

DAT108 Oblig1 H22 - Tråder

DAT108 Oblig1 gruppe 2

Gruppemedlemmer:

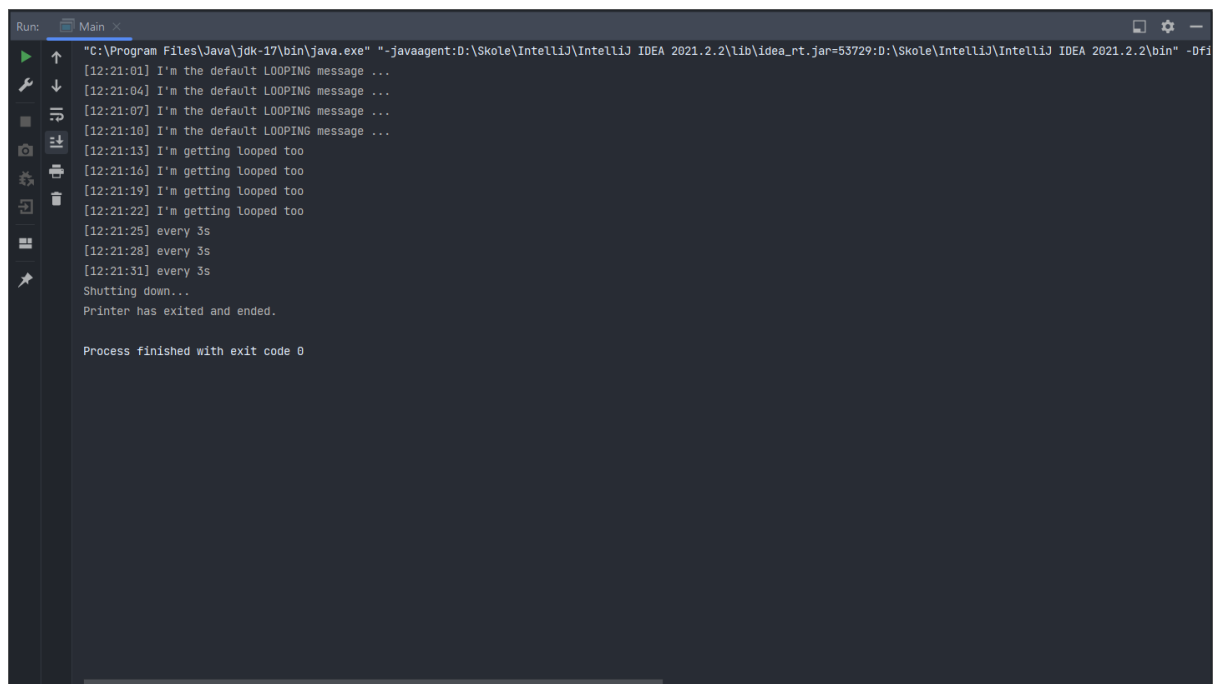
Joachim Leiros

Sindre Holtan

Finn Arne Crowo Nielsen

Preben Brenne Johannessen

Oppgave 1



The screenshot shows the 'Run' window of an IDE. The title bar reads 'Run: Main x'. The command line at the top is: `"C:\Program Files\Java\jdk-17\bin\java.exe" "-javaagent:D:\Skole\IntelliJ\IntelliJ IDEA 2021.2.2\lib\idea_rt.jar=53729:D:\Skole\IntelliJ\IntelliJ IDEA 2021.2.2\bin" -Dfj`. The output log contains the following messages:

```
[12:21:01] I'm the default LOOPING message ...  
[12:21:04] I'm the default LOOPING message ...  
[12:21:07] I'm the default LOOPING message ...  
[12:21:10] I'm the default LOOPING message ...  
[12:21:13] I'm getting looped too  
[12:21:16] I'm getting looped too  
[12:21:19] I'm getting looped too  
[12:21:22] I'm getting looped too  
[12:21:25] every 3s  
[12:21:28] every 3s  
[12:21:31] every 3s  
Shutting down...  
Printer has exited and ended.  
  
Process finished with exit code 0
```

