TCSS 462/562: (Software Engineering for) Cloud Computing Fall 2023 School of Engineering and Technology University of Washington –Tacoma

Assignment 1A – Cloud Technology Sharing Presentation

Version 0.10

Presentation Dates: November 28, November 30, December 5, December 7, 2023

In Fall 2023, presentations will be given by TCSS 562 student teams, while all students will participate by providing peer feedback.

Objective

Project 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 tradeoffs 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

Four person teams are not permitted for the presentations.

Groups should plan to speak at a <u>slow pace</u> 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 2023

Groups are strongly encouraged to deliver presentations in person in Fall 2023. Groups should contact the instructor to make special arrangements if they are unable to deliver the presentation in person. Groups should prepare to justify the request. International visa requirements only permit 1 fully online class per academic quarter. Delivering the presentation in-person is required to claim TCSS 562 as an inperson class as the class does not have a required meeting for a midterm or final exam.

Use of transcripts are encouraged: To support LIVE and/or recorded 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 or recorded presentation. The script can simply be read for a LIVE presentation. For a recorded presentation, the recording can be paused and repeated in the event of errors. In general students report the effort put into preparing a written transcript pays off significantly in improving the quality of both live and recorded presentations.

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 project demonstration.

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

Slide No.	Major Topic	Questions to Answer / Topics
Slide 1	Introduce the	What is it? What does it do?
	technology	
Slide 2	History of the	Who invented the technology? Are there any

Recommended Presentation Format

	technology: Who	competing/similar alternatives?
Slide 3	History of the	Why was the technology invented?
	technology: Why	What was the motivation for its development?
Slide 4	History of the	How has the technology evolved to date?
	technology: How	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	Describe disadvantages, challenges, or problems with the
	Disadvantages	technology. These may be challenges identified by the
		group, or those citied 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 include a demonstrations of: (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**" 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 presentations can be used in lieu of a LIVE demonstration. The key with demonstrations is not to exceed 10 minutes in total duration. In cases where the technology can not be demonstrated, either through a live demo or a recorded demo, existing material found online can be used as needed. This includes, screen captures, video, etc. When other's work is needed to demonstrate the technology, <u>the group should cite the use of external references to receive full credit</u>. (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 <u>six</u> 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. <u>Slides should include slide numbers</u> to help speakers keep pace during the talk.

Corrections can be made AFTER the presentation. Final slides are due by Friday December 8th. Online 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. Due to the time required to review and provide feedback for slides, slides submitted less than 24 hours prior to the talk will not be reviewed, and the 10% will be forfeited.

15% <u>Technical content</u>

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 8th.

15% **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.

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 cut-off due to time limitations.**

20% **Participation in presentations**

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 (approximately 1 per day) of the presentations. Presentation peer reviews will be completed using a 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 yes-no answers. These questions will be captured by the presentation peer review worksheet.

For TCSS 562:

On days TCSS 562 students do not deliver a presentation they will submit a minimum of 1 peer review per day, for a total of 3 peer reviews for the quarter. Peer review structure will follow as described above.

Extra Credit:

Students submitting more than 4 peer reviews of presentations (TCSS 462) or 3 peer reviews (TCSS 562) will be eligible for extra credit at the end of the quarter. A maximum of 2% extra credit is possible if completing a valid peer review for every presentation in the class (excluding the presentation delivered by the student).

All presentation peer reviews are due by Friday December 8th @ 11:59pm.

Students are <u>*highly*</u> 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 day 4, after the class has become familiar with the presentation format and approach. For example, if your group is the first presentation, there is leeway to make mistakes, but also 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. 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 8th at 11:59pm.

7 Topic Submission

A ranked list of preferred presentation topics should be submitted via Canvas by Friday November 17th at 11:59pm. Groups should also provide a ranked list of preferred presentation dates: **Nov 28, Nov 30, Dec 5, and Dec 7.** Presentation dates and topics will be awarded on a first come-first serve basis. The presentation schedule will be shared via Canvas around Monday November 20th.

8 Change History

Version	Date	Change
0.1	11/07/2023	Original Version