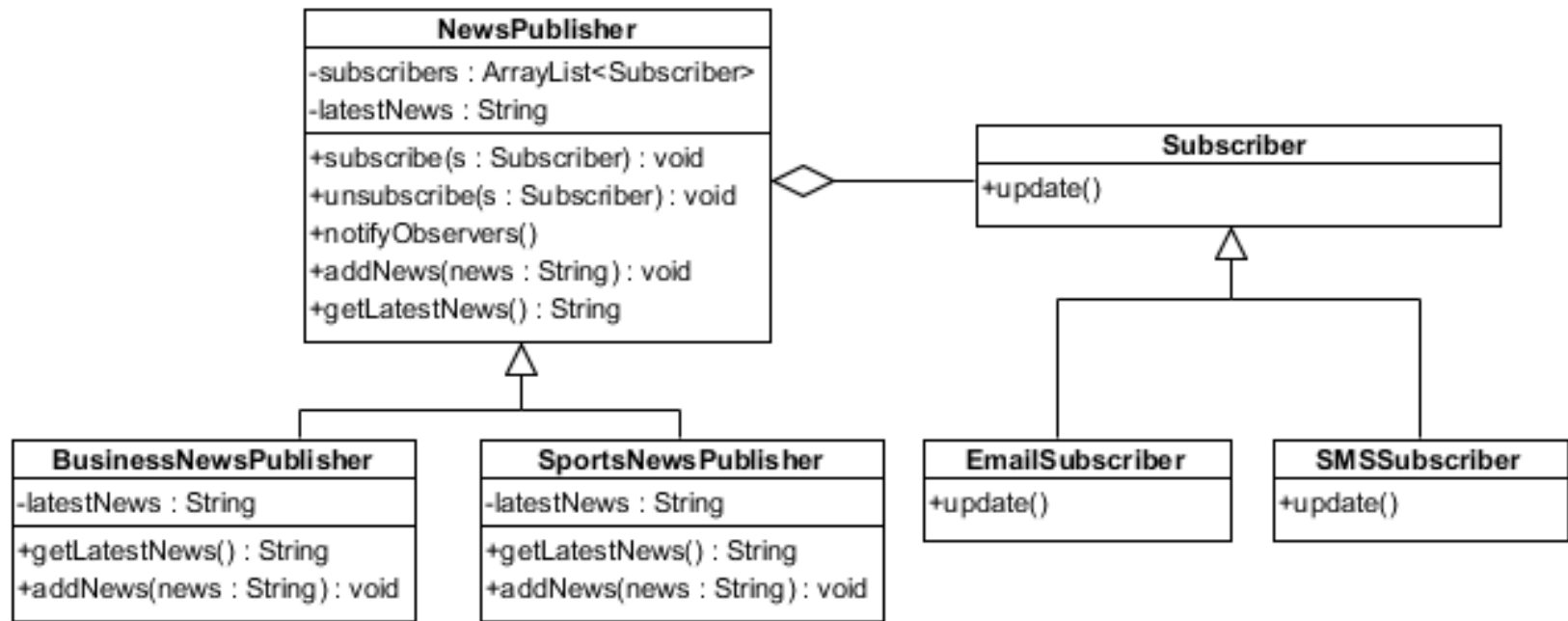


Homework #7



Questions

1. Name the pattern used in the following UML diagram



2. Implement the previous UML diagram in Java

Questions

You are currently implementing a system for encrypting emails and are planning to use two different encryption mechanisms: *InMemoryEncryption* and *InDiskEncryption*. *InMemoryEncryption* will be used when the email size is below 1 GB and the file can be read and encrypted in memory. On the other hand, *InDiskEncryption* will be used when the email size is over 1GB and the encryption needs to take place in batches and part of the encryption results will be stored in disk.

3. Which pattern would you use to solve this problem?
4. Model how the chosen pattern could be used to solve the problem. Use a UML class diagram for your answer.



Questions

5. Implement the UML class diagram in Java.
6. Describe a concrete example where you would use the state pattern.

