Bank Agents - Challenge

The following exercise is for you to apply the concepts we reviewed together in the java fundamentals session we had this week.

Context

There is a bank office where there are 3 types of agents:

- Cashier
- Supervisor
- Director

The process to attend a client who wants to perform a bank operation (deposits, withdrawals, resolving customer issues) must be attended by a **Cashier** in the first instance. So, If there are no available cashiers, then it must be attended by a **Supervisor,** and if there are no available supervisors, the process must be attended by a **Director**.

Deliverables

- Create a UML class diagram to communicate the solution.
- There must be a class called "Dispatcher" which will be in charge of handling clients to be attended, so this class must contain a method called "attend()" to assign a client to the next available agent.
- Dispatcher class must be able to attend 10 concurrent clients.
- The attention time of a client must be random, within a range of 10 to 15 seconds
- Dispatcher class must know how long a process lasted.
- There should be a class (main class) that simulates 10 clients.

Extra points

- javadoc
- What happens when there are more clients than the pool object capacity?