

Logging and Management in Java SE

What Logging Is and How to Use It



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Version Check



Version Check



This version was created by using:

- Java 17
- IntelliJ IDEA 2021.3.2 (Ultimate Edition)



Version Check



This version is 100% applicable to:

- Java 11 and up
- Any version of IntelliJ



Not Applicable



This course is NOT applicable to:

- Anything before Java 1.4



Relevant Notes



A note on frameworks and libraries:

- It's important to use the latest version with the latest security updates
- Certain versions of Apache Log4J contain high risk vulnerabilities



Overview



- What is logging?
- Why and when do we need logging?
- Inspect an example
- Carved Rock Fitness user sign up problem





Logging is the act of writing information about events in the application to a file, also called the log file.



**Logging happens during
the execution of the
application.**





Logs show what happened in the application

- Events
- Exceptions and errors
- Happy path

Accessible after the execution of the application



**Software developers decide
what is written to the log.**





Logging that the JVM does

Server logs

System logs



**Information on what is
happening**

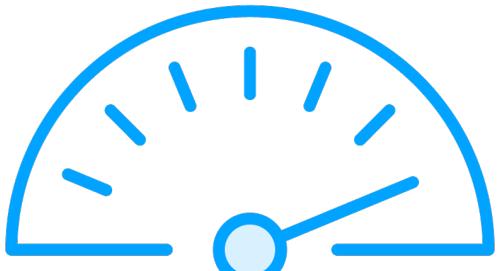
**Necessary for healthy
applications**



Why logging?



