AspectJ Notes for soen6441

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In order to extract some information on possible join points I did the following.

```
before() : within(Book) {
  System.out.println("Something happened inside Book | " + thisJoinPoint);
}
```

Gives us some of the following ouptut

```
Something happened inside of book | staticinitialization(cc.domain.Book.<clinit>)
Something happened inside of book | preinitialization(cc.domain.Book(String, String, String
Something happened inside of book | set(String cc.domain.Book.author)
Something happened inside of book | execution(cc.domain.Book(String, String, String, String
Something happened inside of book | initialization(cc.domain.Book(String, String, String, St
```

Basic examples

This is the class we will be messing with:

```
package dom;

public class Pet
{
  /** Make some pet noise */
  public void noise(){
    System.out.println( "WARGABL GABL");
  }

  /* Pets do not talk... But they do with aspects. */
  public String talk(){
    return "WOOF WOOF WOOF.";
  }
}
```

This is the driver we are using:

```
package dom;

import java.io.PrintStream;

public class Test
{
 private static PrintStream p = System.out;
    public static void main(String[] args){
    Pet pet = new Pet();
    pet.noise();
    p.println(pet.talk());
  }
}


package aspects;

import java.io.PrintStream;

import dom.*;

public aspect TestAspect {
  private static PrintStream p = System.out;
  before() : call(void Pet.noise()) {p.println("Pet.noise called");};
  after()  : execution(void Pet.noise()) {p.println("Pet.noise executed");};
  String around() : call(String Pet.talk()) {
    return "HELLO THERE FINE FELLOW.";
  }
}
```