

SER 321 B Session

SI Session

Thursday, March 21st 2024

7:00 pm - 8:00 pm MST

Agenda



Gradle

JSON

Making your Code Robust

Client & Server

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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Assignment 2

Helper Document is ***super*** helpful!

 Thank you UGTA Paul Heaton! 

Check out the recording for the solution! [Sockets/JavaSimpleSock2](#)

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Gradle Review

Which statement will execute with...

gradle SocketClient -Phost=localhost -Pmessage=secret

```
if (project.hasProperty("host") && project.hasProperty("message") && project.hasProperty("number")) {  
    A      args(project.getProperty('host'),  
               project.getProperty('message'),  
               project.getProperty('number'));  
} else if (project.hasProperty("host") && project.hasProperty("message")) {  
    B      args(project.getProperty('host'),  
               project.getProperty('message'));  
} else if (project.hasProperty("host") && project.hasProperty("number")) {  
    C      args(project.getProperty('host'),  
               "Set by Gradle, since nothing provided: https://gph.is/2y76sj4",  
               project.getProperty('number'));  
} else if (project.hasProperty("host")) {  
    D      args(project.getProperty('host'));  
}
```

Check out the recording for the solution! [Sockets/JavaSimpleSock2](#)

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Gradle Review

Which statement will execute with...

gradle SocketClient -Phost=localhost -Pmessage=secret -Pnumber=2

```
if (project.hasProperty("host") && project.hasProperty("message") && project.hasProperty("number")) {  
    A      args(project.getProperty('host'),  
               project.getProperty('message'),  
               project.getProperty('number'));  
} else if (project.hasProperty("host") && project.hasProperty("message")) {  
    B      args(project.getProperty('host'),  
               project.getProperty('message'));  
} else if (project.hasProperty("host") && project.hasProperty("number")) {  
    C      args(project.getProperty('host'),  
               "Set by Gradle, since nothing provided: https://gph.is/2y76sj4",  
               project.getProperty('number'));  
} else if (project.hasProperty("host")) {  
    D      args(project.getProperty('host'));  
}
```

Check out the recording for the solution! [Sockets/JavaSimpleSock2](#)

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Gradle Review

Have we set any defaults here?

```
if (project.hasProperty("host") && project.hasProperty("message") && project.hasProperty("number")) {
    args(project.getProperty('host'),
        project.getProperty('message'),
        project.getProperty('number'));
} else if (project.hasProperty("host") && project.hasProperty("message")) {
    args(project.getProperty('host'),
        project.getProperty('message'));
} else if (project.hasProperty("host") && project.hasProperty("number")) {
    args(project.getProperty('host'),
        "Set by Gradle, since nothing provided: https://gph.is/2y76sj4",
        project.getProperty('number'));
} else if (project.hasProperty("host")) {
    args(project.getProperty('host'));
}
```


Check out the recording for the solution! [Network/HTTP-JSON](#)

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Gradle Review

Let's modify this code to have *both* defaults and command line properties!

```
task API(type: JavaExec) {  
    classpath = sourceSets.main.runtimeClasspath  
    main = 'API'  
    // default args  
    args 'kgary' // port  
}
```

First let's make the *if* statement:

Check out the recording for the solution! [Network/HTTP-JSON](#)

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Gradle Review

Let's modify this code to have *both* defaults and command line properties!

```
task API(type: JavaExec) {  
    classpath = sourceSets.main.runtimeClasspath  
    main = 'API'  
  
    //OPTION 1  
  
    // default args  
    args 'kgary' // port  
  
    //OPTION 2  
  
}
```

First let's make the *if* statement:

Okay, now where do we put it?

