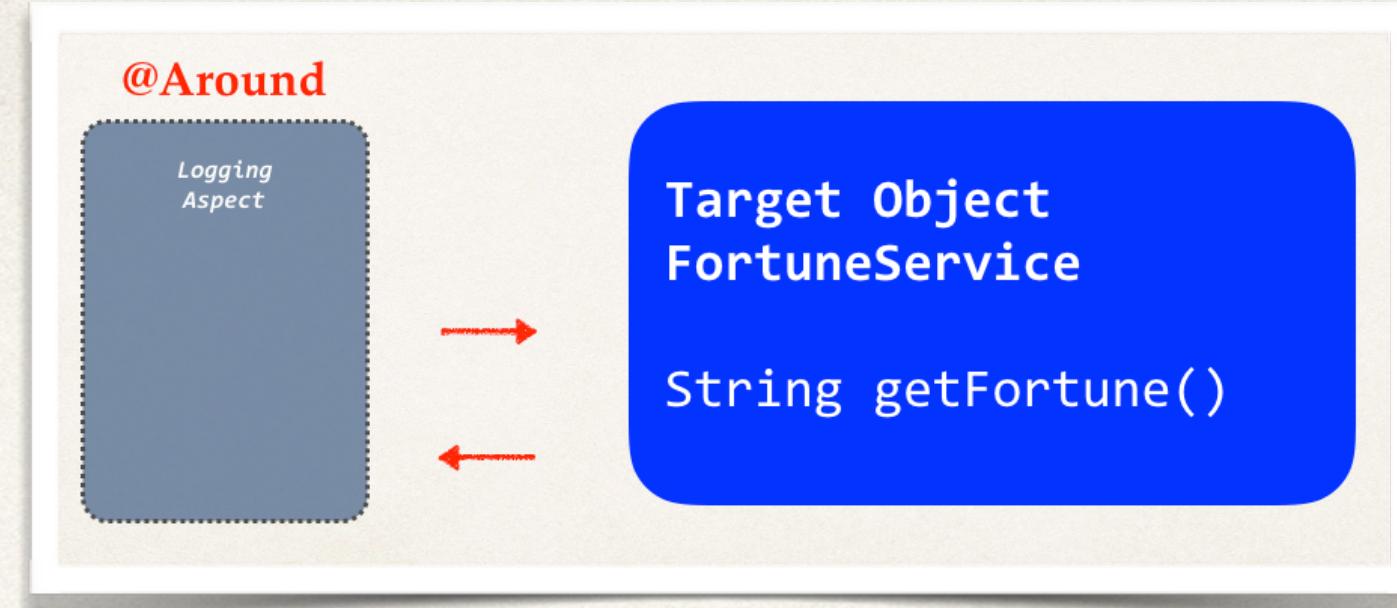


# Aspect-Oriented Programming (AOP)

## @Around Advice - Handle Exception

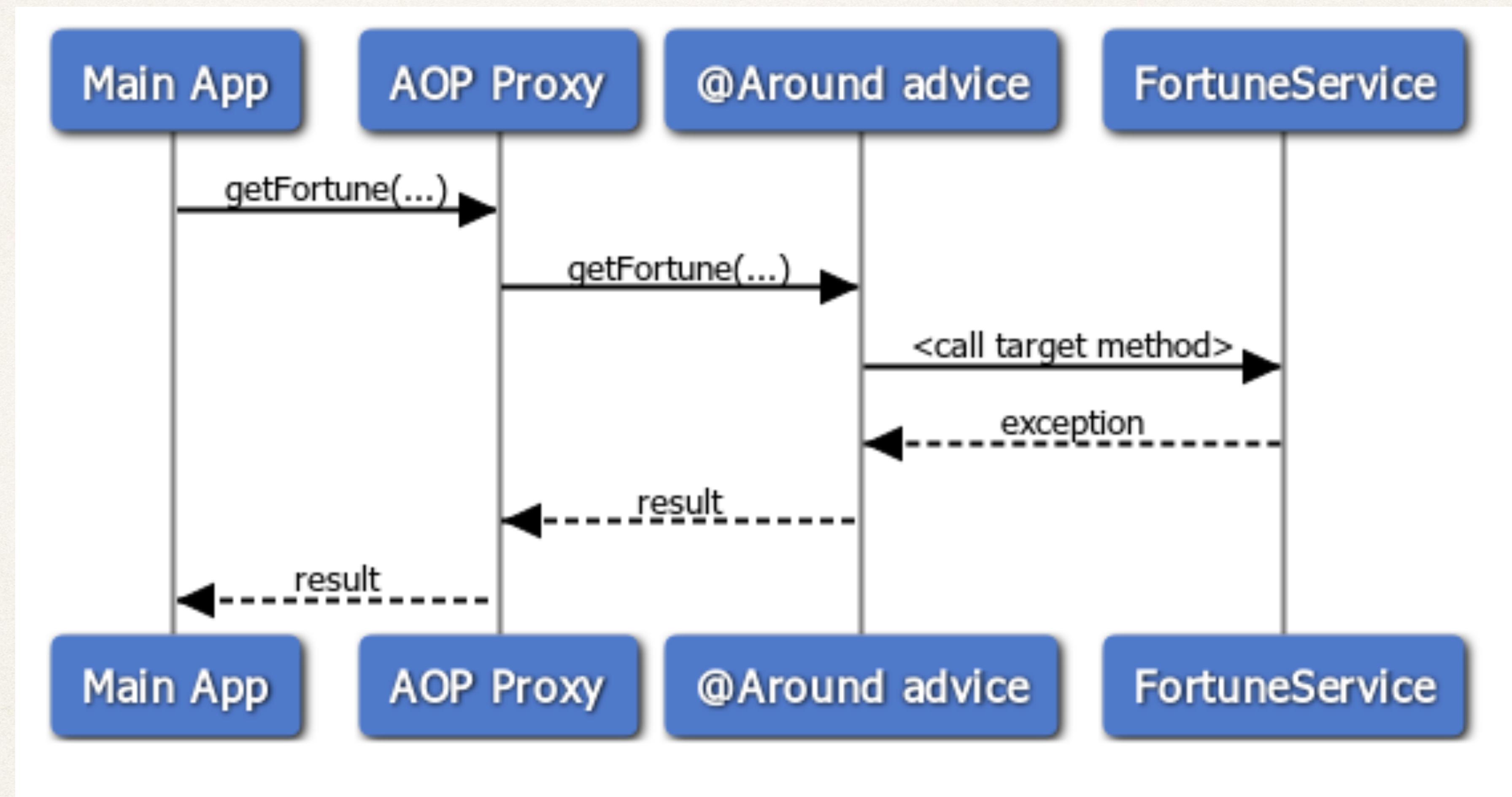


# ProceedingJoinPoint - Revisited



- For an exception thrown from proceeding join point
  - You can handle / swallow / stop the exception
  - Or you can simply rethrow the exception
- This gives you fine-grained control over how the target method is called

# Sequence Diagram



# Handle Exception

```
@Around("execution(* com.luv2code.aopdemo.service.*.getFortune(..))")
public Object afterGetFortune(
    ProceedingJoinPoint theProceedingJoinPoint) throws Throwable {

}

}
```

# Handle Exception

```
@Around("execution(* com.luv2code.aopdemo.service.*.getFortune(..))")
public Object afterGetFortune(
    ProceedingJoinPoint theProceedingJoinPoint) throws Throwable {

    Object result = null;

}

}
```

# Handle Exception

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@Around("execution(* com.luv2code.aopdemo.service.*.getFortune(..))")
public Object afterGetFortune(
    ProceedingJoinPoint theProceedingJoinPoint) throws Throwable {

    Object result = null;

    try {
        // let's execute the method
        result = theProceedingJoinPoint.proceed();

    }

}
```

# Handle Exception

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@Around("execution(* com.luv2code.aopdemo.service.*.getFortune(..))")
public Object afterGetFortune(
    ProceedingJoinPoint theProceedingJoinPoint) throws Throwable {

    Object result = null;

    try {
        // let's execute the method
        result = theProceedingJoinPoint.proceed();

    } catch (Exception exc) {
        // log exception
        System.out.println("@Around advice: We have a problem " + exc);

        // handle and give default fortune ... use this approach with caution
        result = "Nothing exciting here. Move along!";
    }

}
```

# Handle Exception

```
@Around("execution(* com.luv2code.aopdemo.service.*.getFortune(..))")
public Object afterGetFortune(
    ProceedingJoinPoint theProceedingJoinPoint) throws Throwable {

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        System.out.println("@Around advice: We have a problem " + exc);

        // handle and give default fortune ... use this approach with caution
        result = "Nothing exciting here. Move along!";
    }

    return result;
}
```