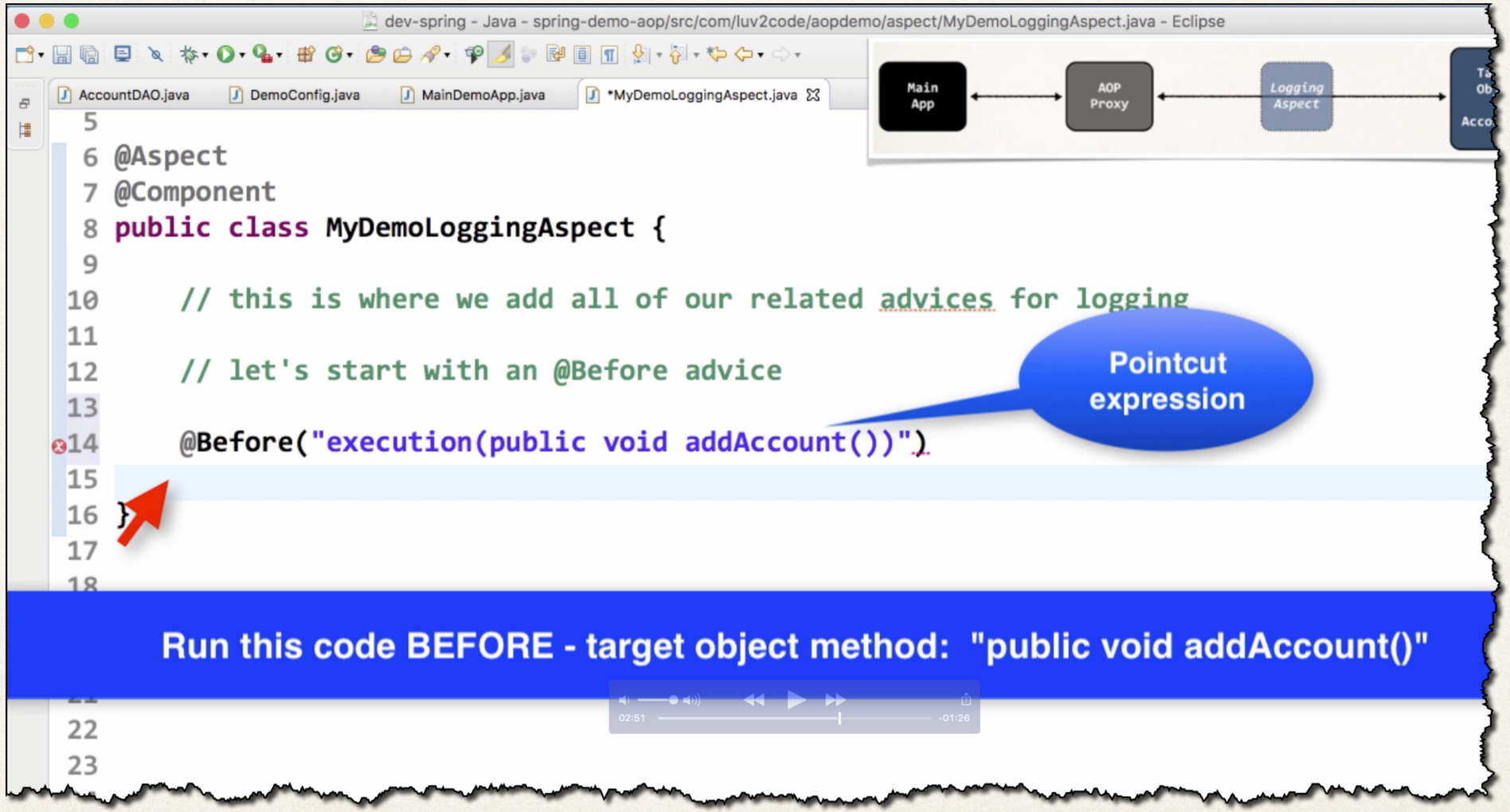
AOP - Pointcut Expressions

I made a promise to you …



AOP Terminology

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- **Pointcut**: A predicate expression for where advice should be applied

Pointcut Expression Language

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- Spring AOP uses AspectJ's pointcut expression language

- We will start with execution pointcuts
  - Applies to execution of methods

Match on Method Name

Pointcut Expression Language

```
execution(modifiers-pattern? return-type-pattern declaring-type-pattern?
            method-name-pattern(param-pattern) throws-pattern?)
```

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```

- The pattern is optional if it has “?”

Pointcut Expression Examples

Match on method names

- Match only **addAccount()** method in **AccountDAO** class

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@Before("execution(public void com.luv2code.aopdemo.dao.AccountDAO.addAccount())")
```

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Modifier

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Return type

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Declaring

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@Before("execution(public void addAccount())")
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Match on method names (using wildcards)

- Match methods starting with **processCreditCard** in any class

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```
@Before("execution(public VerificationResult processCreditCard*())”)
```

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Modifier

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```

Pointcut Expression Examples

Match on method names (using wildcards)

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Modifier

Return type

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@Before("execution(public VerificationResult processCreditCard*())”)
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Pointcut Expression Examples

Match on method names (using wildcards)

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Return type

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Method

Pointcut Expression Examples

- Use wildcards on return type

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@Before("execution(public * processCreditCard*())")
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Pointcut Expression Examples

- Use wildcards on return type

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Method

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@Before("execution(* processCreditCard*())")
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Method