Survey System Report

Project Title: Survey Management System Developer: Mohamed Abudlakdri Hussein

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1. Introduction

The Survey Management System is a web-based application developed using ASP.NET MVC architecture. Its primary purpose is to allow administrators to create, distribute, and analyze surveys efficiently. Users can participate in surveys, and their responses are stored securely for future reporting and analysis.

2. Objectives

- To create a user-friendly interface for creating and managing surveys.
- To enable participants to respond to surveys easily.
- To store and analyze survey responses.
- To generate detailed reports based on collected data.

3. System Overview

3.1 Features

1. User Roles:

- o Admin: Manages surveys and generates reports.
- o Participant: Responds to surveys.

2. Survey Management:

- o Create, edit, and delete surveys.
- o Set deadlines for survey submissions.

3. Question Management:

o Add multiple question types (e.g., multiple choice, text-based, rating scale).

4. Response Management:

- o Collect and store user responses securely.
- View individual and summarized responses.

5. Reports:

- o Generate charts and tables to analyze survey results.
- o Export data to Excel or PDF formats.

4. Technical Details

4.1 Technologies Used

Backend: ASP.NET MVC Framework

• Frontend: HTML, CSS, JavaScript, jQuery

• Database: SQL Server

Authentication: ASP.NET Identity

• Tools: Visual Studio IDE

4.2 Architecture

- Model-View-Controller (MVC): Separates logic, user interface, and data handling.
- Database Design:
 - o Tables: Users, Surveys, Questions, Responses.
 - o Relationships between tables established using foreign keys.

5. Implementation

5.1 User Interface Design

- Clean and responsive design using Bootstrap.
- Intuitive navigation for both admins and participants.

5.2 Database Management

- SOL Server database with normalized tables.
- Stored procedures for data retrieval and insertion.

5.3 Security Features

- User authentication and role-based access control.
- Data encryption for sensitive information.

6. Reports and Analysis

- Graphical representation of survey results.
- Exporting options for survey data.

• Filter and sort responses based on various criteria.

7. Testing and Evaluation

- Unit testing conducted for each module.
- User acceptance testing with feedback incorporated.
- Performance testing to ensure scalability.

8. Conclusion

The Survey Management System fulfills its intended objectives by providing a robust platform for survey creation and analysis. Future enhancements may include integrating AI-based analytics and mobile app compatibility.

9. References

- ASP.NET Official Documentation.
- SQL Server Documentation.
- Bootstrap and jQuery Guides.

Appendix:

- Screenshots of key interfaces.
- ER diagrams and database schema.