UMAER BASHA INSTITUTE OF INFORMATION TECHNOLOGY

UNIVERSITY OF KARACHI

THE DEVELOPMENT OF ONLINE SURVEY MANAGEMENT SYSTEM AS FINAL YEAR PROJECT FOR MASTERS IN COMPUTER SCIENCE

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ACKNOWLEDGEMENT

Alhamdulillah. Thanks to Allah SWT, whom with His willing giving us the opportunity to complete this Final Year Project which is title “ONLINE SURVEY MANAGEMENT SYSTEM”. This final year project report was prepared for department of computer science, University of Karachi, basically for student in final year to complete the Masters in Computer Science program. This report is based on the methods given by the university.

Firstly, we would like to express our deepest thanks to, Mr. Khalid Jamal, assigned, as our supervisor who had guided be a lot of task during two semester’s session 2020/2021. We also want to thanks the lecturers and staffs of Department of Computer Science (UBIT) for their cooperation during we complete the final year project that had given valuable information, suggestions and guidance in the compilation and preparation this final year project report.

ABSTRACT

The aim of the project is to develop an online survey management system. From a preliminary study, lecturers reported that online survey-management system may help them in administering their research work more efficiently. The idea of this proposal is based on a number of related studies. In the review of literature part, it is also discussed about the process of survey management and tips to motivate response. At the end, this paper describes about the methodologies to be used in achieving the objectives.

INTRODUCTION

Surveys provide a means of measuring a population's characteristics, self-reported and observed behaviors, awareness of programs, attitudes or opinions. It is an ideal mechanism to gather and analyze large amounts of direct feedback about someone's members, prospects, and employees. In supports of gathering big amount of data, computer technology may be a good option. In fact, it is commonly experienced that surveys are distributed through emailing services. Also, there are Web-based systems developed for administering survey practices.

An online survey is the collection of data through a self-administered electronic set of questions on the Web. Online surveys are able to conduct large-scale data collection. Web-based survey management system encompasses how the organizations organize, run and manage various types of surveys through the internet networks. It lets the user not only to build questionnaires but also to publish questionnaires to the respondents.

This technology provides an inexpensive mechanism for conducting surveys online instead of through traditional survey methods. Also, it speeds up the distribution and response cycles. Online surveys are expected to be popularly used. However, it is observable that most people or organizations manage their survey using traditional method by distributing their survey through the mail or by telephoning, and some may afford to self-distribute by hand. In current age, where digital is the theme, this is not a timely solution for gathering information because it does not have fast circular returning and responding from the respondents. Other issues such as cost, time and effectiveness are also within considerations.

Therefore, a conceptual model of online survey management system is required to be the solution for these issues. This initiative is proposed to solve problems as described in the next section.

PROBLEM STATEMENT

There are many types of surveys carried out by researchers which are by distributing the questionnaires to potential respondents manually through mail. This method requires cost, time, and efforts. There are many commercial web-based survey management systems, but users have to pay for use besides having to register such as SurveyGizmo, SurveyMonkey, and QuestionPro. When these were asked to the lecturers, they prefer not to use the commercial web-based survey management system because they do not have trust on the system. This shows that the lecturers want to use any tool that help them in administering their survey practice.

Based on the described problem, a web-based system will be developed. In developing and make sure the developed web-based survey management system, two research questions were formulated:

(1) How to design the system so that it is perceived useful?
(2) How to design the interaction style so that the system is perceived easy to use?

The system will be designed to cater the needs of traditional survey practice, including
Functions to disseminate questionnaire, gather feedback and store data, specify the period,
and analyze the data. Accordingly, this study is proposed to achieve objectives as outlined in the next section.

PROJECT OBJECTIVE

The main objective of this project is to create a user friendly Online Survey Management System which make survey management easy for surveyor and help respondents to attempt the surveys.

Our special focus on designing to make the system user friendly.

Another aim of the project is to develop a online system that administers survey practice
which is called Online Survey Management System (OSMS). To achieve the main aim three objectives were formulated:

- To determine functional components of OSMS
- To develop a prototype of OSMS.

The proposed Online Survey System is easy and comfortable to use. In this software, the answers or viewpoints of the participants are collected using ratio button or check box. The system is designed in such a way that it automatically adds the votes to each alternative and after the deadline of survey it displays the result. All the activities in the project are controlled by approvers like HRS.

