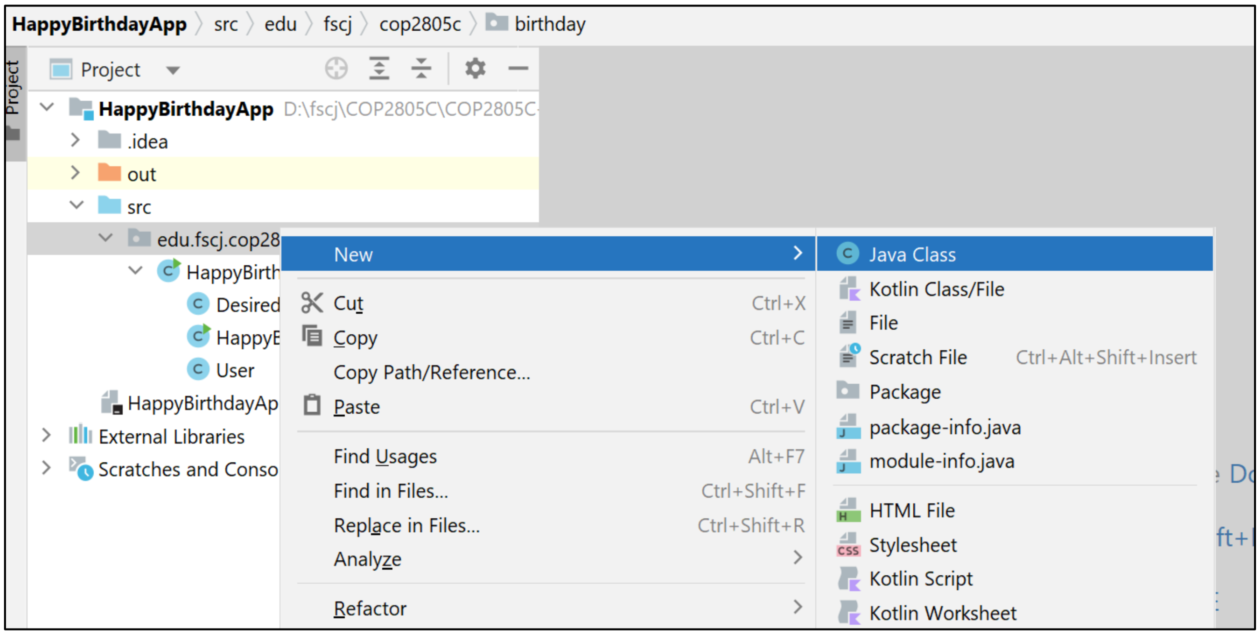
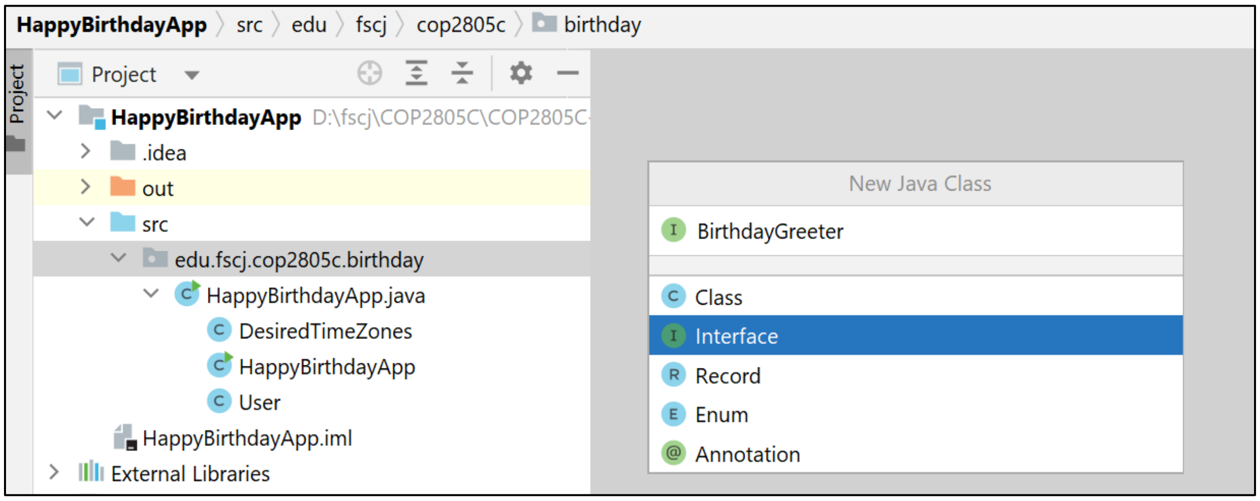
COP2805C Module 4 Practice Exercise

