

Nachdenkzettel Logging

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Gruppe: Mini Games

1. Kennzeichnen Sie in der Config die Stellen wo über das

- **was geloggt wird:** se2examples.core.businessLogic.VehicleManager
- **wieviel geloggt wird:** debug level
- **wo geloggt wird:** file A1.log
- **wie geloggt wird entschieden wird:**

<Configuration>

 <Appenders>

 <File name="A1" fileName="A1.log" append="false">

 <PatternLayout pattern="%t %-5p %c{2} - %m%n"/>

 </File>

 <Console name="STDOUT" target="SYSTEM_OUT">

 <PatternLayout pattern="%d %-5p [%t] %C{2} (%F:%L) - %m%n"/>

 </Console>

 </Appenders>

 <Loggers>

 <!-- You may want to define class or package level per-logger rules -->

 <Logger name="se2examples.core.businessLogic.VehicleManager" level="debug">

 <AppenderRef ref="A1"/>

 </Logger>

 <Root level="debug">

 <AppenderRef ref="STDOUT"/>

 </Root>

 </Loggers>

</Configuration>

1.2 Wie würde man erreichen, dass für alle Klassen innerhalb eines Packages ein spezieller Loglevel gelten würde? Könnte man auch alle Klassen eines Packages in ein anderes File loggen?

One can get the list of existing logger and filter them by name. After that, set this Logger to a Package.

```
for(logger : loggerContext.getLoggerList()) {
    if(logger.getName().startsWith("my.target.package.")) {
        logger.setLevel(DESIRED_LOGGING_LEVEL);
    }
}
```

2. Geben Sie je ein Beispiel wann Sie den loglevel

- error : severe (1000)
- info : general info (800)
- debug : fine (500)

Verwenden

3. Sie verwenden einen FileAppender für das Logging. Jetzt soll Ihre Application im Datacenter laufen. Was machen Sie mit dem FileAppender?

The FileAppender, a subclass of OutputStreamAppender, appends log events into a file. The target file is specified by the File option. If the file already exists, it is either appended to, or truncated depending on the value of the append property.

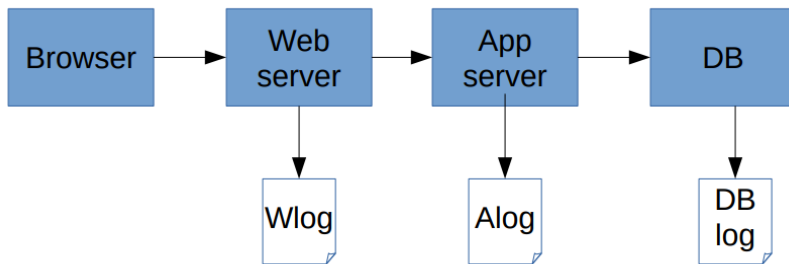
4. Macht logging Ihre Application langsamer? Was passiert wenn Sie log.debug(„foobar“); aufrufen? Wie sollte sich das Logging Subsystem verhalten?

Super excessive logging in your Application. Logging is expensive, in terms of resource usage.

Enables a check in Java

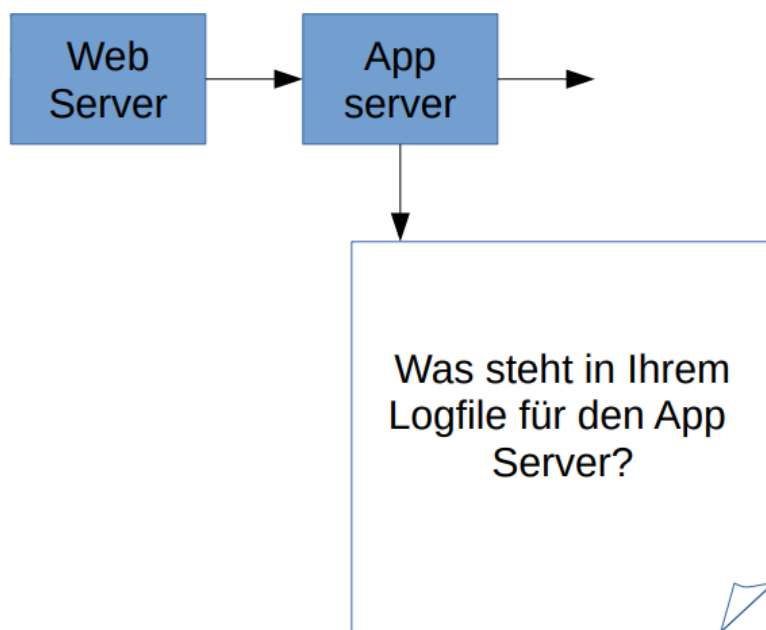
Default-level, info-level, and debug-level messages are captured.

5. Ein Request an Ihre Application durchläuft einen Proxy Server, dann einen Web Server, dann einen Application Server und dann die Datenbank. Auf jedem Server loggen Sie die Requests. Welches Problem tritt auf?



Reduce the number of operations per request. Reduce the frequency of calls. Avoid immediate retries, because all requests accrue against your usage limits.

6. Was sollten Sie pro Komponente/Tier loggen?



- Loggers are responsible for capturing events (called LogRecords) and passing them to the appropriate Appender.
- Appenders (also called Handlers in some logging frameworks) are responsible for recording log events to a destination. Appenders use Layouts to format events before sending them to an output.
- Layouts (also called Formatters in some logging frameworks) are responsible for converting and formatting the data in a log event. Layouts determine how the data looks when it appears in a log entry.

A server log file is a simple text document that contains all activities of a specific server in a given period of time (e.g., one day). It is automatically created and maintained by the server, and it can provide you with a detailed insight into how, when, and by whom your website or the application was accessed.

7. Aus Geschwindigkeitsgründen halten Sie teure DB-Connections auf Vorrat in einem Pool. Jeder Request vom Client braucht dann eine Connection. Der Pool hat die Methoden: DB Connection con = ConnectionPool.getConnection(); ConnectionPool.freeConnection(DBConnection dbCon)

Was loggen Sie in Ihrem App Server? Oder anders gefragt: Was wollen Sie beim Umgang mit dem Pool als Software-Architektin wissen?

I am logging the Data Base connection status of the application. The time (duration of the process) for the connection and if the connection is happening or not.

8. Sie fügen log-statements in die Login-Klasse ein. Was müssen Sie unbedingt beachten??? Tipp: Denken Sie über Userverhalten nach. Und über Mitarbeiter....

I would have to consider the errors that could occur and log it in a file according to its level. An INFO log level would be the most common to use, as it gives information on which user requested authorization if the authorization was successful or not.

for example, I would log the time and date of logins from workers, and if there was a FATAL error in the system and the users/clients cannot finish a purchase...