The system plays a vital role in minimizing the budget of survey. The implementation of project avoids the programs such as meetings, conferences etc.to take any decision or research. With the help of this online system, one can easily forward his/her ideas and viewpoints to the officials.

The proposed online project is an implementation of C# programming language for software generation that is important in college or organization to carry survey. In this system of survey, only the users authenticated by admin from the database system can drop their vote or express their viewpoint regarding the issue. Being online software, it can be logged on from anywhere with internet access.

WHAT IS SURVEY MANAGEMENT:

Today the word survey is used most often to describe a method of gathering information from a sample of individuals. Surveys can be classified by their method of data collection Mail, telephone interview, and in-person interview surveys are the most common types. Besides, surveys are also distributed and collected

through the means of electronic application over the Internet. There are two methods of using the Internet as survey mechanisms:

1. Electronic mail (email)

2. The World Wide Web (the Web).

With e-mail, researchers can send surveys to e-mail addresses as text messages, in which the recipient can then read, save, respond to, or throw away, much like a paper survey. Surveys can also be posted on the Web and may include text, pictures, and forms to be filled in by the respondent.

According to the primary difference between these two response modes is that e-mail is a push technology while the Web is a technology. That is, with e-mail, the sent messages are automatically received in the potential respondent‘s mailbox, whereas respondents must be attracted in some way to a Web page. Because of this difference, one might expect a higher response rate to an e-mail survey than to a web-based. In short, a web-based survey is a survey conducted by a researcher or the public through the internet. They can create their online questionnaire and distribute it through the Internet.

On the other hand, an online survey management system is a system which can manage the survey through internet. In this project, a database will be integrated with the OSMS to store data. When respondents answer the survey at anytime, data will be stored in the database. At the end of data collection period, researchers can retrieve the responses to analyze.

TYPES OF ONLINE SURVEYS:

Nowadays, online surveys are everywhere on the Internet. There are various categories of online surveys. There are two major categories of Online surveys:

1. Probability-based
2. Non probability-based surveys.

Included the following in the non-probability-based category:

1. Entertainment surveys
2. Self-selected Web-surveys
3. Surveys made up of volunteer panel of Internet users

Entertainment surveys consist of questionnaires that request a vote on particular questions and other instant polls. Usually, people need to spend a lot of time to complete an entertainment survey. These surveys do not lead to generalizations of viewpoints across populations, and are not intended for that reason.

Other non-probability-based surveys include dedicated survey sites maintained by owners of Web sites. Such surveys could allow multiple submissions, and make no attempt to be representative of the whole Internet population.

On the other hand, there are several types of probability-based Web-based surveys as listed below:
Intercept surveys which are frequently used to survey on customer satisfaction:

1. Surveys that obtain respondents from an e-mail request.
2. Mixed-mode surveys where one of the options is a Web survey.
3. Pre-recruited panel of a particular population as a probability sample

In addition, the Intercept survey polls every nth visitor to a Website and prevents multiple submissions from the same computer by using cookies. This is important to make sure that every response is sent by different respondent. In the survey that obtains respondents from an e-mail request, the survey will be sent to respondents who agree to complete a survey in response to an e-mail invitation to participate.

Non-response is a big concern with this type of Online survey. The mixed-mode survey let the participants complete the survey on the Web or by paper. With a pre-recruited panel as a probability sample, respondents are provided with passwords or personal identification numbers. In some cases, the participation of probability-based samples of the full population is obtained by providing equipment in exchange for participation in the survey. From these, it could be concluded that the type of the web-based survey is determined by the objectives of the survey and also the type of questions that are asked by the researchers.

PROJECT DESCRIPTION:

Through Online Survey Management System surveyor can create surveys according to their needs and survey respondents can attempt surveys

Online survey management system encompasses how the surveyor organize, run and manage various types of surveys through the internet. It lets the surveyor not only to build questionnaires but also to publish questionnaires to the respondents. This technology provides an inexpensive mechanism for conducting surveys online instead of through traditional survey methods. Also, it speeds up the distribution and response cycles.