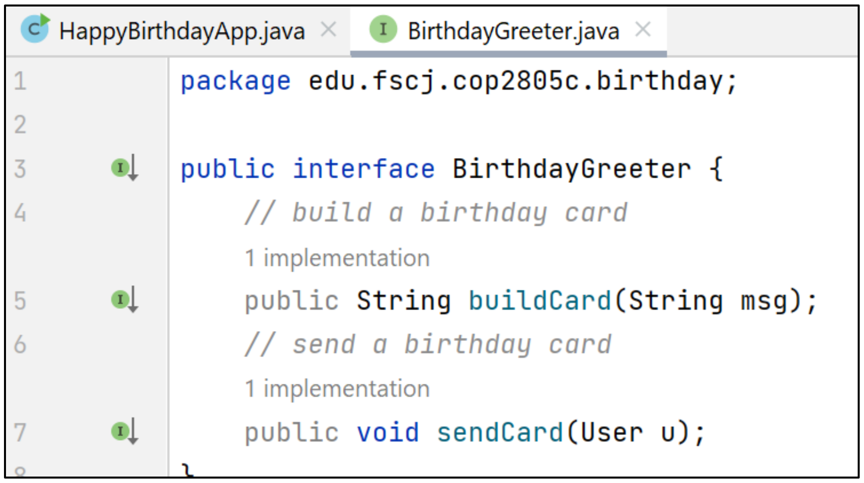
In this practice exercise we will create an interface and implement the abstract methods in an application. We will also use the StringBuilder to help us craft formatted text.

Using the solution from the Module 3 practice exercise add a "BirthdayGreeter" interface to your project. The following images demonstrate how to do this in IntelliJ:





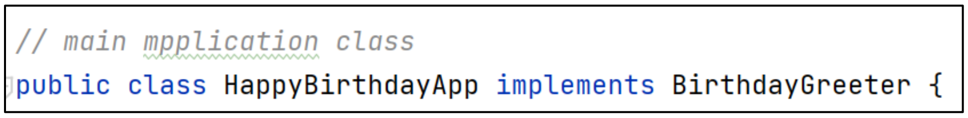
Add two abstract methods to the interface:


HappyBirthdayApp.java BirthdayGreeter.java

```java
package edu.fscj.cop2805c.birthday;

public interface BirthdayGreeter {
    // build a birthday card
    1 implementation
    public String buildCard(String msg);
    // send a birthday card
    1 implementation
    public void sendCard(User u);
}
```

Modify the HappyBirthdayApp class to implement the interface:



```java
// main mpplication class
public class HappyBirthdayApp implements BirthdayGreeter {
```

Implement the abstract methods in the code to produce the output shown below (names and greeting messages can vary based on your preferences).

- The buildCard method builds a birthday card formatted as a String with the outline characters shown in the output, given a (possibly multi-line) message provided by the program.
- The sendCard method calls the buildCard method and then "sends" the card via email to the user (it doesn't actually send it, but there are APIs we could use to do this!)

I have removed the interactive portion of the application and restricted it to just using generated test data.

Sample Output

```
Here are the birthdays:
Dianne Romero:
Sorry, today is not their birthday.

Sally Roberts:
|----------------------------------------------|
|         Happy Birthay, Sally Roberts         |
|  Hope all of your birthday wishes come true! |
|----------------------------------------------|

sending email to Sally.Roberts@email.test
```

```
Edwin Peterson:
|-----------------------------------------------|
|         Happy Birthay, Edwin Peterson         |
|  Hope all of your birthday wishes come true!  |
|-----------------------------------------------|

sending email to Edwin.Peterson@email.test
```