Financial Activities Tracking System

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Abstract – *To keep track of financial activities related to the finance firm efficiently, smartly and optimally for minimizing the cost and the efforts required for different finance-related operations. The main objective behind this project is to come up with software which will reduce the time consumption of the agents, help them in effectively maintaining their data, To provide them security from hackers, malware, and also give efficiency of work anytime and anywhere. Through which the manual workload reduces and chances of errors and loss of data can be prevented.*

Keywords- *Flask, CSV, MongoDB, AngularJS.*

I- INTRODUCTION

Considering that the money area is requesting an ever-increasing number of specialists for satisfying their clients' requirements. It is difficult for the area to keep a record and monitor their information. The manual framework isn't extremely productive and quick enough to stay up with the present market. There are human Restrictions. The manual framework is more inclined to mistakes that is the reason it is neglecting to deliver results. For organizations having an exceptionally huge measure of information to deal with a compelling, solid, integrable, quick, and brilliant framework resembles gold residue.

One vital test in giving tenable data is the absence of solid monetary data and well-working information base frameworks. There is arising writing regarding the matter of reproduction money and public monetary administration featuring the influence of powerful observing frameworks, adaptability in financial plan the executives, and regard for sectoral and spatial disparities in asset allotment. This note takes a to some degree smaller concentration and looks all the more explicitly at existing information base frameworks, investigating their designs and featuring the difficulties experienced while following 3 remaking reserves. This note audits accessible data set frameworks that have proactively been utilized and those that are possibly reasonable for following remaking supporting in post-debacle conditions. Following reproduction finance information comprises of three fundamental stages. These three stages are sorted into information in, information the executives, and information out. This arrangement can assist with honing the emphasis on specialized issues when a monetary global positioning framework is set up.

The proposed framework is to deal with this large number of issues. All help needs of a money firm are served in a quicker, more astute, and effective way. It will make keeping records straightforward and simple. This will prompt Major issues like fakes, tricks, bungle of information, and so forth could be forestalled and this will lead associations towards quicker development.

II- IMPLEMENTATION OF DATABASE USING FLASK FRAMEWORK

Python jar structure is the innovation that we are utilizing to foster the school the executive framework. Jar is a web system written in python. It very well may be characterized into miniature system since it requires no specific apparatuses or libraries and has inbuilt information base. It does not have any information base reflection layer. Anyways carafe support augmentation that can add application highlights. Expansions exist for

Impact Factor-4.013   *e-ISSN: 2581-6667*
International Journal of Engineering and Creative Science, Vol. 5, No. 9, 2022
www.ijecs.net

object social mappers, structure endorsement, move dealing with, various open approval progressions and a couple of ordinary framework related contraptions. Expansions are revived evidently more as regularly as conceivable than the middle Flask program.

The data set alludes to an assortment of records that figure out how to deliver valuable data. The data can be gotten to, changed, made due, controlled and composed to perform different data dealing with undertakings. The data is typically documented across lines, sections and tables that make liability dealing with and data addressing capable. There are various sorts of information bases which are of the following sorts: - Object-Oriented - Relational - Distributed - Hierarchical - Network Database Management System (DBMS) suggests the headway plan used to improve and deal with the cutoff and get back of information from instructive records. DBMS offers an orderly strategy for overseeing manage instructive collections by an association point for clients as well as getting to the informational collections by applications.

III-MONGODB – A COMPARISON WITH NOSQL DATABASES

During the last ten years, there was a colossal development in the information base sizes. This made the data set frameworks battle to grow up with the present prerequisites. Yet, applications those require information or potentially useful parceling, either due to the sheer size of the information or with the end goal of burden adjusting need to depend on exceptionally fabricated relations or use elective data set frameworks. Since circulated dividing execution has turned into a genuine test with the popularity for multi-machine information bases, an entire arrangement of NoSQL data sets have arisen to fill the hole of RDBMS. Normal elements of NoSQL items are the difference from the social information model, rearrangements of value-based model and exchange handling and above all the shift to the basic programming model from the definitive style SQL language. Social data sets are regularly being supplanted by other feasible other options, for example, NoSQL [2] information bases, because of reasons of versatility and heterogeneity. MongoDB, a NoSQL data set, is a spry information base worked for adaptability, execution and high accessibility. It tends to be sent in single server climate [3] and furthermore on complex multi-site models. The use of MongoDB in twitter feeling examination is likewise a seeing one. In this paper we contrast MongoDB and other NoSQL data sets

in light of various variables. A portion of its applications in opinion examination are likewise recorded.

