

# Mongo DB GUI Operation Using Python

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**Abstract:** Mongo DB is a perfect NoSQL database. We can improve performance and index operations speed using this Mongo DB database. There are various features of Mongo DB like increased speed of database operations, various functions instead of complex SQL queries and a very huge performance improvement. Python is web scripting language used for high usage websites for improving performance of the website and reducing the overhead on the web server. We will use this Python language in integration with Mongo DB for highest possible performance.

**Keywords:** MongoDB, Python, Add data, Delete Data, Update Data, View Data, NoSql.

## I. INTRODUCTION

“Mongo DB wasn’t designed in a lab. Mongo DB is Open-source database introduced by 10gen, for wide Variety of application. It is an agile database that allow Schema to change quick as application evolve. Mongo DB is High performance, scalability and availability in memory computing. Mongo DB native replication and Automated failure’s enable enterprise grade reliability and also have operational flexibility. Mongo DB is a database which has document oriented storage. It is also object oriented written in C++.

Mongo DB is open-source full index support database. It is easy to use and in the Mongo DB written query is very simple. Mongo DB provide Map Reduce function .It also provide Grid Fs for process on Big Data. Mongo DB is very powerful much flexible and provide very nice speed. Mongo DB is the primary daemon process for Mongo DB system in mongo DB database is physical container for collection. Each database get its own set of file on the file system. A single Mongo DB server typically has multipledatabases.

In Mongo DB collection is Table and document is row And column/attribute/variable is filed. In Mongo DB document is set of key value pair. Mongo DB support Various drivers such as AggregationFramework. AutoSharading, JSON data model with dynamic schema.

## II. PROPOSED SYSTEM

We are developing the reliable and consistence Interface for Mongo DB.

We will calculate Database operation statistics along with the basic database operation.

Mongo DB not having any proper GUI or easiness in the operations. The procedures for Performing any operations are very tedious. We are trying to keep the operations very Easy, and trying to improve performance of the operations. So that our GUI can be Easily operational and have very high performance.

We will perform following operations in our project:

1. Create database
2. Create table
3. Insert data in the table
4. Update data in the table

5. Delete data in the table
6. Select data from table using regular expression using constant data using multiple data items
7. User and Roles Management
8. Query Statistics

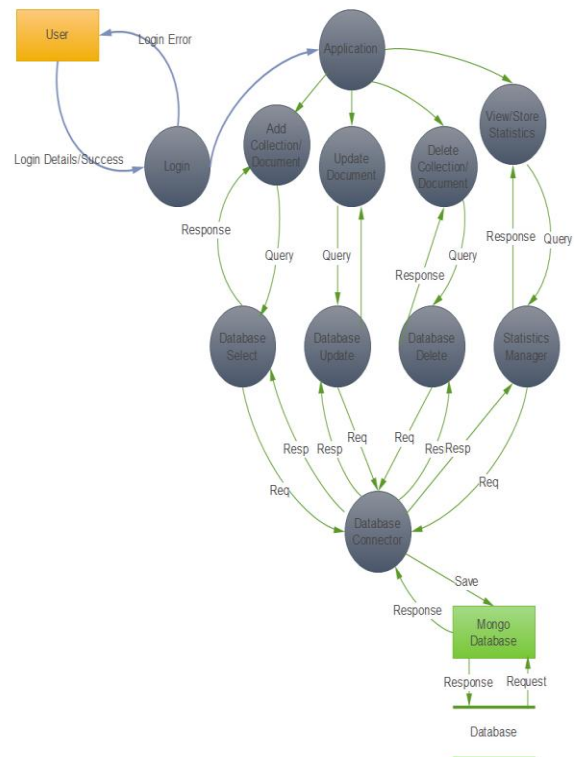


Fig. 1 Architecture of Mongo DB GUI Operation Using Python.

## III. FRAMEWORK

As shown in the figure first we have to login in the Application. After login we can add document, delete Collection or view statistical data.

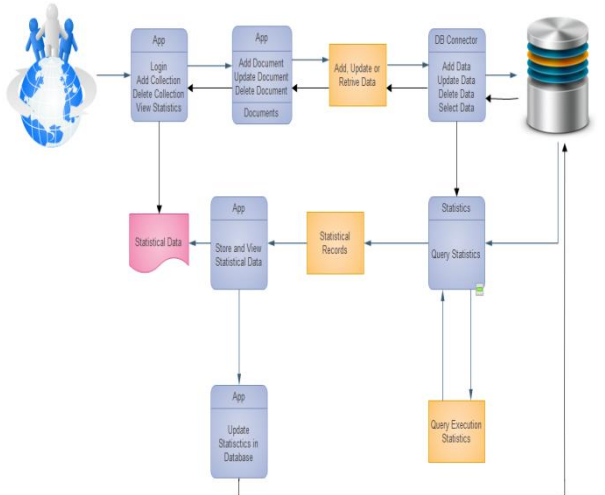


Fig. 2Frame work for Mongo DB GUI Operation Using Python.

**A. Steps for Mongo DB Database GUI Operation Using Python.**

- Mongo DB does not have proper GUI for client. It uses mongo shell but Monngoshell is not user friendly. There, we developed GUI using python with the help of this application user can easily interact with Mongo DB database.
- In this framework, first the client logs in to the application and creates a database. If the user or client is authorized, then he or she logs in successfully; otherwise, a message indicating authentication failure is shown.
- If authorized, the user logs in and creates a database successfully, then creates a table.
- After creating a table, the user can add, delete, update data in the table.
- In that framework, we can also select data from the table using Regular Expression, using constant data using multiple data items.
- After all this process, we can manage user roles and find query statistics.

In such a manner, we are developing a reliable and consistent interface for Mongo DB. We will calculate database operation statistics along with the basic database operations. We are trying to keep the operations very easy, and trying to improve the performance of the operations. So that our GUI can be easily operational and have very high performance.

**IV. CONCLUSION**

RDBMS won't go away, they're still definitely needed. But the storage requirements for the new generation of applications are huge, different from legacy applications. We can choose Mongo DB instead of MySQL because of two factors, ease of use and performance [4]. The end user will get a user-friendly GUI to interact with Mongo DB. It will perform the queries in less time than SQL does, and it is not a replacement for RDBMS but a complement for it. After completing the development of the project, we have planned to keep it open source, so that other users can contribute to it. And based upon this analysis and design part, we are now able to develop the application.

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