

TCSS 562:
SOFTWARE ENGINEERING
FOR CLOUD COMPUTING

Group Presentations III

Wes J. Lloyd
School of Engineering and Technology
University of Washington - Tacoma
TR 5:00-7:00 PM



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OBJECTIVES - 12/7

Questions from 12/2

Presentation Questions; Quiz 2 - to be posted Dec 6

Tutorial 7/8/9 - Due Dec 7, Dec 17, Dec 17

A2 - Term Project Paper - Due Dec 17

A3 - Term Project Lightning Presentation - Dec 14

Tutorial 10 - no submission

Group 6- Simple Notification Service
Minzhi Qu, Yanliu Wang, Guanchen Zhao

Group 2- Distributed Machine Learning with a Serverless Architecture
Zhifei Cheng, Sijin Huang, Zichao Zhang

Group 12- IBM Cloud Functions
Anmin Huang

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ONLINE DAILY FEEDBACK SURVEY

Daily Feedback Quiz in Canvas - Take After Each Class

Extra Credit for completing

Assignments

Upcoming Assignments

Class Activity 1 - Implicit vs. Explicit Parallelism
Available until Oct 11 at 11:59pm | Due Oct 7 at 7:59pm | -100 pts

Tutorial 1 - Linux
Available until Oct 19 at 11:59pm | Due Oct 13 at 11:59pm | -100 pts

Past Assignments

TCSS 562 - Online Daily Feedback Survey - 10/5
Available until Dec 18 at 11:59pm | Due Oct 6 at 8:59pm | -10 pts

TCSS 562 - Online Daily Feedback Survey - 9/30
Available until Dec 18 at 11:59pm | Due Oct 4 at 8:59pm | -10 pts

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TCSS 562 - Online Daily Feedback Survey - 10/5

Starts: Oct 7 at 1:13pm

Quiz Instructions

Question 1

0.5 pts

On a scale of 1 to 10, please classify your perspective on material covered in today's class:

1 2 3 4 5 6 7 8 9 10

Mostly Review To Me Equal New and Review Mostly New to Me

Question 2

0.5 pts

Please rate the pace of today's class:

1 2 3 4 5 6 7 8 9 10

Slow Just Right Fast

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MATERIAL / PACE

Please classify your perspective on material covered in today's class (24 respondents):

1-mostly review, 5-equal new/review, 10-mostly new

Average - 5.75 (↓ - previous 6.38)

Please rate the pace of today's class:

1-slow, 5-just right, 10-fast

Average - 5.25 (no change - previous 5.25)

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FEEDBACK FROM 12/2

?

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TUTORIAL QUESTIONS

- Tutorial 4: Graded
- Tutorial 5/6: to be graded next
- Tutorial 7: Tuesday Dec 7th @ 11:59p
- Tutorial 8: Extra Credit - Dec 17 @ 11:59p
- Tutorial 9: Extra Credit - Dec 17 @ 11:59p
- Tutorial 10 - No Submission

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GROUP PRESENTATION QUESTIONS

- Assignment created as quiz on Canvas
- Only ONE MEMBER of each team needs to submit the quiz
- Quiz collects questions for group presentations in one place
- Best to submit all questions at once on/after Fri Dec 10
- Please provide 2 questions for each presentation not occurring on your team's presentation day
- Tuesday Nov 30 - Quiz for Groups 1, 2, 3, 6, 7, 8, 9, 11, and 12
- Thursday Dec 2 - Quiz for Groups 1, 2, 6, 9, 10, 11, 12, and 13
- Monday Dec 7 - Groups 1, 3, 7, 8, 9, 10, 11, and 13
- Wednesday Dec 9 - Quiz for Groups 2, 3, 6, 7, 8, 10, 12, and 13

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GROUP PRESENTATIONS - WEEK 11

Tuesday Dec 7

Slot #1 - Simple Notification Service (?)

- Group 6: Minzhi Qu, Yanliu Wang, Guanchen Zhao

Slot #2 - Distributed Machine Learning with a Serverless Architecture

- Group 2: Zhifei Cheng, Sijin Huang, Zichao Zhang

Slot #3 - IBM Cloud Functions

Group 12: Anmin Huang, Shuo Peng

Thursday Dec 9

Slot #1 - Tell Me When You Are Sleepy And What May Wake You Up!

- Group 1: Alekhya Palle, Satchit Dahal, Amir Almemar

Slot #2 - Azure Functions version 3 or 4 (?)

- Group 9: Dev Gandhi, Nischal Khadka, Sri Vibhu Paruchuri

Slot #3 - FaasCache: Keeping Serverless Computing Alive with Greedy-Dual Caching

- Group 11: Davis Railsback, Trina Pal, Parshva Kotak

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TALK RECORDINGS

- Submit video recording links (URLs) via CANVAS
 - Final version of recording due by ~ Dec 17
- Can host video on Google Drive, Zoom (cloud), YouTube, or personal server and provide a link
- On day of presentation: arrive 10 min early to class to test video playback (or test during halfway-point)
- Group members should plan to be present to answer questions on day of talk
- If group members are unavailable, please contact instructor

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WE WILL RETURN AT
~6:17PM



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QUESTIONS




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QUESTIONS



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OFFICE HOURS

PLEASE SAY HELLO



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OFFICE HOURS

HAVE STEPPED OUT

WILL RETURN SHORTLY



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AREAS OF THE CLOUD

- **Area:** Serverless Computing
 - Function-as-a-Service
 - Container-as-a-Service
- Infrastructure-as-a-Service Cloud
 - Virtual Machines
 - Containers & container clusters (Kubernetes)
- **Perspective:** cloud provider vs. cloud consumer
- **Applications:** tsunami modeling, bioinformatics, environmental modeling
- **Problem:** driven by the area & perspective
 - Common problems: what is the right abstraction? → observability
 - resource contention, resource heterogeneity, provisioning variation, performance variability (delta between min/max performance)

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