IV-WEB SERVICES BASED ON PYTHON FLASK

There is not any   avoiding it, we are building a disseminated framework consisting of a new article [1]. Without a doubt, even the least complex second year understudy project is a website based application carried out as double-level engineering with a JS/HTML5 in frontend an assistance backend, Python is perhaps the well-known programming language decision for carrying out the backward-finish of web based applications. Inside Python people group, Flask2 is an extremely well known web framework3 . It gives effortlessness and adaptability by executing an absolute minimum of a web server, and consequently promotes as a miniature system. The Flask instructional exercise shows us how to setting up a basic Flask "Hi World" web-administration requires something like 5 lines in the code written in Python [2]. In spite of their fame, apparently, there is no straightforward answer for observing the developing execution of Flask web applications. In this manner, all of the engineers of these ventures faces the accompanying choices when faced by need of social event understanding through the runtime conduct of their executed administrations: 1) Use a business checking instrument which regards the API as a black-box. 2) Implement their specially appointed investigation arrangement, rethinking essential representation and collaboration techniques. 3) Live without investigation understanding into their administrations.

For projects on a cautious spending plan (for instance research, new organizations) the first and the resulting decisions are consistently not available on account of time and financial goals. Regardless, while using untouchable assessment courses of action, a fundamental comprehension through the headway of the uncovered organizations of the web based application, is missing considering the way that such plans have no clue about framing and no coordination with the improvement life cycle. [3] To stay away from projects winding up experiencing the same thing, that of living without appraisal, in this paper we present Flask Dashboard - a low-exertion association checking library for Flask-based Python web helps that is not difficult to combine and empowers the deft assessment of association improvement. [4] As a logical examination, on which we provide our response, we will work on open source APIs which was in the third situation describe above since more than a one year.

V - A COMPARISON WITH 'NO-SQL DATABASES'

Impact Factor-4.013   *e-ISSN: 2581-6667*
International Journal of Engineering and Creative Science, Vol. 5, No. 9, 2022
www.ijecs.net

The No-SQL informational index approaches are portrayed by flexibility away and control of data, improvements in execution, and thinking about more straightforward adaptability. A wide scope of sorts of these No-SQL informational indices exist, Each one is suitable for different unique purposes. Models fuse MongoDB* whose associations are at 4square, Disney, bit.ly, Source-forge, CERN, The New York Times, and others. Hadoop (Apache), 'Cassandra' was basically applicated by Facebook.com for the working of their search algorithm in Inbox. Subsequently it was publicly released and presently it is recon as Apache Software Foundation's high level undertaking, being utilized by Digg, Twitter, Reddit, Rackspace, Cloud-kick, Cisco and others. DynamoDB is utilized by Amazon, Voldemort is utilized by Amazon,Neo4J,Adobe,Cisco, and so forth While RDBMS is exchange arranged and in view of the ACID rule, NoSQL utilizes either CAP or BASE. Among a few abilities of NoSQL information bases are overseeing enormous surges of non-social and unstructured information, quick information access speeds, accessibility of information in any event, when the framework is working in corrupted mode because of organization segments. NoSQL information bases give close unending adaptability and extraordinary execution for information escalated use cases. Be that as it may, with such countless various choices around, picking the right NoSQL data set for your intelligent Web based application can be precarious.

as a general rule, the main variables to remember are as per the following:

I. Versatility. Taking on the Sharding system can be significant in achieving scale regardless of the informational collection advancement being utilized. Sharding uses level separating which is a database arrangement rule in which lines of an informational collection table are held freely. These tables may then be arranged on an alternate database server or real regions. Scaling quickly, as per demand, and with basically no application, changes have transformed into a determiner in Web traffic which has on and off floods. Resource struggle between servers like circle, memory, and central processing unit is dispensed with. Vigilant equivalent taking care of and enhancement of CPU/Memory per database model ought to be conceivable.

