

SER 321 C Session

SI Session

Sunday, June 23rd 2024

6:00 pm - 7:00 pm MST

Agenda



Distribution Issues

Node Structures

Communication Walkthrough

Consensus

Types

RAFT Example

SI Session Expectations

Thanks for coming to the **SER 321** SI session. We have a packed agenda and we are going to try to get through as many of our planned example problems as possible. This session will be recorded and shared with others.

- If after this you want to see additional examples, please visit the drop-in tutoring center.
- We will post the link in the chat now and at the end of the session.
 - tutoring.asu.edu
- Please keep in mind we are recording this session and it will be made available for you to review 24-48 hours after this session concludes.
- Finally, please be respectful to each other during the session.

Interact with us:

Zoom Features

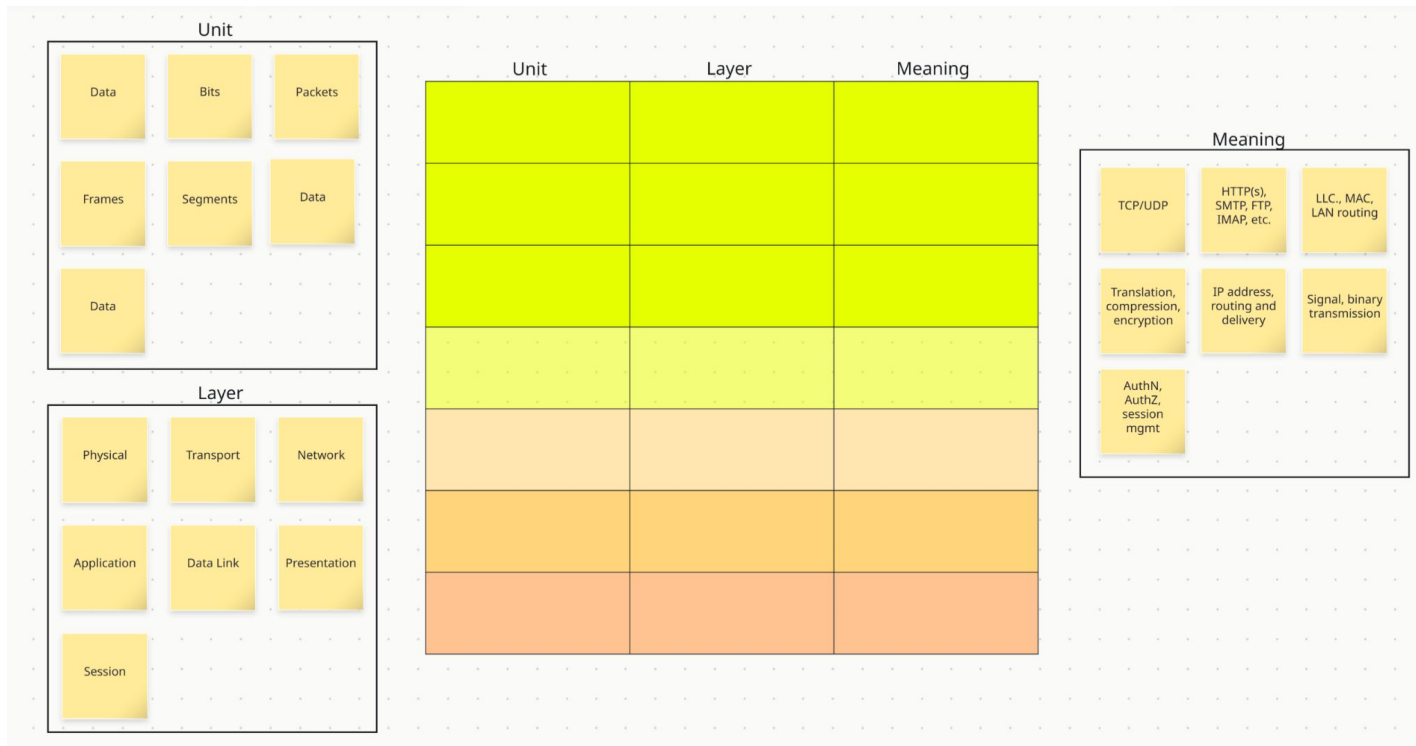


Zoom Chat

- Use the chat feature to interact with the presenter and respond to presenter's questions.
- Annotations are encouraged

Distribution KWL

Let's try something new!