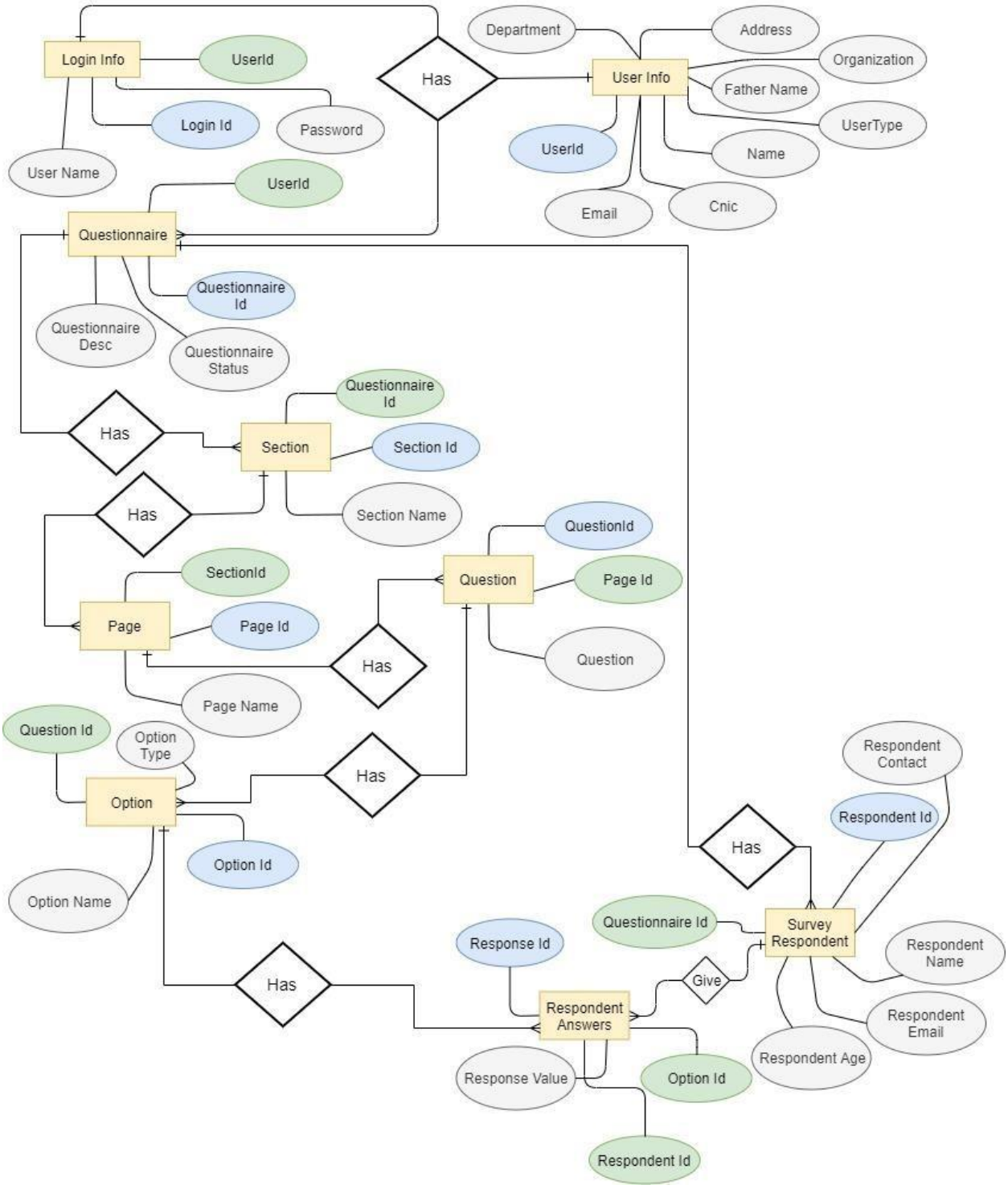
However, it is observable that most people or organizations manage their survey using traditional method by distributing their survey through the mail or by telephoning, and some may afford to self-distribute by hand. In current age, where digital is the theme, this is not a timely solution for gathering information because it does not have fast circular returning and responding from the respondents. Other issues such as cost, time and effectiveness are also within considerations.

Therefore an Online Survey Management System is required to be the solution for these issues. This initiative is proposed to solve problems as described above.

TARGET AUDIENCE:

Our target audience is researchers from different areas like research students, PhD scholars, Doctors, Medical Students etc. Who want to do research for their educational projects, thesis, and for professional research for diseases.

