Essential Survey Tool

SRS

Introduced BY Group 29

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Introduction

Executive Summary

Essential Survey Tool is an online system for both creating and filling survey forms, this system offers the needed tools for creating your forms and analyzing the results in a friendly interface, the system can be used by everyone ranging from students or teachers to business managers, researchers across all industries, with essential survey tool we will get you all the feedback and data you need to enhance the wisdom of your decision making.

Document Overview

This document is divided into two main sections, the first consists of the next chapter, the System Description, this chapter describe the informal requirements, shows the main actors involved and is used to establish a context for the technical requirements specification.

The second section of this document, which starts from System Users chapter until the end of this document, is written is primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

Abbreviations and Terminologies

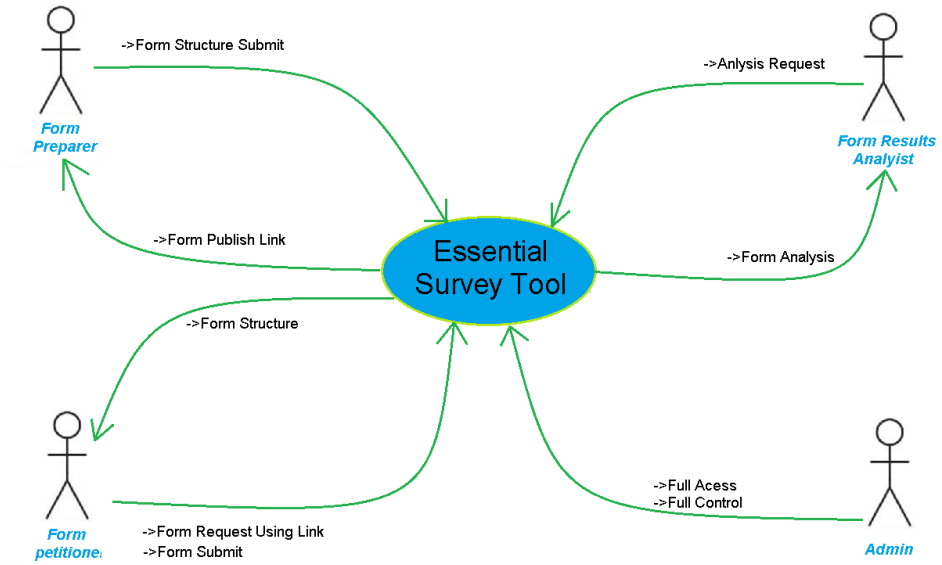
Term	Meaning
Form Preparer Or Survey Creator Or Author	The person who creates the form on the system and shares it among others to have them submit the form.
Form Petitioner or Survey Participant	The person who submits the form, he is given the link from the Form Preparer
Form Analyst	In most cases he is the Form Preparer but logged into the system to check the results of the form submits.
Form Structure	The arrangement and type of questions of the form in html code.

