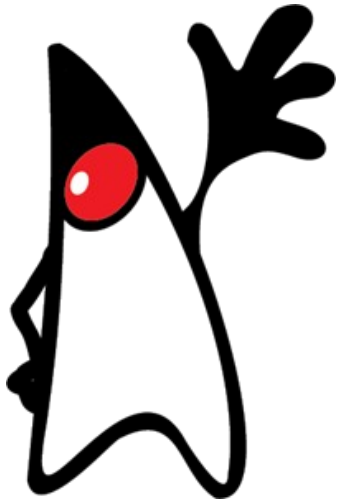
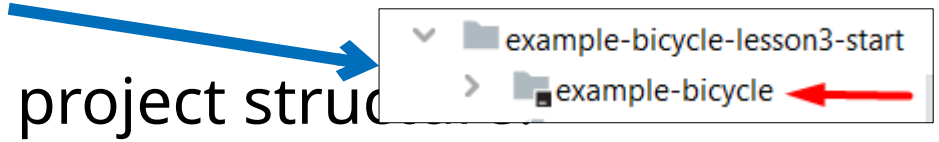
Classes part 2 in practice

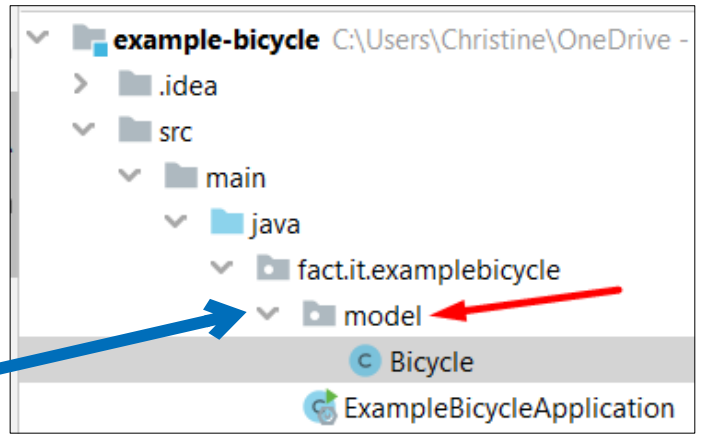


Create your own new class in IntelliJ

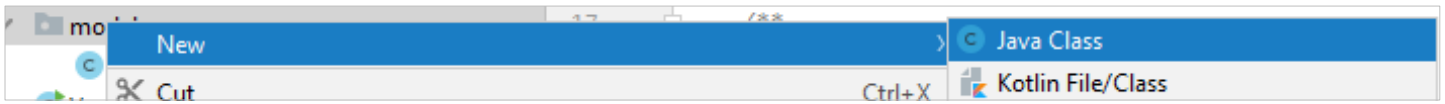
- Download the zip-file "example-bicycle-lesson3-start" and unzip the project.
- Open the project in IntelliJ

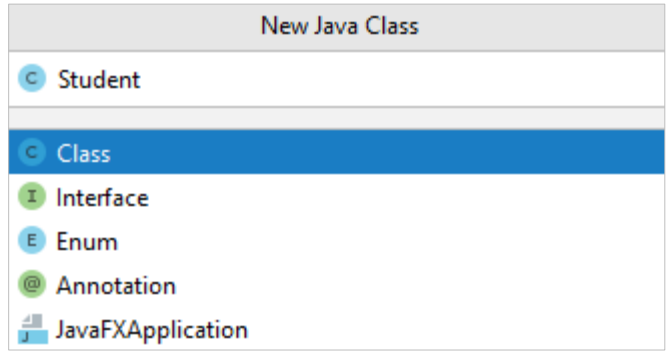


- You can see this project struc



- To create your own class:
  - Right click on the package *model*
  - Choose New > Java Class
  - Give the class the name *Student*
  - Press Enter





