



Log 라이브러리 사용





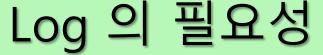
Daily Contents

Stdout 대신 logger를 사용해보자











- ♥ 실행 흐름 추적
 - 코드 파악
 - 디버깅
- ♥ 에러/예외 내용
 - 당시의 상태 정보

```
1____1 .__1_1 1_1_1 1_\__, 1 / / / /
   ======|_|====|__/=/_/_/
   :: Spring Boot ::
                                                                                  (v1.5.2.RELEASE)
2017-03-23 18:11:30.706 INFO 43614 --- [
                                                                                                                                                                        main] c.q.springboot.LogdemoApplication
k/projects/sts-spring-boot/logdemo/build/classes/main started by jj in /Volumes/JJPlay/quick/projects/sts-spring-boot/logdemo/build/classes/main started by jj in /Volumes/JJPlay/quick/projects/sts-spring-boot/logdemo/build/classes/main-boot/sts-spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/spring-boot/
2017-03-23 18:11:30.711 DEBUG 43614 --- [
                                                                                                                                                                        main] c.q.springboot.LogdemoApplication
2017-03-23 18:11:30.712 INFO 43614 --- Γ
                                                                                                                                                                        main] c.q.springboot.LogdemoApplication
2017-03-23 18:11:33.098 INFO 43614 --- [
                                                                                                                                                                        main] c.q.springboot.LogdemoApplication
2017-03-23 18:11:50.307 ERROR 43614 --- [nio-8080-exec-1] c.q.springboot.HelloWorldController
2017-03-23 18:11:53.008 WARN 43614 --- [nio-8080-exec-2] c.q.springboot.HelloWorldController
2017-03-23 18:11:53.011 WARN 43614 --- [nio-8080-exec-3] c.q.springboot.HelloWorldController
```



Standard Out/Error



- ♥ 표준 입출력 활용
- ♥ Unix에서 나온 개념
 - Linux/Windows 모두 활용 가능
- ♥ "Hello World!" 는 어디서 출력되었나?
 - 충분히 배운 것 같지만....

System.out.println("Hello, World!")



Log 라이브러리를 사용하면?



☑ Level 적용 가능

- 특정 레벨은 따로 찾을 수 있음
- 지정 레벨 이상의 로그만 출력 가능

♥ 출력 스트림 선택

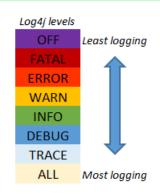
- 콘솔 출력은 당연히 중요
- (롤링)파일, 소켓, 이메일, 시스템 로그 등 가능
- Log 시스템과 연동 가능

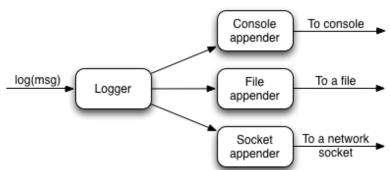
▼ Formatter 지정

■ [날짜-시간] 레벨 – 내용 등의 형식을 지정 가능

Thread-safe

■ 멀티 스레드 환경에서도 고려되어 있음





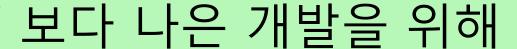


설정 예



```
<!-- Author: Crunchify.com -->
    <Appenders>
        <Console name="Console" target="SYSTEM_OUT">
            <PatternLayout pattern="%d{YYYY-MM-dd HH:mm:ss} [%t] %-5p %c{1}:%L - %msg%n" />
        </Console>
        <RollingFile name="RollingFile" filename="log/CrunchifyTest.log"</pre>
            filepattern="${logPath}/%d{YYYYMMddHHmmss}-fargo.log">
            <PatternLayout pattern="%d{YYYY-MM-dd HH:mm:ss} [%t] %-5p %c{1}:%L - %msg%n" />
            <Policies>
                <SizeBasedTriggeringPolicy size="100 MB" />
            </Policies>
            <DefaultRolloverStrategy max="20" />
        </RollingFile>
    </Appenders>
    <Loggers>
        <Root level="info">
            <AppenderRef ref= 'Console' />
            <AppenderRef ref= 'RollingFile' />
        </Root>
    </Loggers>
</Configuration>
```







- ♥ 유연한 설정
- ♥ 대부분의 언어에 존재
- ♥ 어렵지 않다

♥물론 메시지 내용이 가장 중요!!!

