

COP3330C Module 2 Practice Exercise

For this practice exercise we will practice use dates and times as discussed in Chapter 4 of our textbook (Core APIs).

Design and implement a Java application which prompts a user for their name and birthday, then compares the current day with their information and either informs them that it is not their birthday or wishes them a happy birthday.

Use a separate class for the user which includes their name and a `ZonedDateTime` object which represents their birthday.

- The user's name must be represented by a **`StringBuilder`** object.
- Provide a numeric menu which allows them to choose their timezone from a reasonable subset of available choices extracted from the String array returned by a call to `TimeZone.getAvailableIDs()`.

All code should be saved in a single .java file; only the `BirthdayApp` class should be declared public.

Include a 4-line ID header at the top of your source file as follows:

```
// filename.java
// your name
// date file was created
// one-line summary of what the program does
```

Locate your code in the package **`edu.fscj.cop3330c.birthday`** (use a package statement at the top of your source file, after the ID header).

Remember that there is no submission for this assignment, it is provided for reference and practice.

Sample output is shown here (user input is shown in red). The first test run shows the "failure" case where it is not the user's birthday, the second test run shows the success case.

```
Please enter your first name: David
Please enter your last name: Smith
Please enter the year of your birthday: 1990
Please enter the month of your birthday: 6
Please enter the day of your birthday: 5
1. US/Alaska
2. US/Aleutian
3. US/Arizona
4. US/Central
5. US/East-Indiana
6. US/Eastern
7. US/Hawaii
8. US/Indiana-Starke
9. US/Michigan
10. US/Mountain
```

11. US/Pacific

12. US/Samoa

Please select the number of your timezone from the menu: **6**

Hello, here is your birthday information:

David Smith,1990-06-05T00:00-04:00[US/Eastern]

Sorry, today is not your birthday.

Please enter your first name: **Thomas**

Please enter your last name: **Payne**

Please enter the year of your birthday: **1737**

Please enter the month of your birthday: **1**

Please enter the day of your birthday: **22**

1. US/Alaska

2. US/Aleutian

3. US/Arizona

4. US/Central

5. US/East-Indiana

6. US/Eastern

7. US/Hawaii

8. US/Indiana-Starke

9. US/Michigan

10. US/Mountain

11. US/Pacific

12. US/Samoa

Please select the number of your timezone from the menu: **4**

Hello, here is your birthday information:

Thomas Payne,1737-01-22T00:00-05:50:36[US/Central]

Happy Birthday!