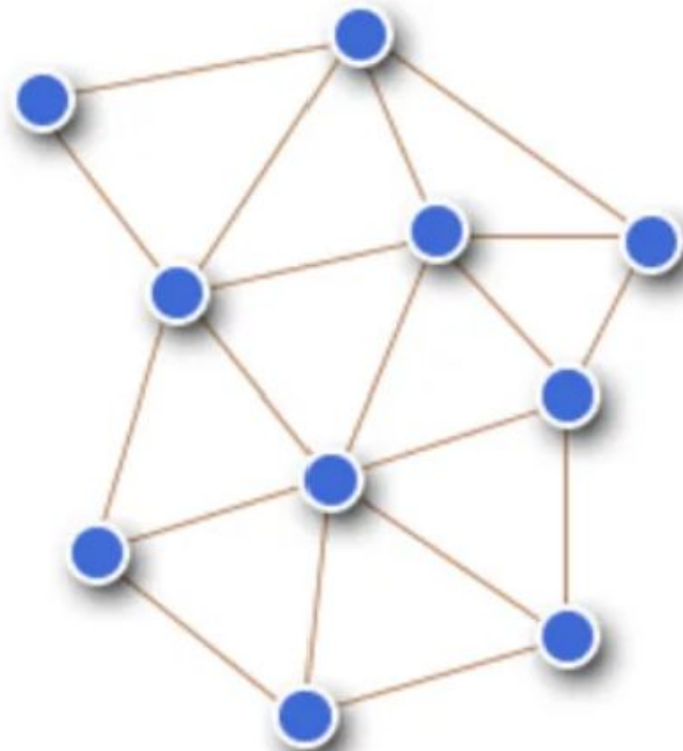


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Distributed Systems

Remember that we are operating in *reality*

- Nodes *will* fail
- Web of nodes *will constantly* change
- Network is not *always* reliable
- Latency is *always present*
- The path traversed *changes*
- Some resources *must be shared*
- *You* need to prevent the pitfalls!
 - No deadlocks
 - No starvation
 - No error states

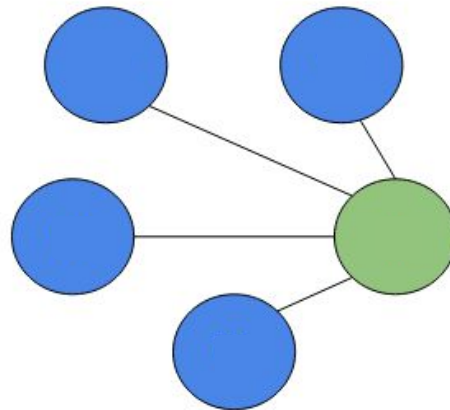
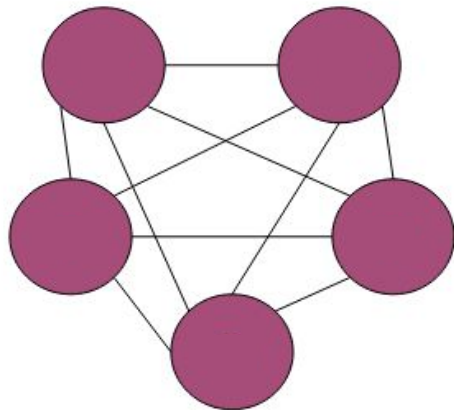


Main and Worker

Peer to Peer

Which is which?

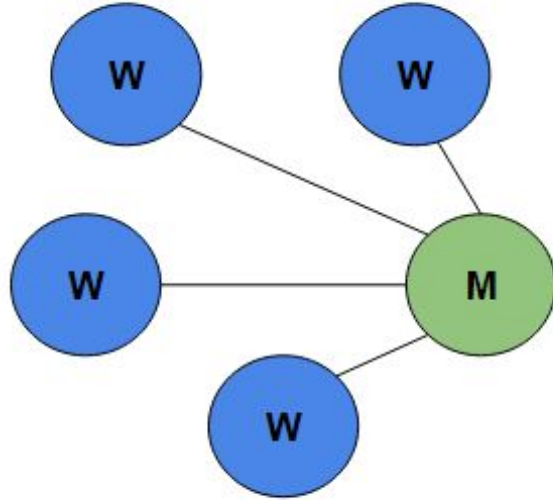
Check out the recording for the solution!



Check out the recording for the solution!