Create a new class in IntelliJ

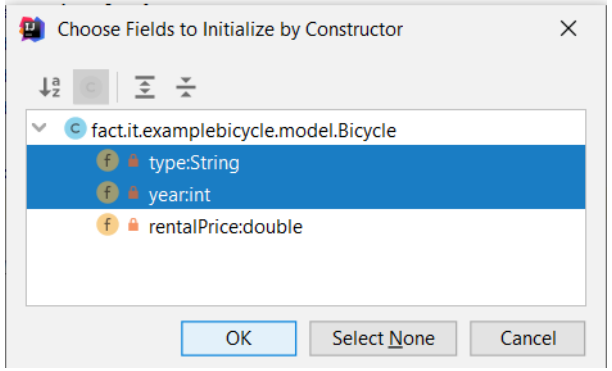
```
package
fact.it.examplebicycle.model;

public class Student {
}
```

code OO part 2 practice.txt

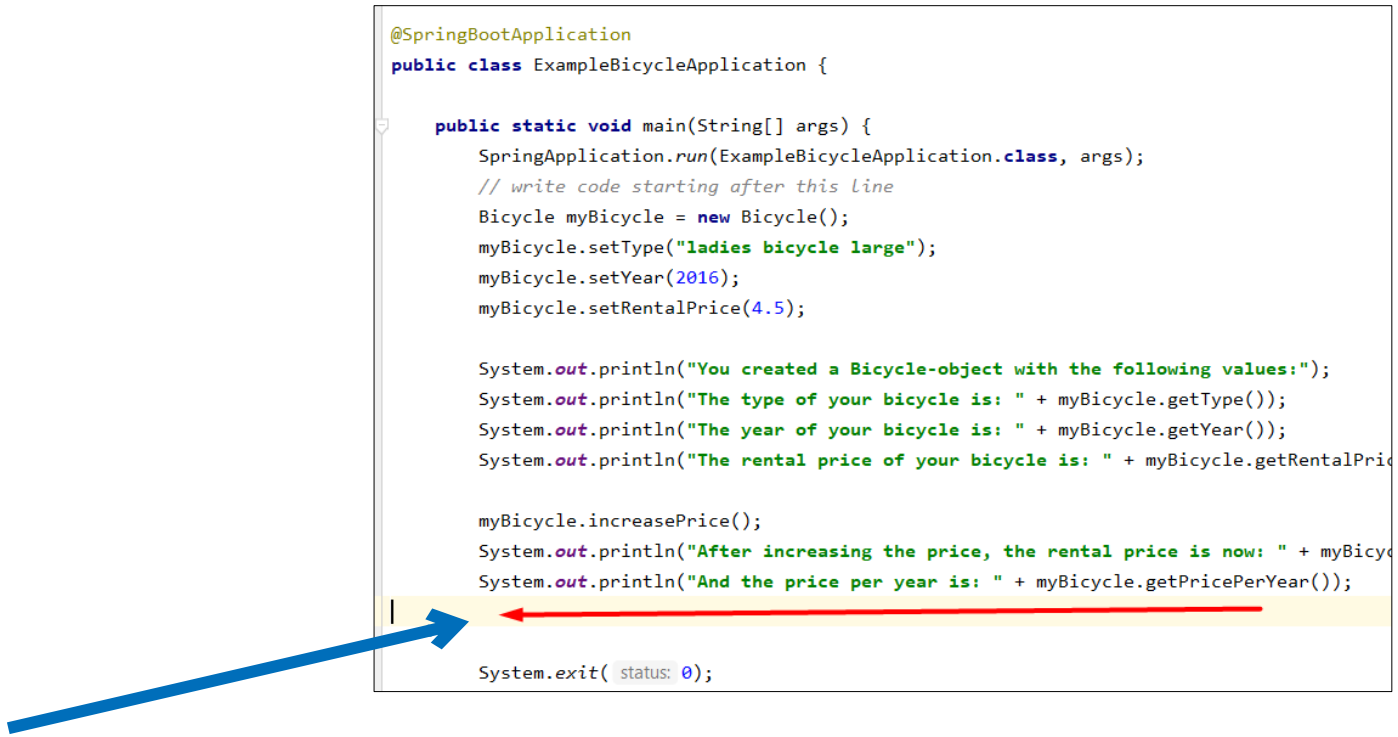
- Copy the code of the class Student from presentation *3a Classes part 2 theory* to your class in IntelliJ (slide 12 to 16) or copy from the file in the upper right corner of this slide.

