

# ESOF 322 Extra Credit Assignment

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1. The alarm initiates the system by producing some sort of obnoxious sound. This causes Joe to wake up. Joe, then rubs his own eyes. He then begins to make coffee. At the same time, he begins to read the news. At the same time as he started the news, he finishes reading the article. Once he has completed reading the news, he grabs a cup of coffee.
2. The third object is never attached to the observer.
3. This pattern is used for detecting attacks from known signatures. It compares traffic with known harmful signatures such as malware or a remote login. The Client will make a request to gain access to the Server. From there the Client's ID and credential will get sent through the IDS system and if the system detects a known signature it will trigger an alarm. If not, the Client will be able to access the Server. If a new signature needs to be added, it simply needs to be added to the AttackDetector class.

## References:

Ebrary. 2020. *How Does Detection Work?*. [online] Available at:  
<[https://ebrary.net/26722/computer\\_science/detection\\_work](https://ebrary.net/26722/computer_science/detection_work)> [Accessed 28 October 2020].

En.wikipedia.org. 2020. *Observer Pattern*. [online] Available at:  
<[https://en.wikipedia.org/wiki/Observer\\_pattern](https://en.wikipedia.org/wiki/Observer_pattern)> [Accessed 28 October 2020].