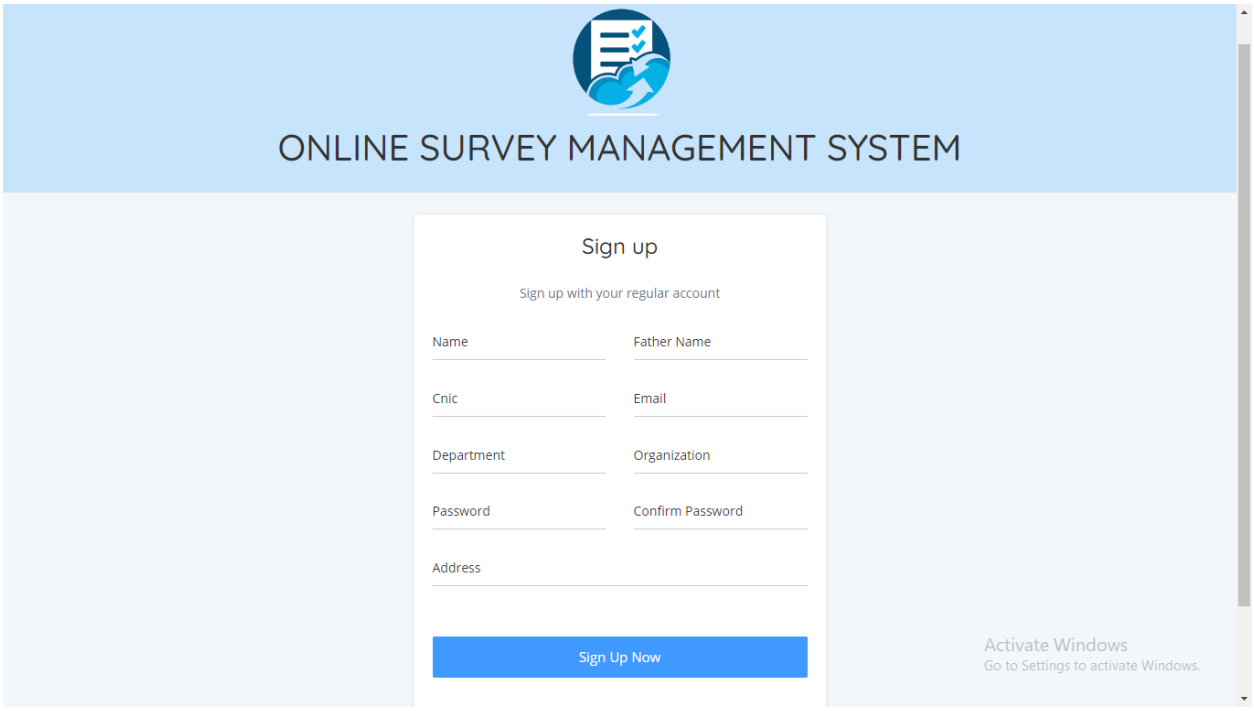
ENTITY RELATIONSHIP DIAGRAM OF ONLINE SURVEY MANAGEMENT SYSTEM:



ONLINE SURVEY MANAGEMENT SYSTEM PROCESS FLOW:

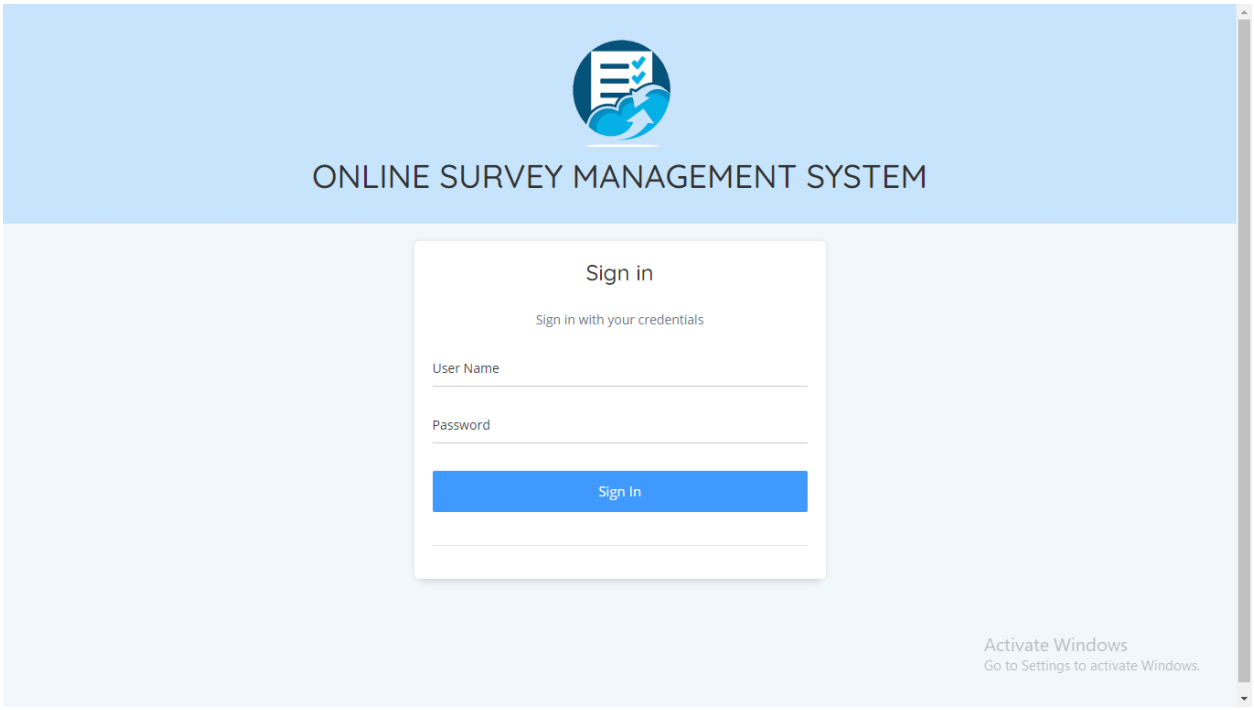
SIGNUP:

