and more time to correct slides before the final submission.

5 Presentation feedback

Groups are **required** to submit draft slides for review by 11:59pm on the prior Sunday for a Tuesday presentation, or the prior Tuesday for a Thursday presentation. The instructor will provide constructive feedback on the slides. Slides should be prepared using Google Sheets or MS Powerpoint to facilitate adding review comments directly to the slides. The instructor should be granted comment-level access.

If there is no access, it will be more difficult to provide feedback. Slides will be shared with the class via posting on the website.

6 Submission Deadline

Final project slides should be submitted to Canvas in PDF format by Friday December 6th at 11:59pm.

7 Topic Submission

A ranked list of preferred presentation topics should be submitted via Canvas by Sunday November 17th at 11:59pm. Groups should also provide a ranked list of preferred presentation dates: **Nov 26, Dec 3, and Dec 5**. Presentation dates and topics will be awarded on a first come-first serve basis. The presentation schedule will be shared via Canvas by Tuesday November 19th.

8 Change History

Version	Date	Change
0.1	11/07/2024	Original Version

9 References

[1] Bloom's Taxonomy, Center for Teaching, Vanderbilt University, <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

[2] Law of Demos, <https://martinfowler.com/bliki/LawOfDemos.html>