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Distributed Systems



Pros:

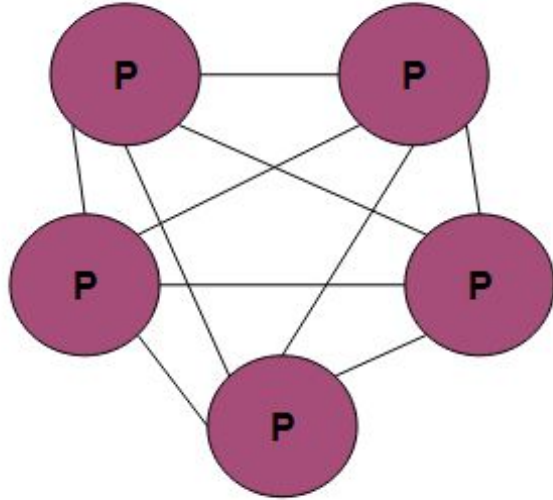
Cons:

Check out the recording for the solution!

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Distributed Systems

Pros and Cons



Pros:

Cons:

We will cover this in a moment!

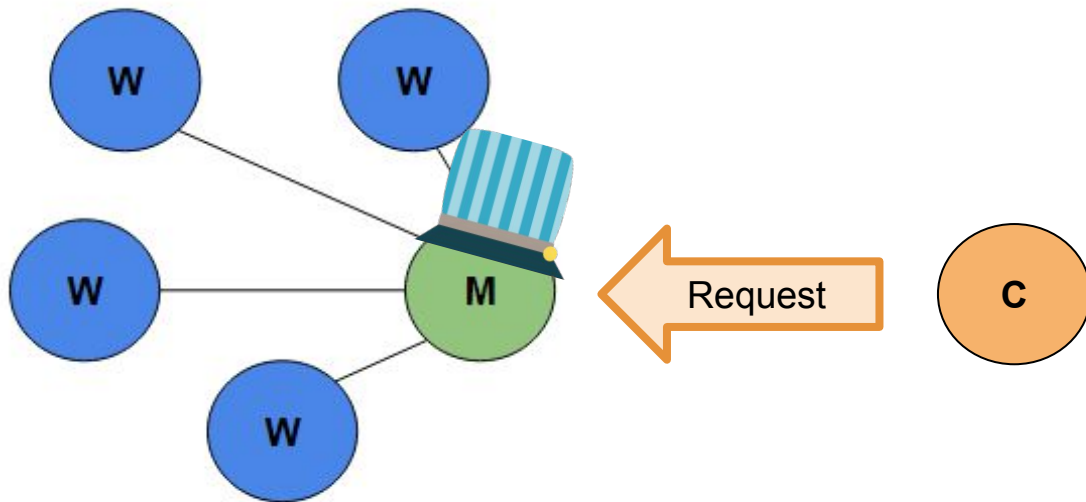
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Distributed Systems

Process Flow!

DATA

Workers
only do
their task
then report
back



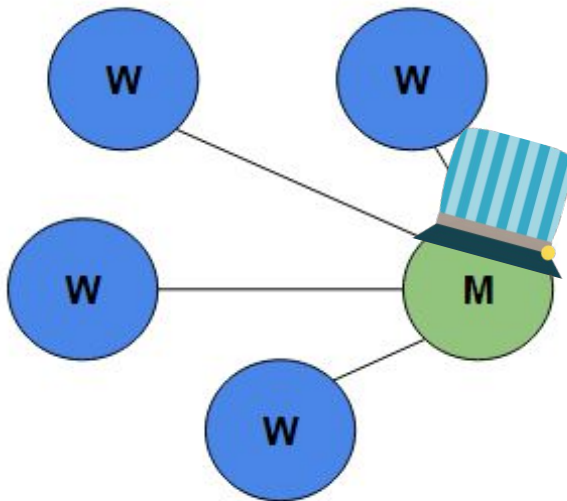
Main is like our server

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Distributed Systems

Process Flow!