User can signup to the system from signup page.



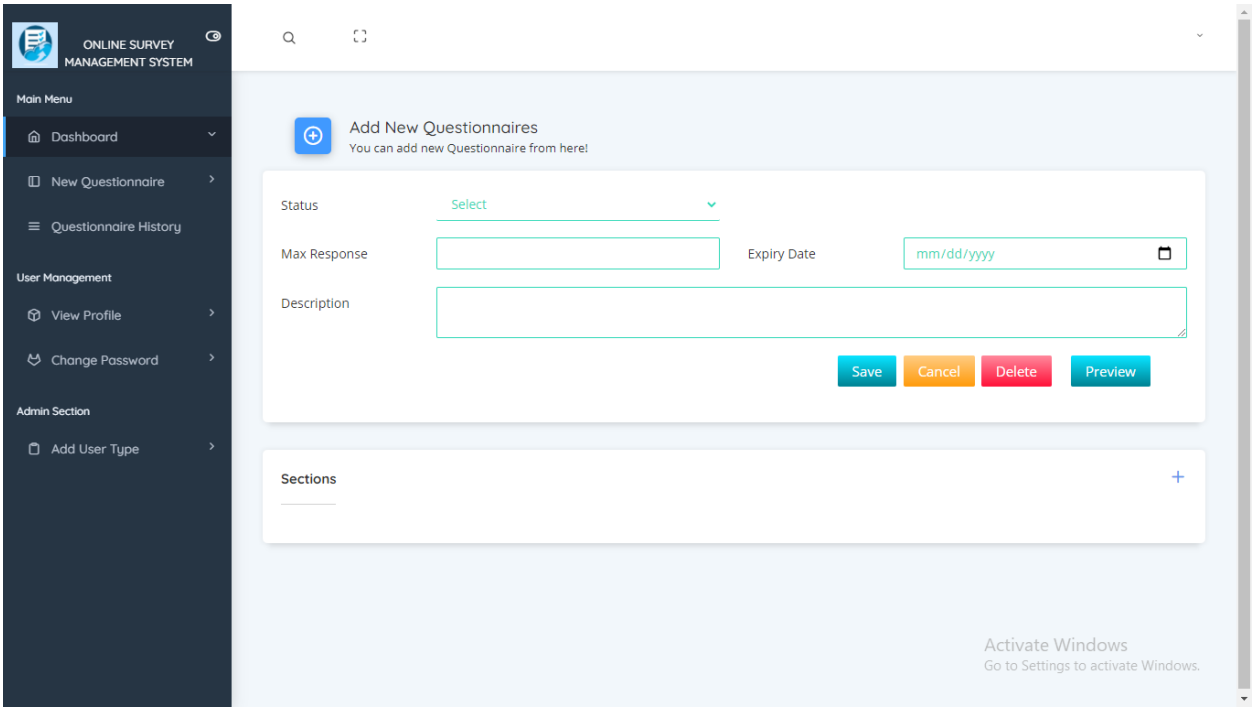
LOGIN:

User can login from login page.