SER 321**JSON**

Do you see any errors?

```
{  
  "name" : "katie",  
  "role" : "student",  
  "course" : "ser321"  
}
```

```
[{  
  "name" : "katie",  
  "name" : "zac"  
}]
```

Check out the recording for the discussion!

```
{  
  "name" : "katie",  
  "pets" : {  
    "dog" : "smokey",  
    "dog" : "samie"  
  }  
}
```

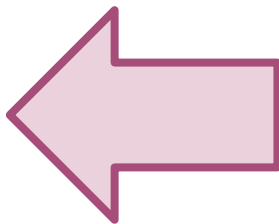
```
{  
  "submissions" : [  
    {"name" : "katie"},  
    {"name" : "zac"}  
  ]  
}
```

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JSON

How could we correct them?

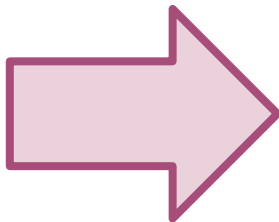
```
[  
  {"name" : "katie"},  
  {"name" : "zac"}  
]
```



```
{  
  "name" : "katie",  
  "name" : "zac"  
}]
```

Check out the recording for the discussion!

```
{  
  "name" : "katie",  
  "pets" : {  
    "dog" : "smokey",  
    "dog" : "samie"  
  }  
}
```



```
{  
  "name" : "katie",  
  "pets" : {  
    {"dog" : "smokey"},  
    {"dog" : "samie"}  
  }  
}
```

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JSON

How many Objects?

How many Arrays?

How many Members?

```
{  
  "name": "lab3vue_act3_kgrinne3",  
  "version": "0.0.0",  
  "private": true,  
  "scripts": {  
    "dev": "vite",  
    "build": "vite build",  
    "preview": "vite preview"  
  },  
  "dependencies": {  
    "vue": "^3.3.4"  
  },  
  "devDependencies": {  
    "@vitejs/plugin-vue": "^4.3.1",  
    "vite": "^4.4.9"  
  }  
}
```

Check out the recording for the solution!

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JSON

JSONObject json =

What if I want to see if
name exists first?

How about the dev
value?

```
{
  "name": "lab3vue_act3_kgrinne3",
  "version": "0.0.0",
  "private": true,
  "scripts": {
    "dev": "vite",
    "build": "vite build",
    "preview": "vite preview"
  },
  "dependencies": {
    "vue": "^3.3.4"
  },
  "devDependencies": {
    "@vitejs/plugin-vue": "^4.3.1",
    "vite": "^4.4.9"
  }
}
```

Check out the recording for the solution!

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Making your Code Robust

What do we mean when we say “make sure your code is robust”?

*Error
Handling*

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Making your Code Robust

Check out the recording for the discussion!

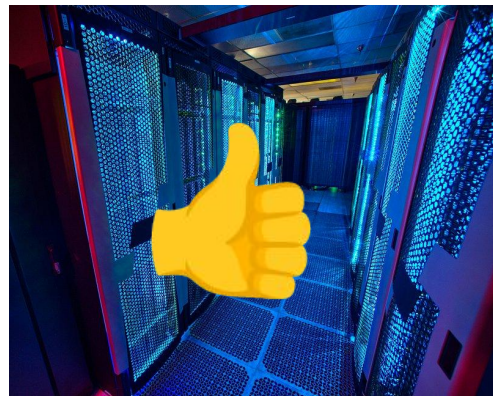
What do we mean when we say “make sure your code is robust”?



You



Buddy



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Making your Code Robust

What do we mean when we say “make sure your code is robust”?

```
PS C:\ASU\SER321\examples_repo\ser321examples\Sockets\Echo_Java> gradle runServer
```

```
> Task :runServer
```

```
Server ready for connections
```

```
Server waiting for a connection
```

```
Server connected to client
```

```
<=====--> 75% EXECUTING [24m 44s]
```

```
> :runServer
```

```
█
```

```
PS C:\ASU\SER321\examples_repo\ser321examples> Starting a Gradle Daemon, 1 busy and 3 stopped
```

```
> Task :runClient
```

```
Connected to server at localhost:9099
```

```
String to send>
```

```
<=====--> 75% EXECUTING [24m 25s]
```

```
> :runClient
```

```
█
```

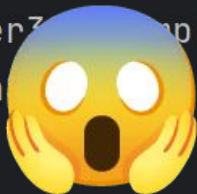
What do you think will happen?