References

N/A

System Description

Introduction

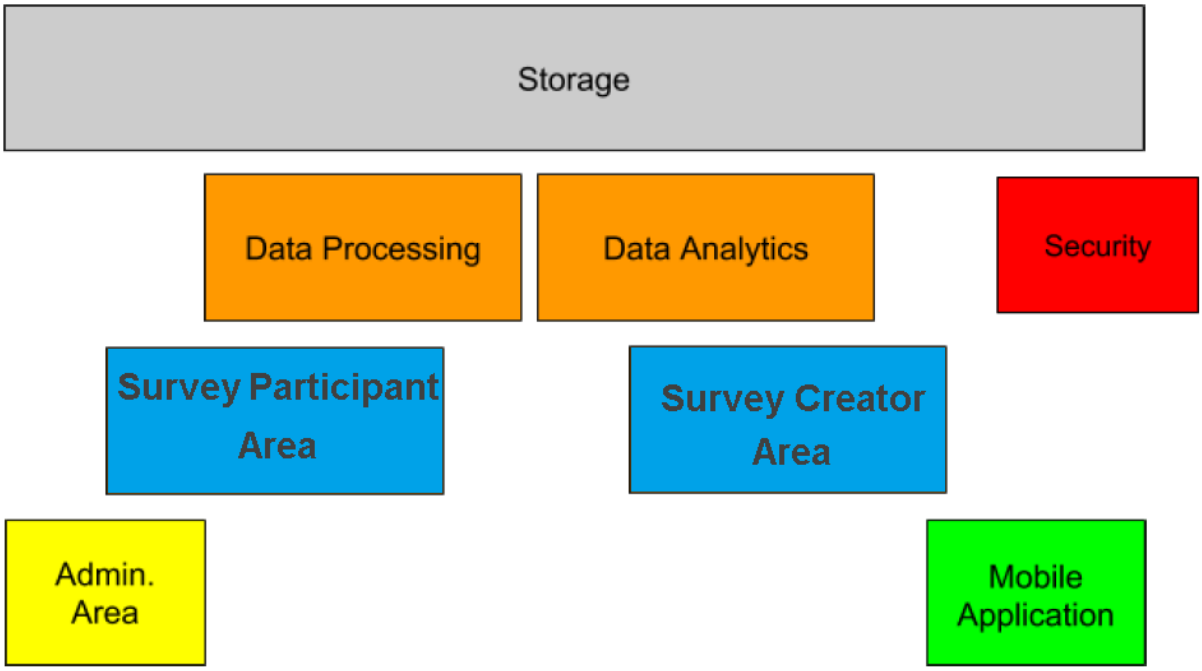


The Essential Survey Tool System consists of four active actors, The Form Preparer, The Form Petitioner, The Analyst and an Admin.

First the Form Preparer creates a Form structure and submits it to the system, the system in return, outputs a shareable link which is then used by Form Petitioners to access the form and submit their results, later, the Form Preparer can log into the system as the Analyst to get the full details and analysis of the form submit results.

At any time, the Form Preparer can pause submissions to the form, delete it or even put an expiration date then it will be deleted automatically, and if any problem arises, he can always contact the Admin user, who has full access to all database including all form Structures, Submits and their respective author accounts.

Modules



These modules make the whole System Architecture,

1. Storage
2. Data Processing
3. Data Analytics
4. survey creator area
5. Participant Area
6. Admin Area
7. Mobile Application
8. Security

Storage

Mainly used for:

- Storing forms structures.
- Storing form submissions.
- Storing forms input types.
- Storing Form Preparers accounts.

Data Processing

This module is responsible for modeling both form structures and form submissions into storable HTML text code to be able to be put into database, also it is used for calling back Form submission data from database to be analyzed in Data Analytics module.

Data Analytics

This module is important to study the forms results and produce very useful result. Basically, this module does Statistical analysis to produce a set of statistical studies regarding users form submissions. For example, this analysis can study the distribution of number of people participating in the form vs. time or region or language.

Security

To take care of authentication and identification of users, through login and register system and prevent malicious users from taking other users identity.

Survey Creator

The module hands out the form creation tools and interface to the Form Preparer to assist him in creating his form.

Admin

This module can be accessed by an Admin user, it gives an overview list of all form structures and authors, it also enables him to edit them out ,add or even delete entities.

Mobile Application

The whole system will be available as android mobile application.

Users

Form Preparer (Author), Creates forms and submits it to the system

Form Petitioner, Takes the form and submits the result to the system.

Form Analyst, same person as the Form Preparer or has his permission, can request result analysis for a form's results.

Admin, Highest class user can access all database including form structures and authors accounts and able to add/remove/edit them out.

System Users

Form Preparer Role Description

- Creates a new form and submits its structure to the system.
- Pauses the form submissions for a limited time.
- Edit, delete a created form or put an expiration date.
- Shares the link given to him by the system to the Petitioners.

Form Petitioner Role Description

- Accesses the link shared by the Preparer which leads to the form submission page.
- Submits his form result to the system.

Form Analyst Role Description

- Accesses a form’s statistical results.
- Needs to be the Form Preparer or have Preparer’s permission.

Admin Role Description

- Add/delete authors.
- Edit authors.
- Add/delete form structures.
- Edit form structures.
- Link/unlink form structures to authors