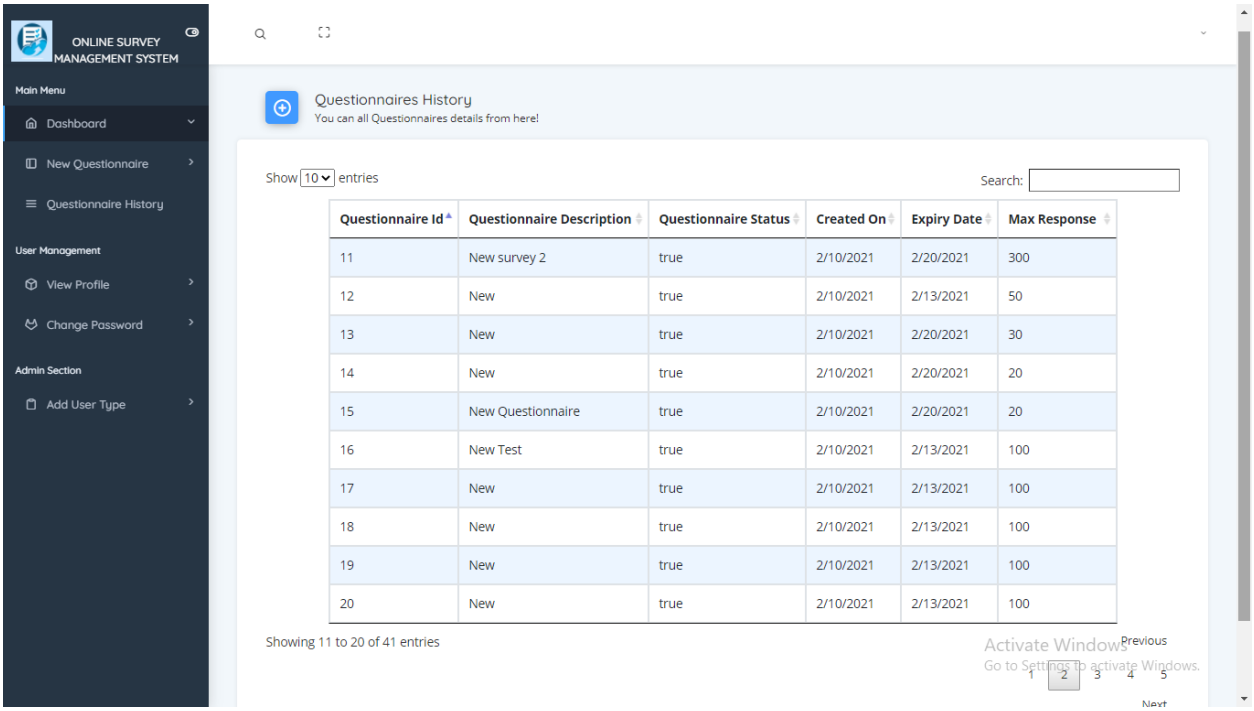
NEW QUESTIONNAIRE:

In this tab user can create new questionnaire for their survey, user will able to use different controls like Check box, Radio button etc



