

# JBoss Community



## Lab 2

# Goals

- Main Objectives
  - Create a Camel Routing Service
  - Add a CDI bean for dynamic routing
  - Add a unit test for service

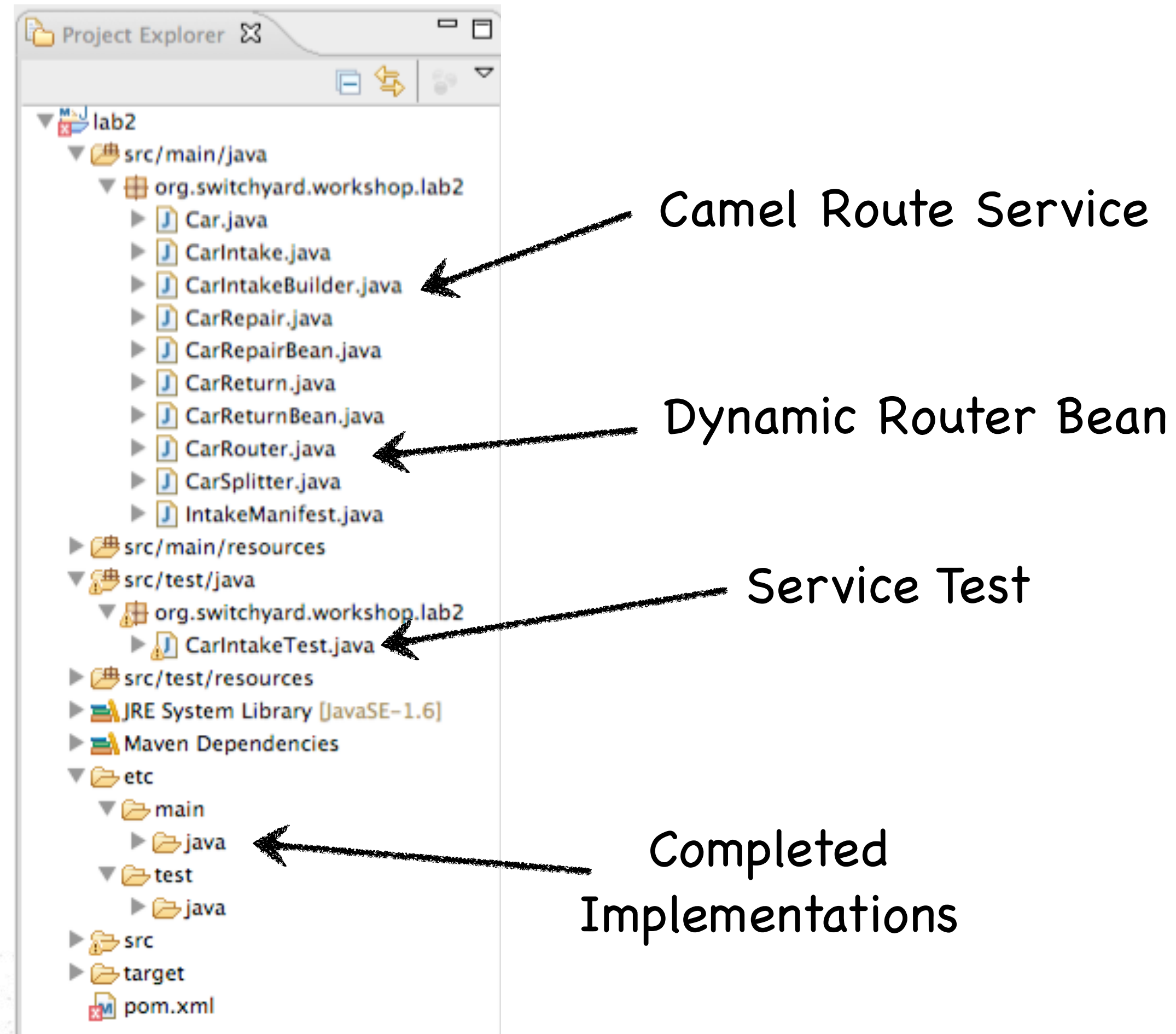
# Creating a Camel Routing Service



# Import Lab2 App

- File -> Import
- Maven -> Existing Maven Projects
- Next
- Root Directory : workshop/labs/lab2
- Select lab2
- Next
- [ Resolve All Later ]
- Finish

