Update BQ_j.
3. Return (Resultset)

4.3 Flow of System

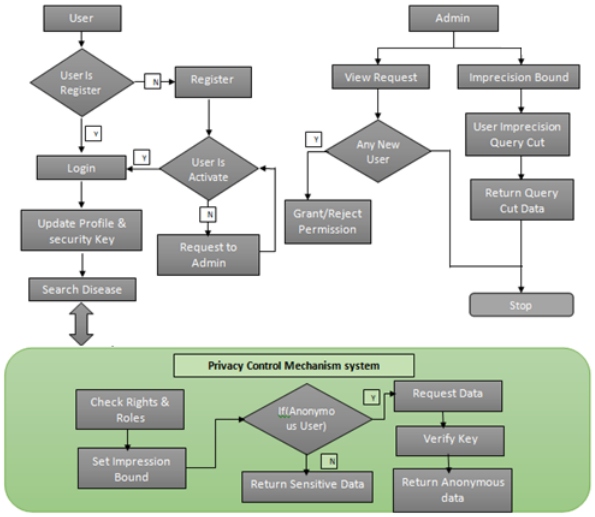


Figure 5: Flow Diagram

4.4 Mathematical Model

S={A, D_o, A_d, A_r, O_p, S, F}
Ai=Each Patient have only one account and contains user id.
Do=Doctor login to system.
Ad=Admin login to system.
Ar,=Authenticate request to admin.
Op= Operations.
S=Success {connection establish, sending or retrieving data successfully }
F=Failure {not a valid user, incorrect password}

1. To add new account :
n
Σ Ai=1 if 1=true , 0=false
i=1
Patient alredy exists
Else
Add new account in it.

2.To login in Account :
n n n
Σ Ai =1 then Σ Ai = Σ Ud =1
i=1 i=1 i=1
(verifies password in user Details according to the patient authority ID present in Account)
account information which contain patient id and password are match then Login Successfully.
Else
login failed.

3.Operations:
n
ΣOpi =1 then Operation Success
i=1
Else
Operation Failed

Operations are patient Authority Validation, Storing and Viewing patient details , doctor Authority Validation, Viewing patient details.

5. Results

Consider one data sets for the empirical evaluation of the proposed heuristics. The data set is the Medical data set from the UC Irvine Machine Learning Repository having 450 tuples and is the defacto benchmark for k-anonymity research. The attributes in the Medical data set are: User Id, Name, Password, Blood Group, Email Id, Mobile no., Location, Date of Birth, age, Address, Gender, Disease name, Pincode.

Registration	User_Id	User_Name	User_Password	Blood_Group
3	111	maruti	maruti	O+
4	454	sanket	sanket	O+
5	3435	abhi	abhi	O+
7	656	kantilal	kanti	O+
8	7634	MRT	mrt	O+
9	4355	ashvini	aa	B+
10	kunti	kunti	kunti	o+ve
11	madhuri	madhuri	madhuri	b+ve
12	mayur	mayur	mayur	a
13	az73646	zadeabhi	123456	A+
14	1234	Mahavir	mahi	B+
15	11	madhuri11	madhuri11	0
16	AGLambe123	AshishL	Ayush123@	0-
17	ML	mayurl	mayurl	A
18	55	madhuri55	madhuri55	0
19	11	11	11	o
20	mm	mm	mm	0

We use 20 and 50 queries generated randomly as the workload/permissions for the Medical data set. In this query set we remove all queries which have empty value.

Generate query load: We set query impression (k) value according to that we generate quires and store it into Query table.

Median Query: Select all set of queries which satisfy all attribute values and store it into Median Query set.

Query Cut: select randomly queries and store it into Query Cut set and divide it into an equal intervals Which is called Uniform Query set.

Retrive From Encrypted Database		
Age	PinCode	Disease
24	8484	Fever
24	54212	fever
25	22	fever
24	2234	fever
28	411028	fever
27	413304	fever
27	440028	fever
26	411057	Fever
27	411024	fever

Retrive From Encrypted Database		
Age	PinCode	Disease
1-30	60-90	Fever
1-30	60-90	fever
1-30	1-30	fever
1-30	60-90	fever
1-30	60-90	fever
1-30	60-90	fever
1-30	60-90	fever
1-30	60-90	Fever
1-30	60-90	fever

We are going to implement 2 algorithms
1) TDH1
2) TDH3

For the k-anonymity experiments, we fix the value of k and change the query imprecision bounds from 5 to 20 value with increments of 5. Then, we find the number of queries whose bounds have not been satisfied by each algorithm for the uniform query workload. The results for k-anonymity are given for the Medical data set for k values of 5,10,15, 20.

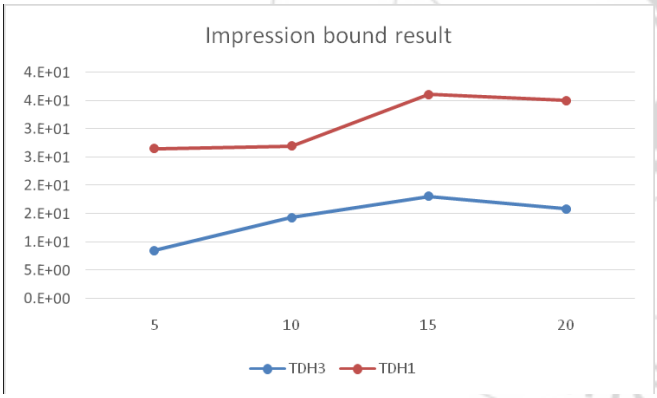
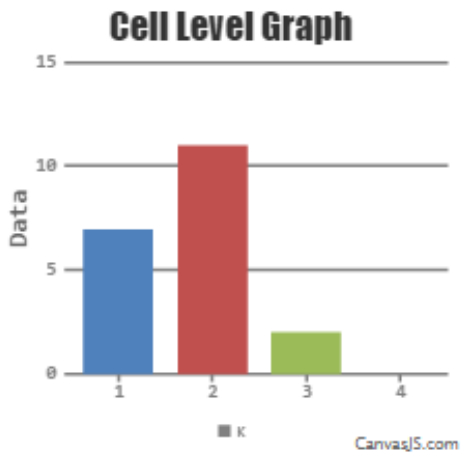


Figure 6: Imprecision Bound Result



6. Conclusion

The system architecture is a combination of access control mechanism and privacy protection Mechanism(Cell Level). New approach provide data access control to user it means we prevent anonymous user to access confidential data. If any user wants to access data which is secure then he/she wants to raise the request to the responsible user then this user send you the key which is used to access his/her data. It strictly prevent anonymous user to access unauthorized data. The proposed system implemented table level, row level, and cell level access control mechanism. Query set is to access the data and this sets assigned to user for roles and permission purpose. The access control mechanism allows only authorized query predicates on sensitive data. The privacy preserving module anonymizes the data to get privacy requirements. Imprecision bound estimation is optimized. The system proposed privacy-preserving access control to incremental data and dynamic access control. The system reduces the time complexity. The advantage of anonymity is resisting the attacker's inference attacks.

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