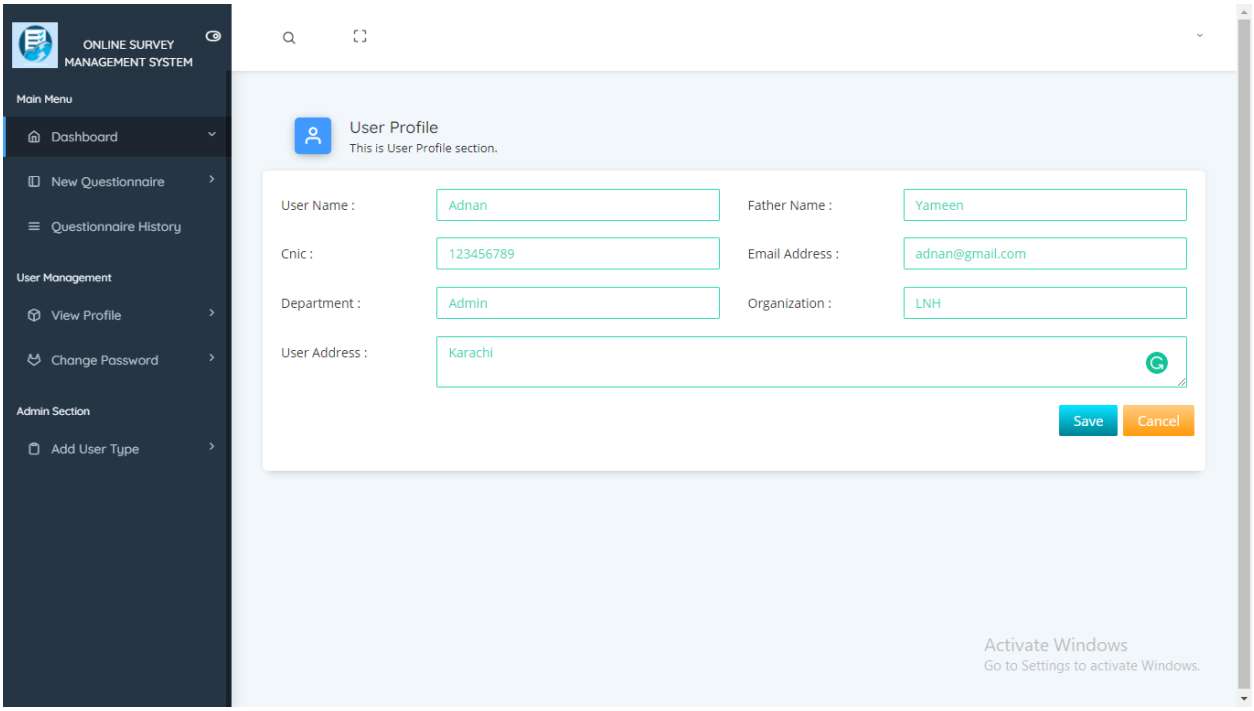
QUESTIONNAIRE HISTORY:

In questionnaire history tab user able to see history of their past questionnaire.



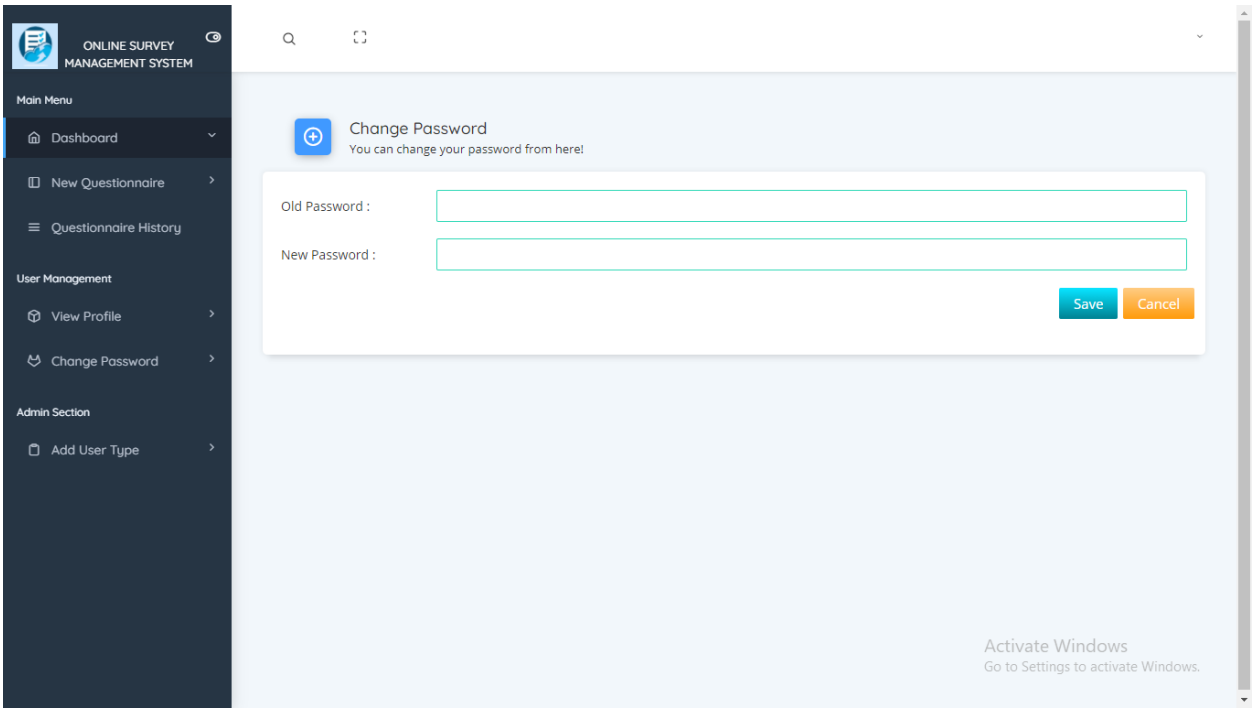
VIEW PROFILE:

In this section user can view their profile information and can change it.