- In the class Bicycle:
  - Add the *overloading* constructor with 2 parameters using Generate… and selecting the 2 parameters: (slide 6)
  - Add the overloading method *increasePrice (double increment)* (slide 10)



- **Run the tests** and correct any errors

Example: ExampleBicycleApplication.java



```java
@SpringBootApplication
public class ExampleBicycleApplication {

    public static void main(String[] args) {
        SpringApplication.run(ExampleBicycleApplication.class, args);
        // write code starting after this line
        Bicycle myBicycle = new Bicycle();
        myBicycle.setType("ladies bicycle large");
        myBicycle.setYear(2016);
        myBicycle.setRentalPrice(4.5);

        System.out.println("You created a Bicycle-object with the following values:");
        System.out.println("The type of your bicycle is: " + myBicycle.getType());
        System.out.println("The year of your bicycle is: " + myBicycle.getYear());
        System.out.println("The rental price of your bicycle is: " + myBicycle.getRentalPric

        myBicycle.increasePrice();
        System.out.println("After increasing the price, the rental price is now: " + myBicyc
        System.out.println("And the price per year is: " + myBicycle.getPricePerYear());

        System.exit( status: 0);
```

Put your cursor here and type the following code:

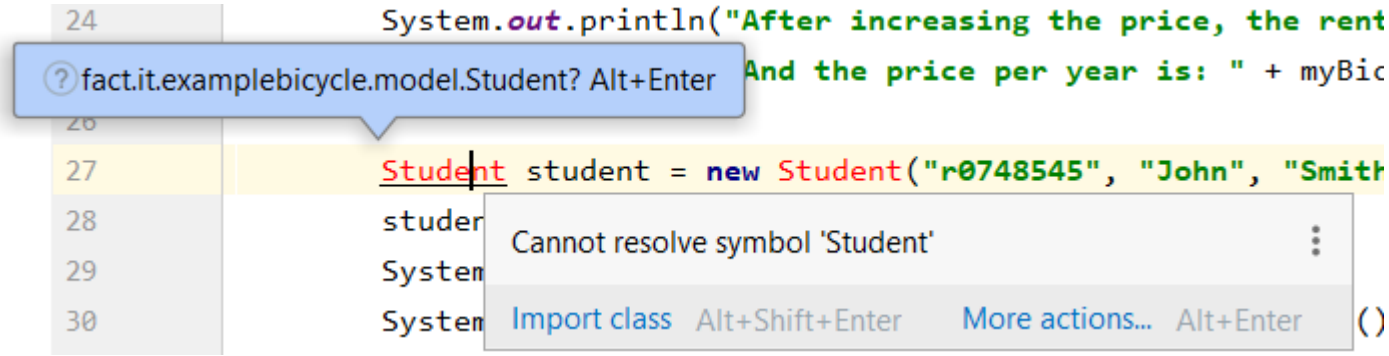
Student student = new Student ("r0748545", "John", "Smith");
student.setForeigner(true);

Creating a Student Object

```
Student student = new Student("r0748545", "John", "Smith" );
student.setForeigner(true);
```

Error resolution: Click on the error and press Alt+Enter

or Choose “Import class”

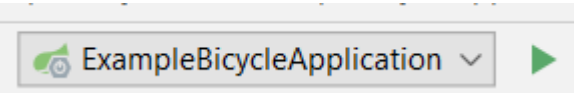


Using a Student Object

- Complete further

```
System.out.println("Student data:");
System.out.println("Full name: " + student.getFullName());
System.out.println("Email: " + student.getEmailAddress());
```

- Run the *ExampleBicycleApplication*




```
The year of your bicycle is: 2016
The rental price of your bicycle is: 4.5
After increasing the price, the rental price is now: 5.0
And the price per year is: 60.0
Student data:
Full name: John SMITH (JSm)
Email: r0748545@student.thomasmore.be
2021-01-11 11:16:49.412  INFO 22240 --- [extShutdownHook]
```