Workers
only do
their task
then report
back



DATA



D1

D2

D3

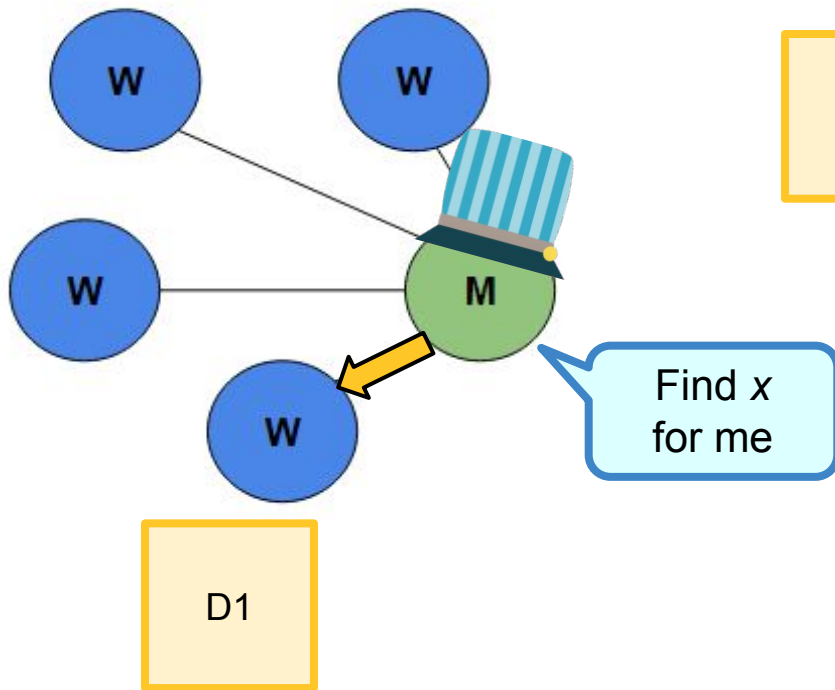
D4

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Distributed Systems

Process Flow!

Workers
only do
their task
then report
back



DATA



D1

D2

D3

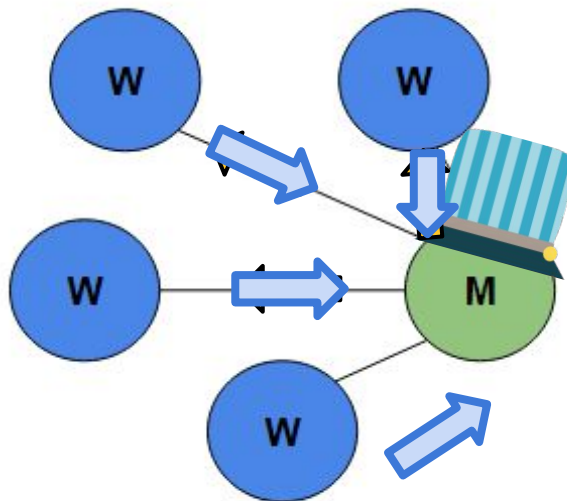
D4

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Distributed Systems

Process Flow!

Workers
only do
their task
then report
back



D1

DATA



D1

D2

D3

D4

D1
Result

D2
Result

D3
Result

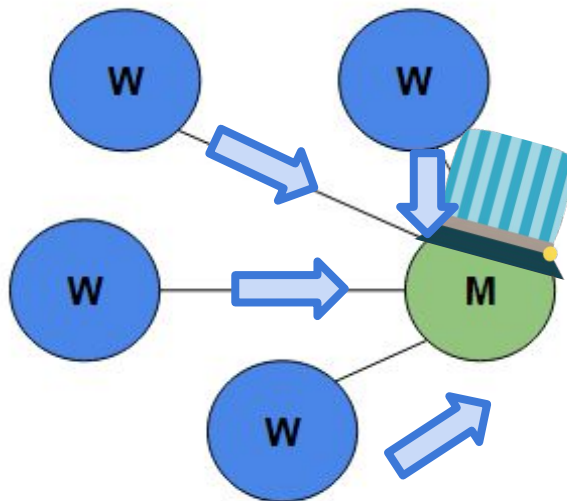
D4
Result

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Distributed Systems

Process Flow!

Workers
only do
their task
then report
back



D1

DATA



D1

D2

D3

D4

D1
Result

D2
Result

D3
Result

D4
Result



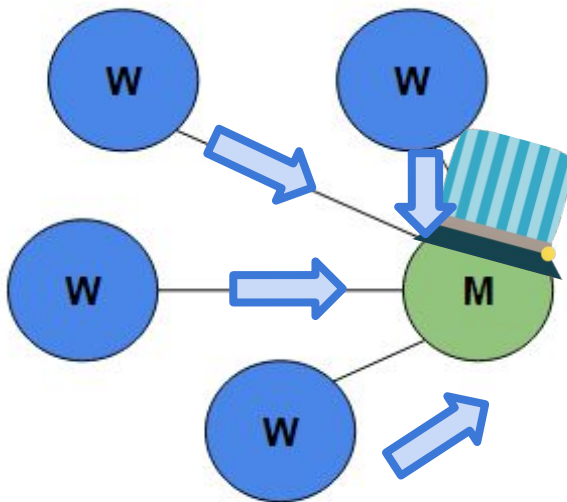
RESULTS

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Distributed Systems

Does this look familiar?

