

COP2805C Module 6 Graded Programming Assignment

In this assignment we will modify the Module 5 solution to create a Java stream and corresponding consumer. We will also localize our appointment reminders.

Use the Reminder queue from Module 5 to implement a private stream member in the AppointmentApplication class. Then use the stream in that class's main method to iterate through the reminders in the queue (use the Module 6 practice exercise as a reference).

Modify your reminder text; the template should show the localized full date **and time** of the appointment (use the FormatStyle.FULL enum). To localize both the date and time, use the ofLocalizedDateTime instead of ofLocalizedDate as we did in the practice exercise.

Then localize the phrase "You have an appointment!" for four different locales: en (English), fr (French), de (Deutsch/German), zh (Chinese). Use your well-developed web search skills to find the appropriate translations (note that ChatGPT works for this). You will also need to find the correct Unicode values for the Hànzì characters. Create a resource bundle with the required property files for this phrase. To do this in IntelliJ, right click in the package and select "New" and select "Resource Bundle".

I implemented my localization code in the "buildReminder" method in the AppointmentApplication class.

Here is a sample using the "en" locale:

```
+++++
+ Tuesday, February 28, 2023 at 6:04:42 PM Eastern Standard Time +
+ You have an appointment!                                     +
+ John Smith                                                  +
+ Title: Test Appointment 1                                   +
+ Description: This is test appointment 1                     +
+++++
```

Be sure to remember to add (accurate) ID headers for all of your new files.

Submit your solution to the GitHub classroom repo created when you accepted the assignment

Sample output is shown below; you should test reminders which use all 4 locales. As with the practice exercise, the padding is not correct for the Chinese version, you can ignore that issue for this assignment.

```
Sending the following SMS message to John Smith at (904) 555-1212
Sending the following email message to Joëlle Coutaz at Joëlle.Coutaz@email.com
Sending the following email message to Andy Bechtolsheim at
Andy.Bechtolsheim@email.com
Sending the following email message to Xia Peisu at Xia.Peisu@email.com
starting forEach
+++++
+ Tuesday, February 28, 2023 at 6:04:42 PM Eastern Standard Time +
+ You have an appointment!                                     +
+ John Smith                                                  +
```

+ Title: Test Appointment 1 +
+ Description: This is test appointment 1 +
++++
++++
+ mardi 28 février 2023 à 18:04:42 heure normale de l'Est nord-américain +
+ Vous avez rendezvous! +
+ Joëlle Coutaz +
+ Title: Test Appointment 2 +
+ Description: This is test appointment 2 +
++++
++++
+ Dienstag, 28. Februar 2023 um 18:04:42 Nordamerikanische Ostküsten-Normalzeit +
+ Sie haben einen Termin! +
+ Andy Bechtolsheim +
+ Title: Test Appointment 3 +
+ Description: This is test appointment 3 +
++++
++++
+ 2023年2月28日星期二 北美东部标准时间 下午6:04:42 +
+ 你;有;個;約;會;! +
+ Xia Peisu +
+ Title: Test Appointment 4 +
+ Description: This is test appointment 4 +
++++