

backup strategy but the images stored in file system do require them. It is also easier to access images that are stored in the database.

The idea behind storing images in this system is, the image that is to be stored is first converted into byte stream and then this byte stream is stored in the database column, provided the image field is of image type instead of any other type like varchar, nchar etc.

Providing images of the sample in the report as well as in the experiments gives a glimpse and a long description of the sample. It also provides sample or product-specific information.



Figure 2: Storing equations and images

IV GRAPHICAL USER INTERFACE

Graphical User interface is an important part of software application. It is used in human computer interaction. The main aim is to enhance the efficiency and ease of use. User can manipulate and control the software and hardware by means of user interface. The software becomes more popular when GUI is attractive, simple to use, responsive in short time, clear to understand and consistent on all interfacing screens. Basic components of GUI are icons, pointer, desktop and pointing device. Our major aim is to create a user friendly GUI.

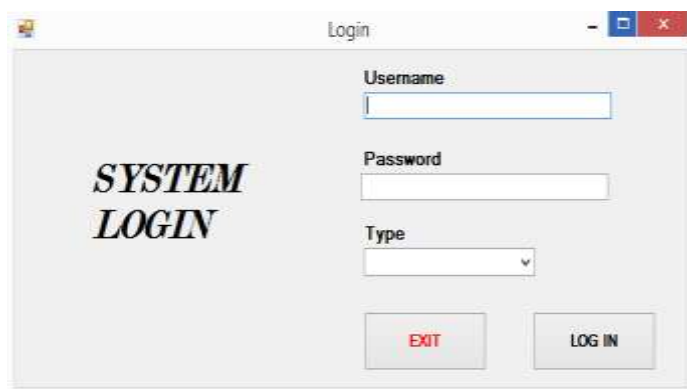


Figure 3: Graphical user interface for login

Main page of our GUI is system login. We have given username; password and type (Admin or user). Admin or user can login with the valid user id, password and type.



Figure 4: Main page

After the admin has logged in, tabs for main page, user, experiment, sample and employee pages are given. Also a facility to search the information according to user id is provided.

The users are already existing clients of the organization then they don't need to enter their details again on their next visit. They can directly search their data just by entering the user id in the textbox space provided in the GUI.

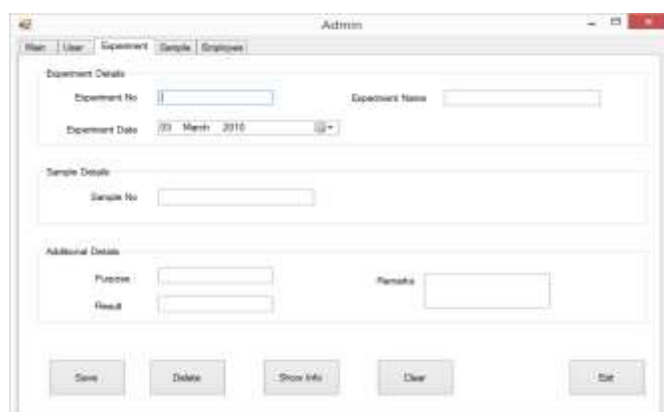


Figure 5: Graphical user interface for sample page

If user or admin wants to store the information regarding experiment like experiment no, name, date, purpose so he can store it. Admin can also delete the existing records which are stored in the database as well as update the information in the database.

V GENERATING REPORT AS PER USER REQUIREMENT

Report generation plays an important role in the project. Report generator is computer program where data is taken from the given database and generate a document in the format which satisfies user requirements such as pdf, MS Word and Excel. The source of data in report generation is database itself. The information is provided to the target user

in a timely, accurate and relevant manner. Report is generated depending on their experiment, samples and users.

VI CONCLUSION

This paper presented gives idea about storing the chemical equation and images in the database. It also provides overview about real time database where real time processing is used to control workloads whose state varies constantly. There are big technological challenges in this field. Moreover the system being a real time system, large amount of data had to be handled efficiently. This project mainly aims at achieving the same.

VII REFERENCES

- [1] <https://msdn.microsoft.com/en-IN/library/ms186939.aspx>
- [2] <http://www.britannica.com/technology/graphical-user-interface>