

SER 321 B Session

SI Session

Monday March 25th 2024

7:00 pm - 8:00 pm MST

Agenda



JSON

Socket Communication

Properties

Steps

Diagram

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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JSON

Which of the following would be a valid response?

[Assign 3-1 Starter Code](#)

```
{  
  "type" : "echo", -- echoes the initial response  
  "ok" : <bool>, -- true or false depending on request  
  "echo" : <String>, -- echoed String if ok true  
  "message" : <String>, -- error message if ok false  
}
```

Echo General Response

A. {
 "type" : "echo",
 "echo" : <String>
}

C. {
 "type" : "echo",
 "message" : <String>
}

B. {
 "type" : "echo",
 "ok" : false,
 "echo" : <String>
}

D. {
 "type" : "echo",
 "ok" : true,
 "echo" : <String>
}

Check out the recording for the solution!

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JSON

How would you check if the *type* header exists?

[Assign 3-1 Starter Code](#)

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

Echo Request

```
{  
  "type" : "echo", -- echoes the initial response  
  "ok" : <bool>, -- true or false depending on request  
  "echo" : <String>, -- echoed String if ok true  
  "message" : <String>, -- error message if ok false  
}
```

Echo General Response

*Think of
yourself as the
server!*

```
String reqType = ""; //to hold request type  
String content = ""; // to hold data from client  
JSONObject request = new JSONObject(str);
```

You can assume
STR is the data
sent from the
client

Check out the recording for the solution!

How would you fetch the type content?

[Assign 3-1 Starter Code](#)

SER 321

JSON

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

Echo Request

```
{  
  "type" : "echo", -- echoes the initial response  
  "ok" : <bool>, -- true or false depending on request  
  "echo" : <String>, -- echoed String if ok true  
  "message" : <String>, -- error message if ok false  
}
```

Echo General Response

*Think of
yourself as the
server!*

You can assume
STR is the data
sent from the
client

```
String reqType = ""; //to hold request type  
String content = ""; // to hold data from client  
JSONObject request = new JSONObject(str);  
if (!request.has("type")) {  
    //error - no type header  
    //send error response  
}
```

Check out the recording for the solution!

How would you obtain the message sent?

[Assign 3-1 Starter Code](#)

SER 321 JSON

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

Echo Request

```
{  
  "type" : "echo", -- echoes the initial response  
  "ok" : <bool>, -- true or false depending on request  
  "echo" : <String>, -- echoed String if ok true  
  "message" : <String>, -- error message if ok false  
}
```

Echo General Response

*Think of
yourself as the
server!*

You can assume
STR is the data
sent from the
client

```
String reqType = ""; //to hold request type  
String content = ""; // to hold data from client  
JSONObject request = new JSONObject(str);  
if (!request.has("type")) {  
    //error - no type header  
    //send error response  
}  
reqType = request.getString("type");  
if (reqType.equals("echo")) {  
    //fetch message  
}
```

Check out the recording for the solution!

How would you construct the response?

[Assign 3-1 Starter Code](#)

SER 321
JSON

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

Echo Request

```
{  
  "type" : "echo", -- echoes the initial response  
  "ok" : <bool>, -- true or false depending on request  
  "echo" : <String>, -- echoed String if ok true  
  "message" : <String>, -- error message if ok false  
}
```

Echo General Response

*Think of
yourself as the
server!*

```
String content = request.getString("data");  
JSONObject res = new JSONObject();
```

Check out the recording for the solution!

```
{  
  "type" : "echo",  
  "ok" : true,  
  "echo" : <String>  
}
```

Target Response

Then what do you do?

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Response Codes

Think Fast - ID these Codes

1XX

2XX

3XX

4XX

5XX

Check out the recording for the solution!

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Client/Server

Think Fast - Client or Server?

```
String host = args[0];  
Socket server = new Socket(host, port);
```

Check out the recording for the solution!

SER 321
Client/Server

Think Fast - Client or Server?

```
Socket clientSock;  
ServerSocket sock = new ServerSocket(port);
```

Check out the recording for the solution!

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Scratch Space

Questions?

Survey:

<http://bit.ly/ASN2324>



Upcoming Events

SI Sessions:

- Thursday, March 28th at 7:00 pm MST
- Sunday, March 31st at 7:00 pm MST
- Monday, April 1st at 7:00 pm MST

Review Sessions:

- TBD

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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[Access your appointment link](#)

[Access the drop-in queue](#)

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

Online Study Hub

1-

Go to Zoom

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

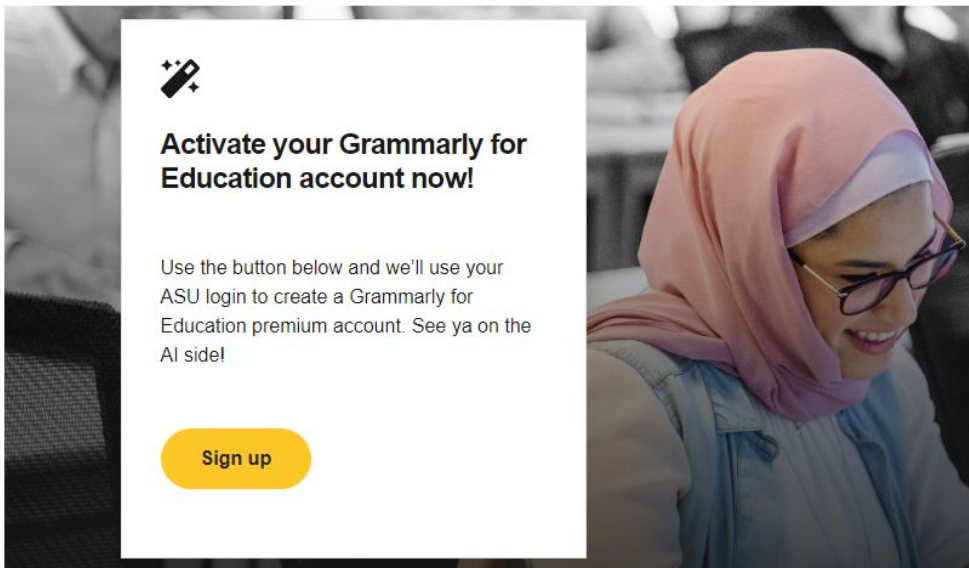
Computer Applications and Information Technology


 [Peer Community](#)

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

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Use the button below and we'll use your ASU login to create a Grammarly for Education premium account. See ya on the AI side!

[Sign up](#)



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](#)