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Making your Code Robust

We crashed the server!

```
PS C:\ASU\SER321\examples_repo\ser321examples\Examples\Examples\Sockets\Echo_Java> gradle run
```



```
Server ready for connections
Server waiting for a connection
Server connected to client
java.net.SocketException: Connection reset
    at java.base/sun.nio.ch.NioSocketImpl.implRead(NioSocketImpl.java:320)
    at java.base/sun.nio.ch.NioSocketImpl.read(NioSocketImpl.java:347)
    at java.base/sun.nio.ch.NioSocketImpl$1.read(NioSocketImpl.java:800)
    at java.base/java.net.Socket$SocketInputStream.read(Socket.java:966)
    at Server.main(Server.java:48)
```

```
Deprecated Gradle features were used in this build, making it incompatible with
Gradle 8.0.
```

```
PS C:\ASU\SER321\examples_repo\ser321examples\Examples\Examples\Sockets\Echo_Java> gradle run
Starting a Gradle Daemon, 1 busy and 3 stopped Daemons could not be
```

```
PS C:\ASU\SER321\examples_repo\ser321examples\Examples\Examples\Sockets\Echo_Java> gradle runClient
Starting a Gradle Daemon, 1 busy and 3 stopped Daemons could not be
se --status for details

> Task :runClient
Connected to server at localhost:9099
String to send>
<=====--> 75% EXECUTING [24m 43s]
> :runClient
Terminate batch job (Y/N)? y
PS C:\ASU\SER321\examples_repo\ser321examples\Examples\Examples\Sockets\Echo_Java>
```

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Scratch Space

Questions?

Survey:

<http://bit.ly/ASN2324>



Upcoming Events

SI Sessions:

- Sunday, March 24th at 7:00 pm MST
- Monday, March 25th at 7:00 pm MST
- Thursday, March 28th at 7:00 pm MST

Review Sessions:

- TBD

More Questions?

Check out our other resources!

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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



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[Access the drop-in queue](#)

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

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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

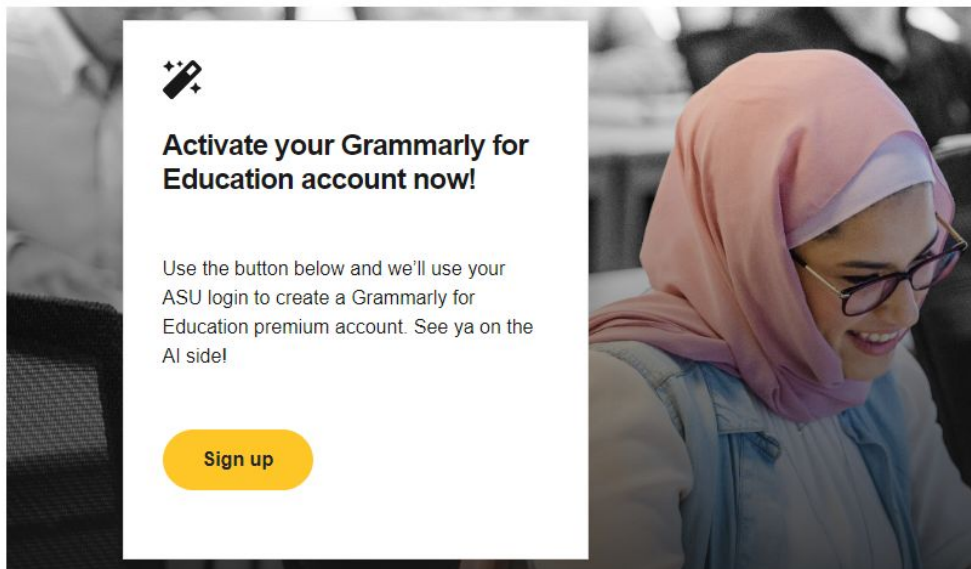
Computer Applications and Information Technology

 [Peer Community](#)

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

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](#)