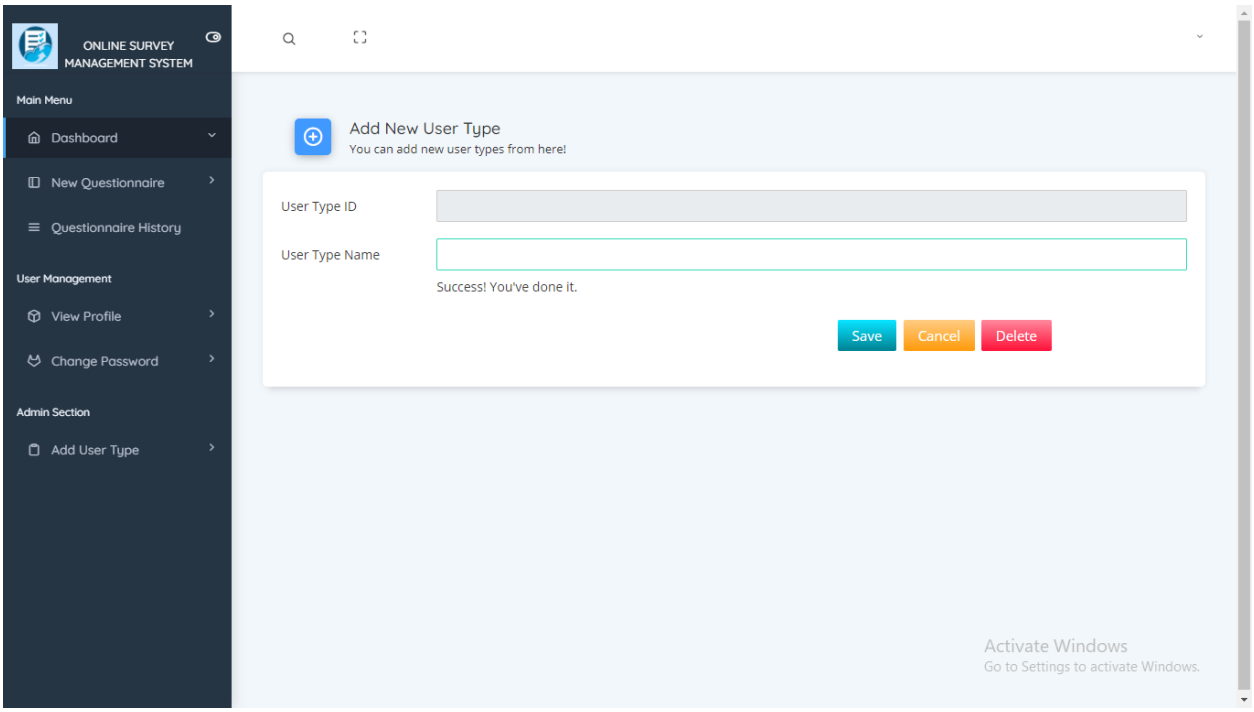
CHANGE PASSWORD:

User will change their password from here.



ADD USER TYPE:

Add user type is a setup form which is controlled by developer use to add user type.



TOOLS:

We have used Visual Studio 2015 for coding and SQL Server 2012.

TECHNOLOGY PLATFORM:

We have used following technologies in development.

1. .Net Framework 4.5
2. ASP.NET MVC 5
3. Rest API
4. HTML 5
5. CSS 3
6. Bootstrap 4
7. Jquery

CONCLUSION:

Surveys and polls are a very effective tool for gathering feedback from customers and reducing the uncertainty around important decisions. By writing down the purpose of your survey and hypotheses up front, you'll be able to learn where your intuition is strong and find organizational blind spots.

Surveying is hard and biases can enter through poor survey delivery and poor question design. It's important to think about which data type will be most useful to answer the questions at hand. Focused surveys are the most likely to yield actionable results.

In conclusion, Online Survey System Project in Java is an excellent software to conduct online survey with minimized economy. The result of the project is accurate and totally error free. With this system, the whole survey process can be conducted secretly by hiding the identities of the people surveyed. The growing use of internet and computers confirms the good scopes of project.