Oppgave 2

```
Run: no.hvl.dat108.ex1.task2.Main X
[12:31:50] Waiters: [Pernille, Sara]
[12:31:50] Capacity of the hamburger tray is: 4 hamburgers
-----
[12:31:50] [Chef] Joachim is ready to work
[12:31:50] [Chef] Finn is ready to work
[12:31:50] [Chef] Sindre is ready to work
[12:31:50] [Waiter] Pernille is ready to work
[12:31:50] [Waiter] Sara is ready to work
-----
[12:32:00] [Waiter] Sara waiting to collect a hamburger from the tray: Hamburgers on the track: [TRAY IS EMPTY]
[12:32:00] [Chef] Finn adds [HamburgerID: 1] => Hamburgers on the track: [HamburgerID: 1]
[12:32:00] [Waiter] Sara collects [HamburgerID: 1] <= Hamburgers on the track: [TRAY IS EMPTY]
[12:32:01] [Chef] Sindre adds [HamburgerID: 2] => Hamburgers on the track: [HamburgerID: 2]
[12:32:01] [Chef] Joachim adds [HamburgerID: 3] => Hamburgers on the track: [HamburgerID: 2] [HamburgerID: 3]
[12:32:02] [Waiter] Pernille collects [HamburgerID: 2] <= Hamburgers on the track: [HamburgerID: 3]
[12:32:04] [Chef] Joachim adds [HamburgerID: 4] => Hamburgers on the track: [HamburgerID: 3] [HamburgerID: 4]
[12:32:05] [Chef] Finn adds [HamburgerID: 5] => Hamburgers on the track: [HamburgerID: 3] [HamburgerID: 4] [HamburgerID: 5]
[12:32:06] [Waiter] Pernille collects [HamburgerID: 3] <= Hamburgers on the track: [HamburgerID: 4] [HamburgerID: 5]
[12:32:06] [Chef] Sindre adds [HamburgerID: 6] => Hamburgers on the track: [HamburgerID: 4] [HamburgerID: 5] [HamburgerID: 6]
[12:32:07] [Chef] Joachim adds [HamburgerID: 7] => Hamburgers on the track: [HamburgerID: 4] [HamburgerID: 5] [HamburgerID: 6] [HamburgerID: 7]
[12:32:08] [Waiter] Sara collects [HamburgerID: 4] <= Hamburgers on the track: [HamburgerID: 5] [HamburgerID: 6] [HamburgerID: 7]
[12:32:09] [Waiter] Pernille collects [HamburgerID: 5] <= Hamburgers on the track: [HamburgerID: 6] [HamburgerID: 7]
[12:32:12] [Chef] Sindre adds [HamburgerID: 8] => Hamburgers on the track: [HamburgerID: 6] [HamburgerID: 7] [HamburgerID: 8]
[12:32:12] [Chef] Joachim adds [HamburgerID: 9] => Hamburgers on the track: [HamburgerID: 6] [HamburgerID: 7] [HamburgerID: 8] [HamburgerID: 9]
[12:32:12] [Waiter] Sara collects [HamburgerID: 6] <= Hamburgers on the track: [HamburgerID: 7] [HamburgerID: 8] [HamburgerID: 9]
[12:32:12] [Waiter] Pernille collects [HamburgerID: 7] <= Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9]
[12:32:13] [Chef] Finn adds [HamburgerID: 10] => Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9] [HamburgerID: 10]
[12:32:15] [Chef] Sindre adds [HamburgerID: 11] => Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9] [HamburgerID: 10] [HamburgerID: 11]
[12:32:16] [Chef] Joachim waiting to deliver hamburger to the tray: Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9] [HamburgerID: 10] [HamburgerID: 11]

Process finished with exit code 130
```