How is this different from a parallel processing model?



D1

DATA



D1

D2

D3

D4

D1
Result

D2
Result

D3
Result

D4
Result



RESULTS

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Distributed Systems

What about Peer to Peer?

Would this sequence
(*the data handling*) change
in the different structure?



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Scratch Space

Questions?



Survey:

<http://bit.ly/ASN2324>



Upcoming Events

SI Sessions:

- Monday, June 24th at 6:00 pm MST
- Thursday, June 27th at 6:00 pm MST
- Sunday, June 30th at 6:00 pm MST

Review Sessions:

- Review Session - **Wednesday**, July 3rd at 6:00 pm MST (2 hr Session)
- Q&A Session - Sunday, July 7th at 6:00 pm MST (Final Session)

More Questions?

Check out our other resources!

tutoring.asu.edu



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Services



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[Access the drop-in queue](#)

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2-

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1. Click on 'Go to Zoom' to log onto our Online Tutoring Center.
2. Click on 'View the tutoring schedule' to see when tutors are available for specific courses.

More Questions?

Check out our other resources!

tutoring.asu.edu/online-study-hub

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Online Study Hub

Online peer communities for students and tutors, YouTube channels, and Tutorbots.



What are online peer communities?

Individual courses have an online peer community that allows you to connect with your peers to post and answer questions and to develop study groups.



How can tutoring center videos help?

Videos can help supplement the learning you're doing in and outside of class and include step-by-step methods for how to understand concepts.



How does the Tutorbot work?

You can ask the Tutorbot questions about course concepts and the Tutorbot will recommend additional resources and examples to help address your questions.

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Business

ACC 231

Uses of Accounting Info I

 [Peer Community](#)

ACC 241

Uses of Accounting Info II

 [Peer Community](#)

CIS 105

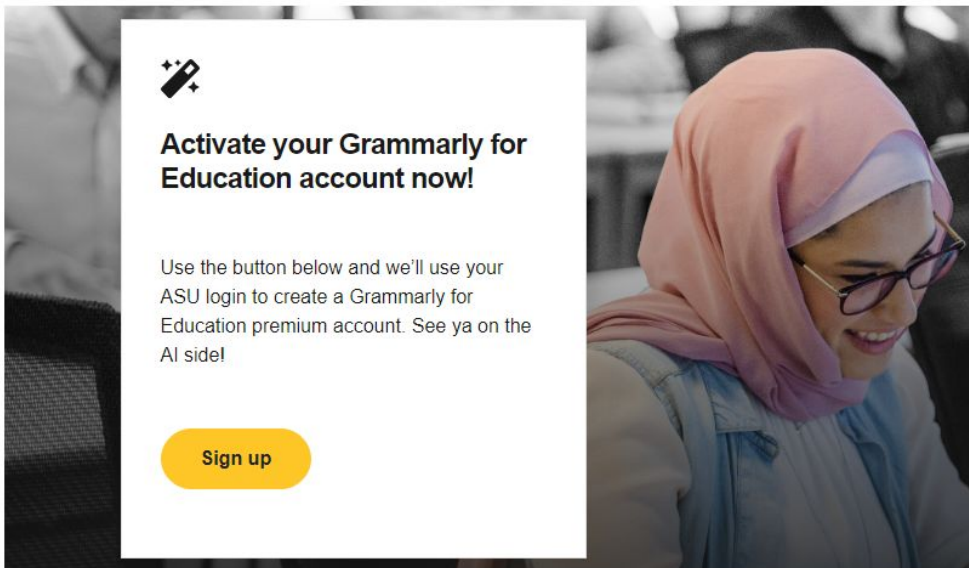
Computer Applications and Information Technology


 [Peer Community](#)

Don't forget to check out the Online Study Hub for additional resources!

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tutoring.asu.edu/expanded-writing-support

*Available slots for this pilot are limited

Additional Resources

- [Course Repo](#)
- [Gradle Documentation](#)
- [GitHub SSH Help](#)
- [Linux Man Pages](#)
- [OSI Interactive](#)
- [MDN HTTP Docs](#)
 - [Requests](#)
 - [Responses](#)
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- [Swing Tutorials](#)
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