# What's Inside



# Hands On!

- Option 1 - Clean Hands
  - Copy in existing implementation and test

```
% cd workshop/labs/lab2  
% cp -R etc/main src/  
% cp -R etc/test src/
```

- Option 2 - Dirty Hands
  - Add dynamic routing logic to CarRouter.java
  - Add EIP logic to CarIntakeBuilder.java
  - Add test logic to CarIntakeTest.java

# CarIntakeBuilder

## (before)

```
/**
 * The Camel route is configured via this method. The from:
 * endpoint is required to be a SwitchYard service.
 */
public void configure() {
    from("switchyard://CarIntake")
        .log(LOG_MESSAGE);
    /**
     * INSERT SPLIT AND ROUTE EIP HERE
     */
}
}
```



# CarIntakeBuilder

(after)

```
/**
 * The Camel route is configured via this method. The from:
 * endpoint is required to be a SwitchYard service.
 */
public void configure() {
    from("switchyard://CarIntake")
    .log("Received message for CarIntake : ${body}")
    .split().method("splitManifest")
    .dynamicRouter(bean("routeCar"));
}
```

←← Add These Two Lines

# CarRouter

## (before)

```
@Named("routeCar")
public class CarRouter {

    public String route(Car car, @Header(Exchange.SLIP_ENDPOINT) String lastEndpoint) {
        /**
         *          INSERT DYNAMIC ROUTING LOGIC HERE          *
         *****/
        return null;
    }
}
```

# CarRouter

## (after)

```
@Named("routeCar")
public class CarRouter {

    public String route(Car car, @Header(Exchange.SLIP_ENDPOINT) String lastEndpoint) {
        if (lastEndpoint != null) {
            // we have routed this message before - nothing left to do
            return null;
        }

        if (car.isDamaged()) {
            // Route to the CarRepair service
            return "switchyard://CarRepair?namespace=urn:switchyard:application:lab2";
        } else {
            // Route to the CarReturn service
            return "switchyard://CarReturn?namespace=urn:switchyard:application:lab2";
        }
    }
}
```

# CarIntakeTest

## (before)

```
@RunWith(SwitchYardRunner.class)
@SwitchYardTestCaseConfig(mixins=CDIMixin.class,
                          config=SwitchYardTestCaseConfig.SWITCHYARD_XML)
public class CarIntakeTest {

    @ServiceOperation("CarIntake")
    private Invoker service;

    @Test
    public void intakeCars() throws Exception {

        /**
         *          INSERT TEST LOGIC HERE          *
         */
    }
}
```

# CarIntakeTest

## (after)

```
@RunWith(SwitchYardRunner.class)
@SwitchYardTestCaseConfig(mixins=CDIMixin.class, config=SwitchYardTestCaseConfig.SWITCHYARD_XML)
public class CarIntakeTest {

    @ServiceOperation("CarIntake")
    private Invoker service;

    @Test
    public void sendMessage() throws Exception {
        Car car1 = new Car().setModel("Ford")
            .setDamaged(true)
            .setMileage(30000)
            .setClassification(Classification.MIDSIZE);

        Car car2 = new Car().setModel("Honda")
            .setDamaged(false)
            .setMileage(45000)
            .setClassification(Classification.SPORT);

        service.sendInOnly(
            new IntakeManifest().addCar(car1).addCar(car2));

        Thread.sleep(500);
    }
}
```

# Testing the Service

```
% cd workshop/labs/lab2
% mvn test
```

```
2697 [main] INFO route1 -
=====
==== MANIFEST RECEIVED IN ROUTE SERVICE ====
=====

oooooooooooooooooooooooooooooooooooooooooooooooooooooooooooo
+ Repairing Car ....
+ model      : Ford
+ class      : MIDSIZE
+ mileage    : 30000
oooooooooooooooooooooooooooooooooooooooooooooooooooooooooooo

=====
+ Returning Car ....
+ model      : Honda
+ class      : SPORT
+ mileage    : 45000
=====
```

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