Oppgave 3

```
Run: no.hvl.dat108.ex1.task3.Main x
[12:32:48] [Chef] Joachim is ready to work
[12:32:48] [Chef] Finn is ready to work
[12:32:48] [Chef] Sindre is ready to work
[12:32:48] [Waiter] Pernille is ready to work
[12:32:48] [Waiter] Sara is ready to work
-----
[12:32:52] [Chef] Joachim puts [HamburgerID: 1] => Hamburgers on the track: [12:32:52] [Waiter] Sara takes [HamburgerID: 1] <= Hamburgers on the track: [ ] [ ]
-----
[12:32:52] [Chef] Finn puts [HamburgerID: 2] => Hamburgers on the track: [HamburgerID: 2]
[12:32:52] [Chef] Sindre puts [HamburgerID: 3] => Hamburgers on the track: [HamburgerID: 2] [HamburgerID: 3]
[12:32:53] [Waiter] Pernille takes [HamburgerID: 2] <= Hamburgers on the track: [HamburgerID: 3]
[12:32:54] [Chef] Joachim puts [HamburgerID: 4] => Hamburgers on the track: [HamburgerID: 3] [HamburgerID: 4]
[12:32:54] [Waiter] Sara takes [HamburgerID: 3] <= Hamburgers on the track: [HamburgerID: 4]
[12:32:55] [Chef] Finn puts [HamburgerID: 5] => Hamburgers on the track: [HamburgerID: 4] [HamburgerID: 5]
[12:32:57] [Chef] Joachim puts [HamburgerID: 6] => Hamburgers on the track: [HamburgerID: 4] [HamburgerID: 5] [HamburgerID: 6]
[12:32:57] [Waiter] Pernille takes [HamburgerID: 4] <= Hamburgers on the track: [HamburgerID: 5] [HamburgerID: 6]
[12:32:57] [Waiter] Sara takes [HamburgerID: 5] <= Hamburgers on the track: [HamburgerID: 6]
[12:32:57] [Chef] Sindre puts [HamburgerID: 7] => Hamburgers on the track: [HamburgerID: 6] [HamburgerID: 7]
[12:32:59] [Chef] Finn puts [HamburgerID: 8] => Hamburgers on the track: [HamburgerID: 6] [HamburgerID: 7] [HamburgerID: 8]
[12:33:00] [Waiter] Pernille takes [HamburgerID: 6] <= Hamburgers on the track: [HamburgerID: 7] [HamburgerID: 8]
[12:33:00] [Waiter] Sara takes [HamburgerID: 7] <= Hamburgers on the track: [HamburgerID: 8]
[12:33:01] [Chef] Sindre puts [HamburgerID: 9] => Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9]
[12:33:01] [Chef] Joachim puts [HamburgerID: 10] => Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9] [HamburgerID: 10]
[12:33:02] [Chef] Finn puts [HamburgerID: 11] => Hamburgers on the track: [HamburgerID: 8] [HamburgerID: 9] [HamburgerID: 10] [HamburgerID: 11]
[12:33:03] [Waiter] Pernille takes [HamburgerID: 8] <= Hamburgers on the track: [HamburgerID: 9] [HamburgerID: 10] [HamburgerID: 11]
[12:33:04] [Waiter] Sara takes [HamburgerID: 9] <= Hamburgers on the track: [HamburgerID: 10] [HamburgerID: 11]
[12:33:05] [Chef] Finn puts [HamburgerID: 12] => Hamburgers on the track: [HamburgerID: 10] [HamburgerID: 11] [HamburgerID: 12]
[12:33:05] [Chef] Sindre puts [HamburgerID: 13] => Hamburgers on the track: [HamburgerID: 10] [HamburgerID: 11] [HamburgerID: 12] [HamburgerID: 13]

Process finished with exit code 130
```

I oppgave 3 kan det komme “bugs” i formattering av utskrift da det er kun selve blockingQueueen som er synkronisert og ikke utskriften i seg selv.