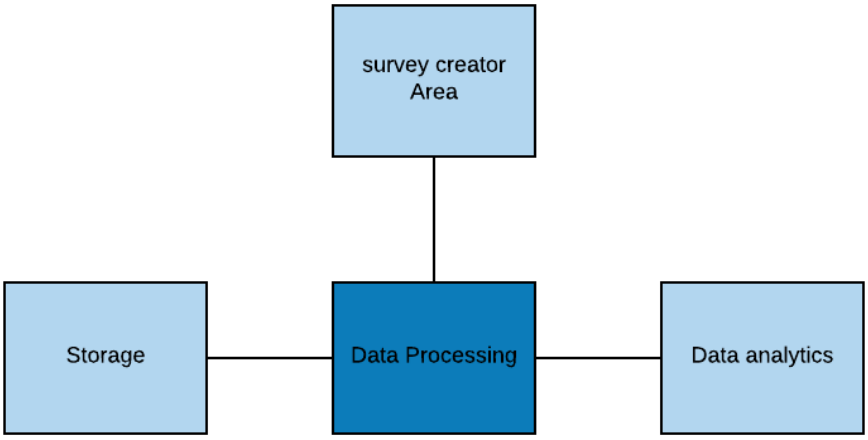
System Modules

Data Processing

This module is responsible for modeling both forms and form submissions into storable data to be able to be put into database, also it is used for calling back data from database to be analyzed in Data Analytics module.

Use block or context diagram to illustrate external and sub-modules.

Use activity diagram, state machine diagram, data flow diagrams to illustrate module operations.



Data processing context diagram.

Data Analytics

This module is important to study the forms results and produce very useful result. Basically this module does Statistical analysis to produce a set of statistical studies regarding users form submissions. For example, this analysis can study the distribution of number of people participating in the form vs. time or region or language.

Data Analytics context diagram.

Security

To take care of authentication and identification of users, through login and register system and prevent malicious users from taking other users identity.

Survey Creator Area

The module responsible for managing or editing already created forms.

Survey creator context diagram.

Admin

Higher class user who is able to look into all forms for all authors and have high authority, and take higher actions like adding or removing forms or authors.

Mobile Application

The whole system will be available as android mobile application.

System Functions

[FR_1] Data Processing

1.1 Submitting forms

Description: Putting user created forms and submissions information into the database.

Inputs: submission request

Outputs: putting the necessary data into database.

Pre-conditions: An active account for the user.

1.2 Getting Data from data base to Analytics Module

Description: Getting back the required data by the Analytics module from storage.

Inputs: Request from the Analytics Module.

Outputs: Getting back the required data.

[FR_2] Form Creator Area

2.1Choosing questions

Description: Customer can choose from different types of survey questions such as:

* Rating scale questions

* Likert-type scales

* Semantic differential

* Multiple choice questions

* Rank order questions

* Dichotomous questions

* Open-ended questions

And other different types, and Customer can easily choose the type of question he/she wants from the question types provided and drag and drop it into his/her survey page and then specify the question as he wants. He / She can choose as much questions as needed to cover all the points that the customer needs information about

Inputs: Drag and Drop from the list

Outputs: Putting the Dropped question into form structure

Pre-conditions: An active account for the user.

2.2 Control the time of the survey

Description: Customer can choose when to start his survey and the duration that it lasts so it will close automatically at the specified deadline.

Inputs: Start time, duration.

Outputs: save time settings in the database.

Pre-conditions: An active account for the user, at least one question in the form.

2.3Send surveys via web, email, social and more

Description: Customer can reach other people easily by sending the surveys to their emails or simply share his surveys on social media. The customer can also choose who to send the surveys for, example his audience and to invite specific persons.

Inputs: selected Receivers, communication platform.

Outputs :sending the form to the selected receivers

Pre-conditions :An active account for the user ,at least one question in the form

3.Security

3.1 Registration

Description : Form Authors must register an account on the website.

Inputs: username and password.

Outputs: the user gets a registration success message and username is pushed into the database

But if username is already in use ,then output a warning message telling user to choose another username.

Pre-conditions: username or password fields are valid characters and are not empty.

3.2 login

Description: Form Authors are asked to login to get access to the core modules.

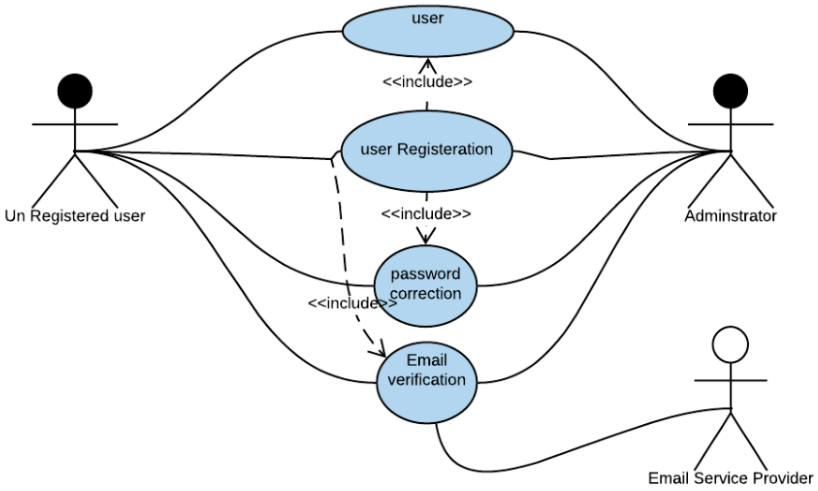
Inputs: username and password.

