National College of Computer Studies

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IOST

Project Report On

"Survey System"

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Submitted By:

Atullya Maharjan

CSIT 4th Semester

Roll No: 5

Sec: B

Abstract

The Survey System is a software solution developed in Java that provides an engaging and interactive experience for users taking surveys. Unlike traditional methods that use paper forms, this system uses modern technology to allow users to complete surveys online. This removes the need for physical paper forms, making it easier and more convenient.

The main goal of this system was to create an easy-to-use and efficient platform for surveys, improving the way people gather and share opinions. The development of this system shows the strength of Java programming in creating tools that improve user experiences.

A key feature of the Survey System is that it gives participants immediate results after they complete surveys. This quick feedback makes the experience more interactive and encourages more people to take part. It helps collect data and insights effectively.

In summary, the Survey System achieves its goal of providing a simple, effective, and enjoyable survey experience. Using Java technology, it offers a reliable platform for surveys, making it a valuable tool in today's world.

Acknowledgement

I am sincerely grateful to **NCCS College** for providing me with the resources and support to undertake this project. I extend my heartfelt thanks to **Mr. Sumit Ghishing**, our esteemed lecturer for their invaluable guidance and expertise. Their continuous support has shaped the direction and quality of our work.

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Thanking You,

Atullya Maharjan

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Chapter 1: Introduction

1.1 Introduction to the project

The Survey System is software created using Java and SQL that improves how surveys are conducted and managed. It helps simplify the entire process from setting up surveys to filling them out, doing away with old paper-based methods and manual data handling.

The primary aim of the Survey System is to offer a straightforward and effective way for users to participate in surveys. It provides various tools, such as creating new surveys, adding questions, and answering surveys. Users can also see their results immediately after completing surveys, which adds to the convenience.

Moreover, the system emphasizes security and proper management of data.. The Survey System is designed to make survey participation not just easier but also more secure and enjoyable for all involved.

1.2 Problem Statement

Before the Survey System was developed, managing surveys was often a clumsy and inefficient process. It involved extensive paperwork and significant time commitments, frequently resulting in issues like data loss. This old method made it difficult to keep survey records updated and secure.

The Survey System addressed these issues by introducing a secure and user-friendly platform. Additionally, the system limits record modifications to authorized administrators only, which helps reduce paperwork, save time, and decrease paper usage.

1.3 Objectives

- To simplify the creation and management in surveys by eliminating outdated manual and paper-based method.
- To provide a user-friendly platform that allows users to easily access and complete surveys.
- To secure all survey data by implementing strict access controls.
- To offer immediate results and feedback to users upon completion of surveys.

Chapter 2: Implementation

2.1 Tools used

Visual Studio Code: The Survey System project is developed using the Java programming language as its primary tool for implementation. Java was chosen for versatility and strong community support.

In addition, the project utilizes Visual Studio Code (VS Code) as the integrated development environment (IDE) for efficient code writing, debugging, and management. VS Code provides various features like syntax highlighting, code completion, and debugging tools, ensuring a smooth and productive development process.

2.2 Implementation detail of module

The Survey System developed in Java allows users to create, participate in, and manage surveys efficiently. Below is a concise overview of key classes and methods involved in the system:

a) **createTable Function**: This method is responsible for creating tables in the database if they do not exist. It takes a SQL query string as an argument, prepares a statement, and executes the SQL command to ensure that the necessary table structure is in place.

b) **registerUser Function**: This function handles the registration of new users in the system. It collects user input for username, password, role, and address, then inserts these details into the `Users` table in the database. It uses prepared statements to protect against SQL injection.

c) **loginUser Function**: This method facilitates user login. It prompts the user to enter their username and password, checks these credentials against the `Users` table, and returns a User object if the credentials are correct. This function ensures secure login using prepared statements.

d) **createSurvey Function**: This function manages the creation of new surveys. It captures the survey title and description from user input, inserts these into the Surveys table, and handles the creation of associated questions. It iterates over user-provided questions, adding each to the `Questions` table linked to the survey's ID.

e) **participateInSurvey Function**: This method enables users to participate in an existing survey. It displays questions from the specified survey one by one, collects answers from the user, and records these answers in the `Responses` table, linking each response with the user ID and question ID.

f) **viewSurveyResults Function**: This method is used to view the results of a specific survey. It queries the database to retrieve and display all responses associated with each question of the survey, providing insights into how participants have responded.

These functions and methods form the backbone of the Survey System, allowing it to function as a comprehensive tool for survey management, participation, and analysis.

Chapter 5: Conclusion

In conclusion, the Survey System project has successfully met its goals by providing a straightforward and effective platform for creating, managing, and participating in surveys. This system, built using Java and SQL, has made the survey process much easier and more secure. Users can easily register, create surveys, and see survey responses in real time. The successful implementation of these features shows the importance of careful planning, effective system design, and thorough testing in software development. Overall, the Survey System has proven to be a valuable tool for efficiently gathering information and improving decision-making processes.

References

- https://copyassignment.com/survey-management-system-in-java/

- https://github.com/topics/online-survey-system

- https://www.scribd.com/document/559928617/Online-Survey-System