Scope Document

Team No: 15

7. Cassandra Data Tables as REST API

Members:

Vinayak Bharti (201405522) Akash Kant (201230194) Mihir Wadwekar(201202026) SVK Rohit (201356204)

Abstract:

The objective of this project is to provide a GUI and an API layer on top of Cassandra, exposing data tables via REST API's.

Apache Cassandra is an open source distributed database management system designed to handle large amounts of data across many commodity servers, providing high availability with no single point of failure.

Cassandra offers capabilities that relational databases and other NoSQL databases simply cannot match such as: continuous availability, linear scale performance, operational simplicity and easy data distribution across multiple data centers and cloud availability zones.

• Scope:

Major objective of this project is to expose Cassandra data tables as REST API with pagination. Main focus would be on the CRUD (create, replace, update and delete) features of Cassandra. We will implement the following features:

- ❖ A GUI that provides a mechanism to view and manipulate data tables in Cassandra.
- * REST APIs for CRUD operation on Cassandra Data tables and other services.
- Pagination while displaying the contents of the data tables.

<u>Technologies</u> (Initial Draft):

- Apache Cassandra
- Python-Flask for REST API server
- GUI toolkits like bootstrap