Complete Project
Team-5

Ragini Choudhary(110058895)
Vishvak Tatineni(110058892)
Vivek Sumra(110046866)

Github Link : https://github.com/Ragini1619/ADTProject

A. Description of tasks completed after Milestone-1.

After Milestone-1 , one of the major task that we completed was Sharding, which had a series of steps.

- ➢ Understanding the concept of Sharding and the basic setup.
- ➢ Starting mongd instances Config Server
- ➢ Configuring the configuration server instances as replica sets
- ➢ Creating mongo instances to run as shards of the database
- ➢ Configuring the shard server instances as Replica Sets
- ➢ Start a Routing Server
- ➢ Connect to MongoS
- ➢ Adding shards to the Router
- ➢ Importing data into the Database created
- ➢ Performance Evaluation.

B. Task Completion status(All Tasks+Any features that could not be implemented)

- ✓ We were on track as planned in the initial project planning phase.
- ✓ We have completed all the above-mentioned tasks on time.
- ✓ The tasks mentioned in red had been deprecated in the later phase of the project implementation as they were taken into consideration at the time of research work and due to time constraints and studying the relevance of these tasks in our project didn't add any value to what we had planned of doing. we decided to exclude them for our task list.

TASK	Sub-Tasks	Owner	Status
Prerequisites	MongoDB Installation on local	All	🟩
	MongoDB Compass on local		🟩
	Basic familiarity with MongoDB		🟩
	Basic understanding of Indexing		🟩
	Basic understanding of Sharding		🟩
Data Identification	Identify large datasets of various volumes for analysis	Ragini	🟩
	Sample dataset to perform proof of concept activities	Vishvak	🟩
	Importing identified data into local DB to work on	All	🟩
Query Identification	Query identification for analysis based on the dataset utilized	Vivek	🟩
Performance Metrics & Results Documentation	Identify & understand how performance is measured in MongoDB	Vivek	🟩
	Run the queries identified and document performance stats	All	🟩
Index Implementation	Build indexes on identified fields on all datasets	All	🟩
	Synchronizing Index		🟥
	Verifying Index		🟥
	Upgrading Index		🟥
	Rebuilding Index		🟥
	Analyzing the scope of Compound Indexes for the data	All	🟩
	Implementing Compound Indexes	All	🟩
Sharding Implementation	Create a Directory for Config Server		🟩
	Setup Config Mode on a new Server		🟩
	Syncing the Mongo instance and Config Server		🟩
	Cluster creation and population		🟩
	Enabling Sharding		🟩

Color	Significance
🟩	Completed
🟥	Deprecated
🟧	Could not be completed
🟦	On Track – To be taken up next