Outputs: user is pushed to the main page if success ,otherwise gets a wrong username or password warning message.

Pre-conditions: username or password fields are valid characters and are not empty.

System Models

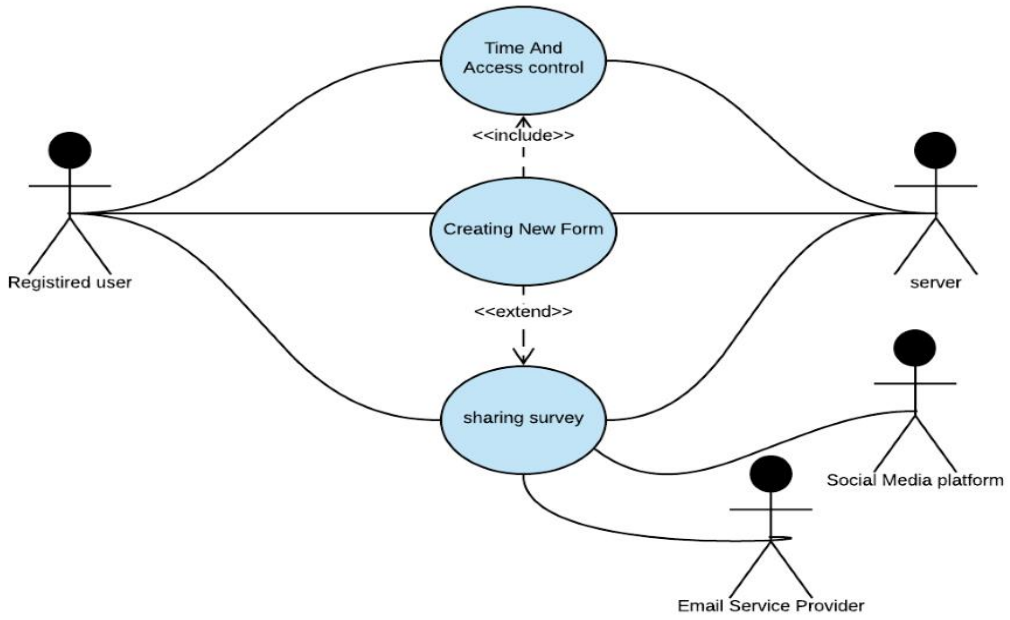
Registration Use Case Diagram



Actors	unregistered users And system server
Description	User should be able to enter the required data and get user name redundant check and ensuring that the password satisfy certain level of format then the system should send Email to user registered email with embeded link that user should click to complete the process
Data	First name ,Last name, user-name, Email , password

Response	After clicking on the external link user-data should be saved in the database and user could log into the system at any time

Creating new form Use Case Diagram



Actors	Registered users , system server, social media platform, Email service provider
Description	To create a new form the user should have account on the server if not the system should promote him to made a new one after login in user can create new survey

	and choose its time and specify who has access to the system and he/she can share through Email or social media.
Data	First name ,Last name, user-name, Email , password
Response	After making the survey , it should be visible to who has access to it

Non-Functional Requirements

[NFR_1] <Security> Requirements

[NFR_1_1] Accounts Registration

No two accounts can coexist with the same username.

[NFR_1_2] Authentication

User must supply the correct username and password in order to login into an account.

[NFR_2] <Usability> Requirements

[NFR_2_1] Intuitiveness

the interface is easy to learn and navigate; buttons, headings, and error messages are simple to understand.

[NFR_2_2] Efficiency of use

goals are easy to accomplish quickly and with few or no user errors.

[NFR_3] <Operation> Requirements

[NFR_3_1] Form Body

Any created form must include at least one question.

[NFR_4] <Performance> Requirements

[NFR_4_1] user accounts

The system database can hold a maximum of 100 user accounts.

[NFR_4_2] forms

The system database can hold a maximum of 10 forms per account.

Domain Requirements

N/A.