Trouble shooting



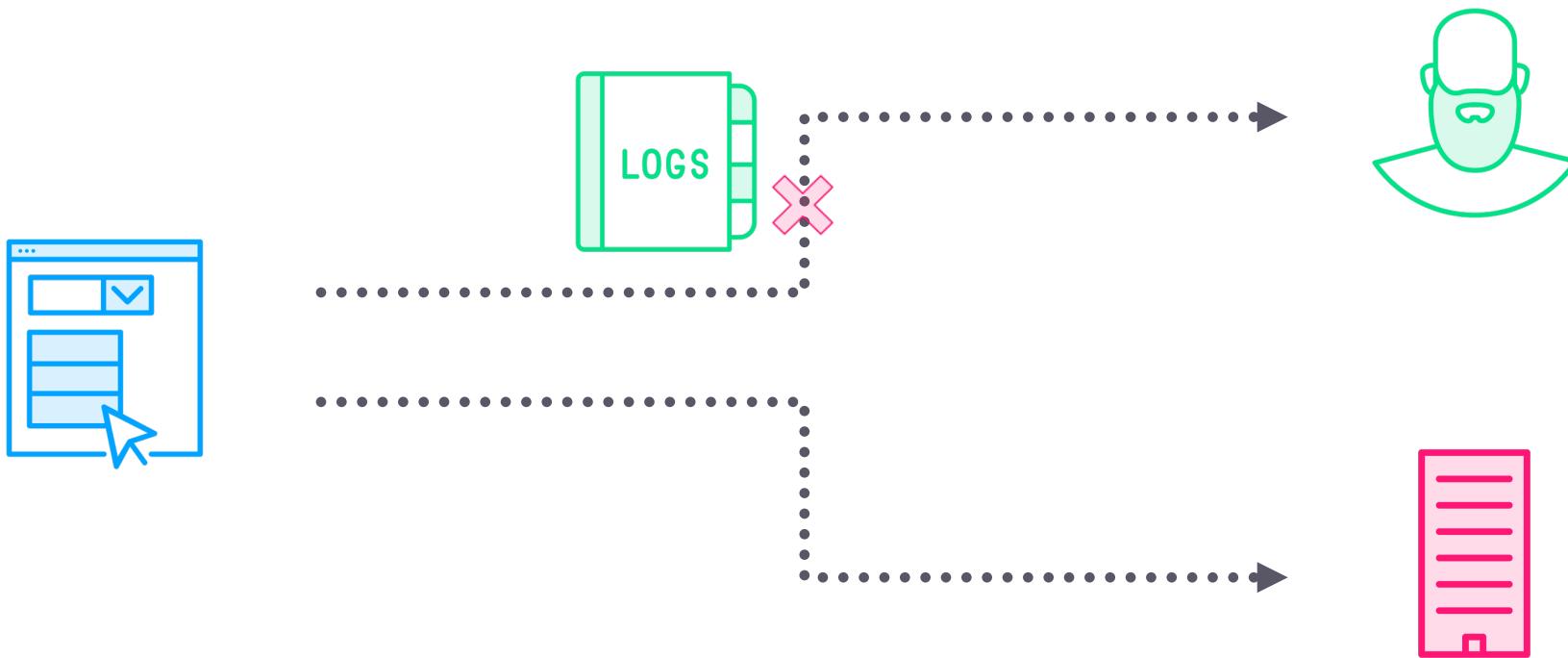
Performance
analytics



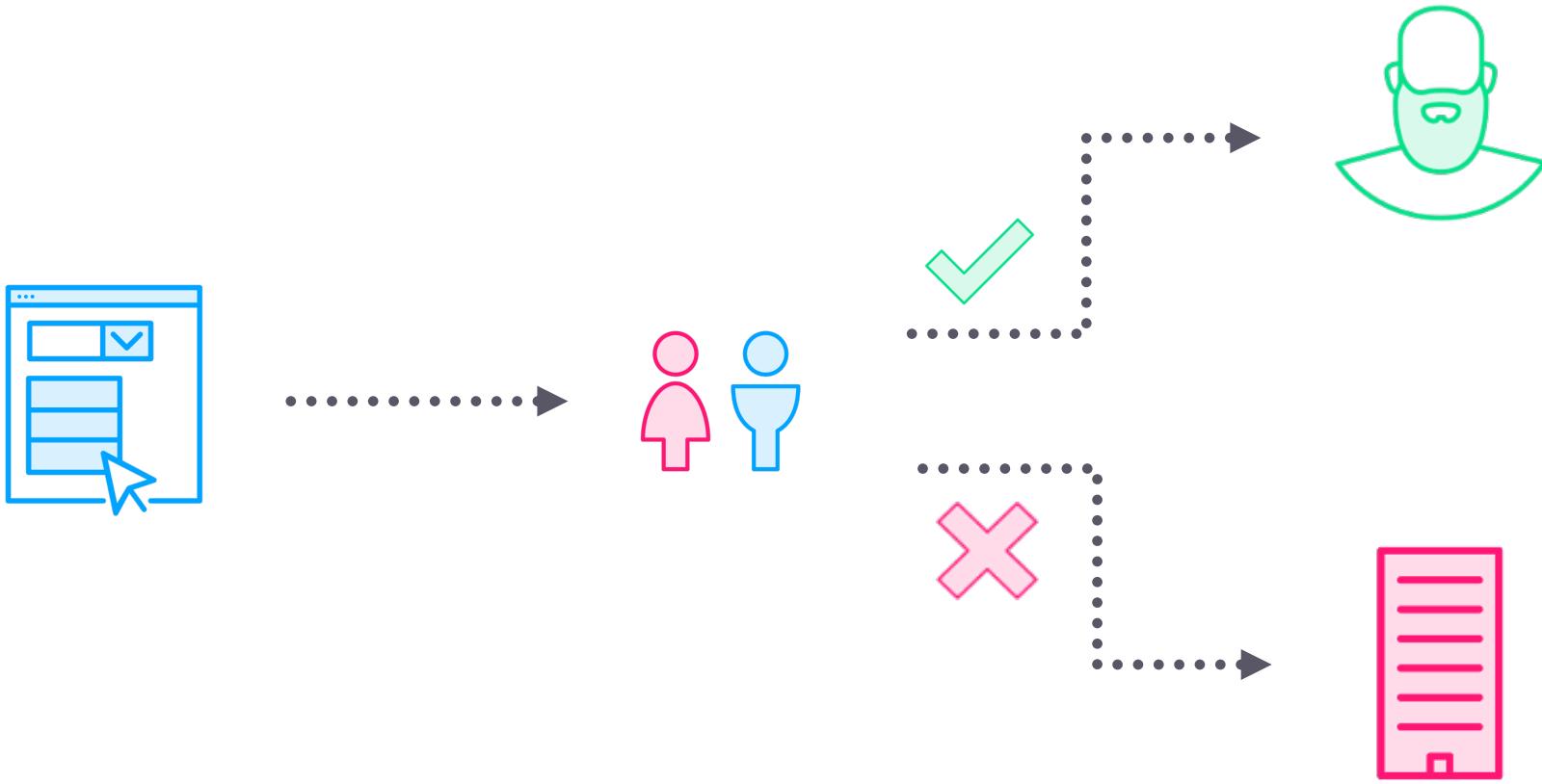
Auditing



Example



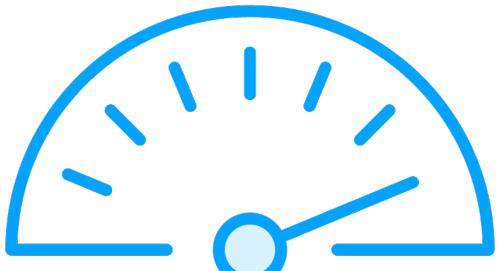
Example



Why logging?



Trouble shooting



Performance
analytics



Auditing



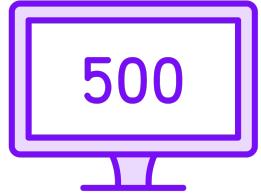


Who Will Benefit From Logging?

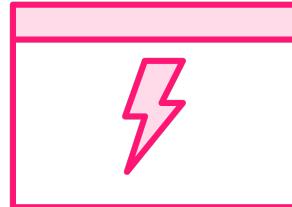
- Software developers
- System administrators
- Support team
- End users!



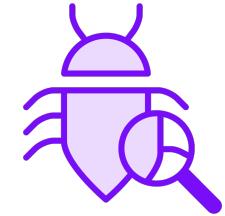
When to Use Logging?



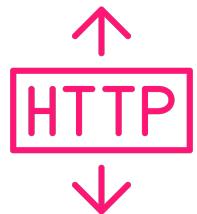
Exceptions and errors



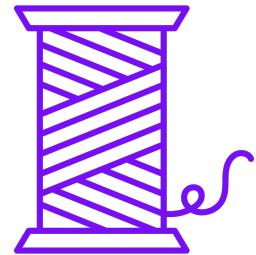
Events and states



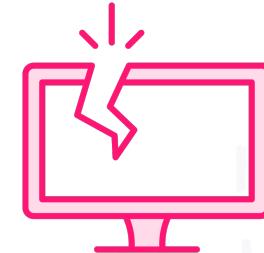
Debug info



HTTP requests



Thread usage



Frontend errors





Carved Rock Fitness order problem

- No error message on the frontend
- Users cannot order after sign up
- Where to find this demo code





What can we help you find?

SEARCH

CLOTHING FOOTWEAR EQUIPMENT BAGS & TRAVEL TRAIL REVIEWS

John Doe
Your Cart | log out



Gear in your cart ...



Headlight Helmet

Protect your noggin and light your way. The best of both worlds.

\$59.95

< 2 >
Quantity

\$119.90

[Edit Item](#) | [Remove Item](#) | [Move to Wish List](#)



Ultimate Dreamline Kayak

Carbon fiber body with platinum hooks make this the perfect gift for that ...

\$649.99

< 1 >
Quantity

\$649.99

[Edit Item](#) | [Remove Item](#) | [Move to Wish List](#)



Carved Rock Tee

Protect your noggin and light your way. The best of both worlds.

\$15.00

< XL >
Size

< 1 >
Quantity

\$15.00

[Edit Item](#) | [Remove Item](#) | [Move to Wish List](#)

Order Summary

3 Items in cart: \$784.89

Est. Shipping & Handling: \$100.00

Est. Total **\$884.89**

CHECKOUT



- Get a logger
- Log!
- Adding basic logic to our case



Up Next:

Adding a Logger and Creating Log Messages