ii. Execution. Instinctive applications need especially low read and make latencies. Execution is obtained by coursing the pile across a couple of servers. The informational collection ought to pass dependably low latencies paying little psyche on to stack or total size of data. By and large, the read and make latencies out of NoSQL informational collections are incredibly low since data is shared with all centers in a pack while the application's it is in to work set memory.

iii. Accessibility. Normal Web applications need a remarkably open information base. On the off chance that your application is down, you are just losing cash. To guarantee high accessibility, your reaction ought to have the decision to do online updates, really kill a middle point for help without affecting the transparency of the social occasion, handle online endeavors, like fortresses, and give calamity recuperation, expecting the whole server farm goes down.

iv. Simplicity of improvement. Social information bases require an inflexible outline and, assuming that your application changes, your data set blueprint necessities to change also. In such manner, NoSQL data sets offer a few significant benefits that make it conceivable to modify information structure without influencing your application.

VI-PROPOSED SYSTEM AND IT'S ARCHITECTURE

Fig.1: Fig shows the block diagram of login page

A general architecture of the proposed system is imagified in Fig 1. When any user gives login inputs like id and password, the algorithm checks that user is valid or not. If user is valid, than it checks that user is Admin or Super Admin, If its Admin then the dashboard for Admin is lunched. If the user is admin then the Admin dashboard is lunched.

VII- IMPLEMENTATION AND EVALUATION

Ease of work by providing integrable and efficient programming answers for the money area in following

exercises what's more, pay to ensure the association has adequate money nearby to meet its responsibilities. Ensuring consistency with RBI guidelines. Dealing effectively with the number of agents and customers to earn customer's trust. Objective is to provide the best quality solution according to client's needs and demands. Delivering the performance and quality which satisfies every prospect. At last, it's connected to applying strong organizational principles to the association's financial development. Most significant task to be performed through our system are listed below

● To provide medium and platform for efficient management of agents, customers, admins.
● To keep record of all loans related data, customers' data safely and effectively.
● To avoid issues, errors, malpractices caused due to human errors in manual systems.

To provide an efficient tracking gateway for numerous agents' daily practices. And maximise growth of finance companies.
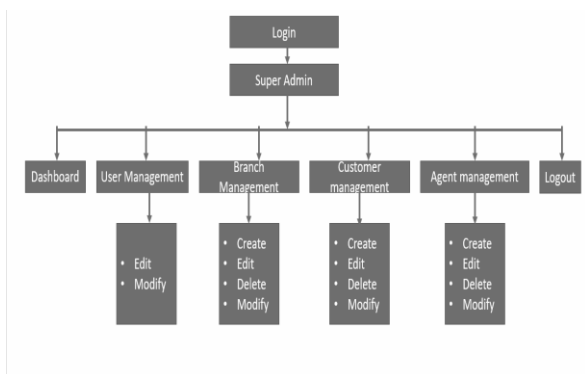
1. Super Admin Section

Fig.2: Fig shows the block diagram of super admin section

Super Admin is the highest authority using the system. Super Admin's dashboard will show different blocks i.e. User management, Branch Management, Customer Management, Agent Management, Logout. Super Admin can Create, Edit or Remove user, Branch or agent.
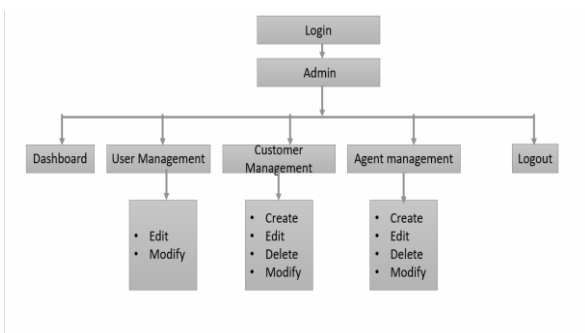

Fig.3: Fig shows the block diagram of admin section

Admin is the Second highest authority using the system. Admin's dashboard will show different blocks i.e. User management, Customer Management, Agent Management, Logout. Super Admin can Create, Edit or Remove user or agent.
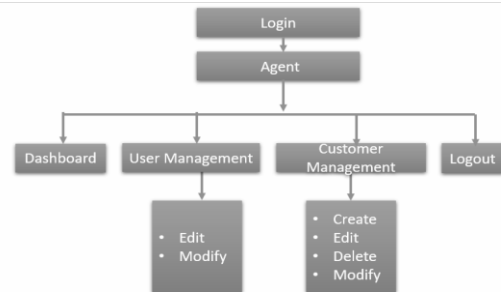

