

SER 321 B Session

SI Session

Sunday, March 31st 2024

7:00 pm - 8:00 pm MST

Agenda



Protocol Tips!

TCP vs. UDP Review

Server Socket Steps

Handling Client Connection

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

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Protocol Tips

Stay Organized!

Try to emulate the structure in 3-1

Format your Markdown!

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Protocol Tips

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```
<!-- TOC -->
```

```
* \[Protocol:\](#protocol-)
* \[Echo:\](#echo-)
* \[Add:\](#add-)
* \[AddMany:\](#addmany-)
* \[Roller:\](#roller-)
* \[Inventory:\](#inventory-)
* \[General error responses:\]
```

```
<!-- TOC -->
```

```
## Protocol: ##
```

```
### Echo: ###
```

Request:

```
{
  "type" : "echo", -- type of request
  "data" : <String> -- String to be echoed
}
```

General response:

Protocol:

Echo:

Request:

```
{
  "type" : "echo",
  "data" : <String>
}
```

General response:

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* [Protocol:](#protocol-)
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* [General error responses:]
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## Protocol: ##
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Protocol:

Echo:

Request:

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{
  "type" : "echo", -- ty
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}
```

```
####General response:####
```

Spaces are important!

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```
<!-- TOC -->
* [Protocol:](#protocol-)
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* [Roller:](#roller-)
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<!-- TOC -->
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## Protocol: ##

### Echo: ###

#### Request: ####

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  "type" : "echo", -- type of request
  "data" : <String> -- String to be echoed
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#### General response: ####
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Protocol:

Echo:

Request:

```
{
  "type" : "echo",
  "data" : <String>
}
```

General response:

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TCP vs. UDP Matching

Check out the recording for the solution!

Unreliable

TCP

OR

UDP

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TCP vs. UDP Matching

Check out the recording for the solution!

Connection-Oriented

TCP

OR

UDP

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TCP vs. UDP Matching

Check out the recording for the solution!

Uses Streams

TCP

OR

UDP

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TCP vs. UDP Matching

Check out the recording for the solution!

Has Less Overhead

TCP

OR

UDP

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TCP vs. UDP Matching

Check out the recording for the solution!

Has Less Overhead

TCP

OR

UDP

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Server Socket

Steps for the **Server Socket**

1.

2.

3.

4.

5.

6.

7.

8.

9.

*Check out the
recording for
the solution!*

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Server Socket

*Check out the
recording for
the
discussion!*

1. Define Params

2. Create Socket

3-5. Mark Socket to Listen

6. Wait for Connection

7. Handle Client Connection

8. Close Client Connection

9. Continue Listening

```
public static void main (String args[]) {  
  
    if (args.length != 1) {  
        System.out.println("Expected arguments: <port(int)>");  
        System.exit( status: 1);  
    }  
  
    try {  
        port = Integer.parseInt(args[0]);  
    } catch (NumberFormatException nfe) {  
        System.out.println("[Port|sleepDelay] must be an integer");  
        System.exit( status: 2);  
    }  
  
    try {  
        //open socket  
        ServerSocket serv = new ServerSocket(port);  
        System.out.println("Server ready for connections");  
  
        while (true){  
            System.out.println("Server waiting for a connection");  
            sock = serv.accept(); // blocking wait  
            System.out.println("Client connected");  
            // ...  
        }  
    }  
}
```

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Scratch Space

Questions?

Survey:

<http://bit.ly/ASN2324>



Upcoming Events

SI Sessions:

- Monday, April 1st at 7:00 pm MST
- Thursday, April 4th at 7:00 pm MST
- Sunday, April 7th at 7:00 pm MST

Review Sessions:

- Sunday, April 21st at 7:00 pm MST
- **Monday, April 25th Session is *cancelled***

More Questions?

Check out our other resources!

tutoring.asu.edu



Academic Support

Academic Support Network (ASN) provides a variety of free services in-person and online to help currently enrolled ASU students succeed academically.

Services



Subject Area Tutoring

Need in-person or online help with math, science, business, or engineering courses? Just hop into our Zoom room or drop into a center for small group tutoring. We'll take it from there.

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Need help with undergraduate or graduate writing assignments? Schedule an in-person or online appointment, access your appointment link, or wait in our drop-in queue.

[Access your appointment link](#)

[Access the drop-in queue](#)

Schedule Appointment



Online Study Hub

Join our online peer communities to connect with your fellow Sun Devils. Engage with our tools to search our bank of resources, videos, and previously asked questions. Or, ask our Tutorbot questions.

Now supporting courses in Math, Science, Business, Engineering, and Writing.

Online Study Hub

1-

Go to Zoom

2-

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[View the tutoring schedule](#)

[View digital resources](#)



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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[University College](#)

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

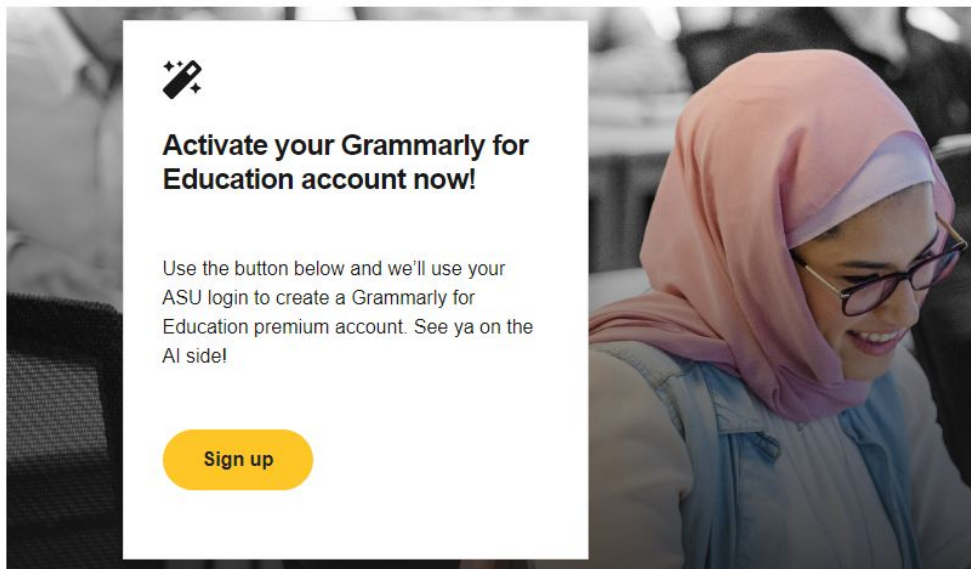
Computer Applications and Information Technology

 [Peer Community](#)

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

Expanded Writing Support Available

Including Grammarly for Education, at no cost!



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](#)
- [JSON Guide](#)
- [org.json Docs](#)
- [javax.swing package API](#)
- [Swing Tutorials](#)