Week 3 Task

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PC-C

How caching proxies save Bandwidth

- By using **caching** techniques integrated with the **proxy** service, it is possible to ensure that certain objects requested on sites are copied to the **proxy**, so if other users from the same network access the same website, there is no need to proceed with a new request, since the **data** will be stored in the **proxy**.
- The caching is stored on low or high-speed magnetic disks, depending on the criticality of the environment. In addition, it is common to keep more requested objects in a memory space, to avoid read and write operations on disks, which end up being much slower than unloading the object from memory.
- There are several algorithms for distributing storage, selecting objects to be stored, updating, and replacement policy, since caching space does not necessarily have to be dedicated, and it will always have finite space.

- **Functional & Non-functional** requirements of web applications:
  - Functional requirements :
    - A functional requirement will describe a particular behavior of function of the system when certain conditions are met
    - For example: “Send email when a new customer signs up” or “Open a new account”.
    - **Some of the more typical functional requirements include:**
    - Business Rules
    - Transaction corrections, adjustments and cancellations
    - Administrative functions
    - Authentication
    - Authorization levels

Non-functional requirements :

- A non-functional requirement will describe how a system should behave and what limits there are on its functionality.
- **Some typical non-functional requirements are:**
- Performance – for example Response Time, Throughput, Utilization, Static Volumetric
- Scalability
- Capacity
- Availability
- Reliability
- Recoverability
- Maintainability