Fig.4: Fig shows the block diagram of agent section

Agent does not use the web page for agent there is a dedicated mobile application which allows agent to add remove or edit customer.
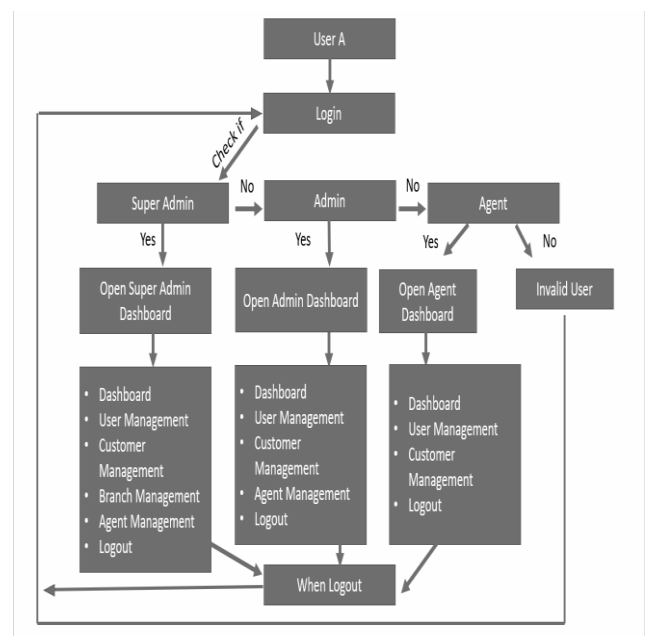

Fig.5: Fig shows the flow chart of the financial activities tracking system
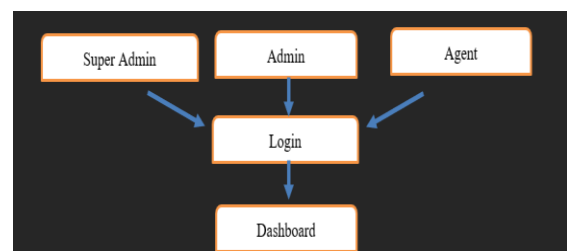

Fig.6: Fig shows the login process

At the start of everything login page will land. It will have two text field for user. That are User id & Password. It will also have two buttons. That are Login & Forget Password. All users of the system will get their credentials from higher authorities. Login button will lead to the dashboard if credentials are correct. Forget password button will allow user to reset password using registered email address.
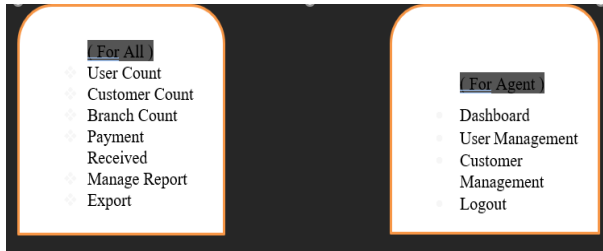

Fig.7: Fig shows the module contents

VIII-CONCLUSION AND FUTURE WORK

To keep track of financial activities related to the finance firm efficiently, smartly and optimally for minimizing the cost and the efforts required for different finance-related operations. The main objective behind this project is to come up with software which will reduce the time consumption of the agents, help them in effectively maintaining their data, to provide them security from hackers, malwares and also give efficiency of work anytime and anywhere. Through which the manual workload reduces and chances of errors and loss of data can be prevented. Ease of work by providing integrable and efficient software solutions for the finance sector in the following liquidity and pay to ensure the association has adequate money accessible to meet its responsibilities. Ensuring consistence with state, government, and industry-express rules. Dealing effectively with the number of agents and customers to earn customer's trust. Objective is to provide the best quality solution according to clients needs and demands. Delivering the performance and quality which satisfies every prospect. At last, it's tied in with applying successful administration standards to the organization's monetary design. The proposed system is to take care of all these issues. All service needs of a finance firm are served in a faster, smarter, and efficient way. It will make keeping records simple and easy. This will lead to Major problems like deceit, con, wrong management of data, etc. could be prevented and this will lead organizations towards faster growth.

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