**Base Experiment (MQ)**

This experiment is an extension of the [Base experiment](https://github.com/CS-6381/FinalProject/blob/main/DesignOfExperiments/Base.md) that is specific to Datastore technologies.

**Qualitative Data**

Fill in with information you discover about the given Data Store. Please include any other key characteristics of the data store which amy not be outlined.

| **Metric** | **Value** |
| --- | --- |
| Use Case | <https://cassandra.apache.org/>: For apps where data loss is unaffordable |
| CAP Theorem Evaluation | <https://stackoverflow.com/questions/20205797/which-part-of-the-cap-theorem-does-cassandra-sacrifice-and-why>: Prioritizes Availability and Partitioning over Consistency |
| Database/Structure Hierarchy | <https://www.youtube.com/watch?v=lE8LI5BvDGA>: Table, column, primary key.  <https://en.wikipedia.org/wiki/Apache_Cassandra>: Open-source, distributed NoSQL database management system |
| Replication / Clustering Availability | <https://cassandra.apache.org/>: Data replicated to nodes, across data centers. Nodes that fail get replaced fast. Linear scalability (add more nodes), synchronous/asynchronous replication. |
| Syntax/Query Language Support | <https://www.youtube.com/watch?v=lE8LI5BvDGA>: Similar to MySQL (e. g. CREATE, INSERT, SELECT).  <https://en.wikipedia.org/wiki/Apache_Cassandra>: Java, Python, Node, Go, C++ |