

Software Requirements Specification

For

**Customers & Market eSurveys**

**via Mobile Phone**

Version 1.1

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# INTRODUCTION

## PURPOSE OF REQUIREMENT DOCUMENT

This Software Requirements Specification provides a complete description of all the functions and specifications of the customer and market survey application.

It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate.

The main purpose of this software is to conduct surveys for different organization. By using these surveys different reports will be produced using detailed and complex statistical analysis of survey data that can be used to generate graphs and that can be used by an organization to take cost-effective decisions.

## PROJECT SCOPE

**1.2.1 Description**

This software product can facilitate an organization to take cost-effective decisions on the basis of surveys conducted via mobile.

**1.2.2 Benefits**

Here are a number of benefits of surveys through mobile like it enable real-time, accurate feedback and reports, measure customer experience, understand the customers and gain deeper insight, segment the customer base so that an organization can improve the value created for the end-users.

* + 1. **Corporate Goals or Business Strategy**

This software will make market research simple i.e. questioning with customers; real-time evaluation saves a lot of work and all results can be analyzed thoroughly.

Having an efficient and customized guidance through the questionnaire is a true timesaver, stress-free in use and allows you to cross-analyze the feedback in real time.

Through this software product an Organization can cross-analyze against behavior and technical capabilities and then can take efficient decisions using that analysis.

## DEFINITIONS, ACRONYMS & ABBREVIATIONS

**SQL Server**

SQL stands for Structured Query Language

SQL is a [database](http://en.wikipedia.org/wiki/Database) computer language designed for managing [data](http://en.wikipedia.org/wiki/Data) in [relational database management systems](http://en.wikipedia.org/wiki/Relational_database_management_systems) (RDBMS), and originally based upon [relational algebra](http://en.wikipedia.org/wiki/Relational_algebra) and [calculus](http://en.wikipedia.org/wiki/Relational_calculus). Its scope includes data insert, query, update and delete, [schema](http://en.wikipedia.org/wiki/Database_schema) creation and modification, and data access control.

**ASP.NET**

ASP stands for Active Server Pages

ASP.NET is a [web application framework](http://en.wikipedia.org/wiki/Web_application_framework) developed and marketed by [Microsoft](http://en.wikipedia.org/wiki/Microsoft) to allow [programmers](http://en.wikipedia.org/wiki/Programmer) to build dynamic [web sites](http://en.wikipedia.org/wiki/Web_site), [web applications](http://en.wikipedia.org/wiki/Web_application) and [web services](http://en.wikipedia.org/wiki/Web_service). It was first released in January 2002 with version 1.0 of the [.NET Framework](http://en.wikipedia.org/wiki/.NET_Framework), and is the successor to Microsoft's [Active Server Pages](http://en.wikipedia.org/wiki/Active_Server_Pages) (ASP) technology. ASP.NET is built on the [Common Language Runtime](http://en.wikipedia.org/wiki/Common_Language_Runtime) (CLR), allowing programmers to write ASP.NET code using any supported [.NET language](http://en.wikipedia.org/wiki/List_of_CLI_languages).

**ADO.NET**

ADO stands for [ActiveX Data Objects](http://en.wikipedia.org/wiki/ActiveX_Data_Objects)

ADO.NET is a set of computer software components that programmers can use to access data and data services. It is a part of the [base class library](http://en.wikipedia.org/wiki/Base_Class_Library) that is included with the [Microsoft .NET Framework](http://en.wikipedia.org/wiki/.NET_Framework). It is commonly used by programmers to access and modify data stored in [relational database systems](http://en.wikipedia.org/wiki/Relational_DBMS), though it can also access data in non-relational sources.

**ADMIN**

ADMIN stands for Administration

ADMIN means to work for Organization, Controlling the operation itself in the Company by Adhering the Policies of Company.

**LOGIN ID**

ID stands for identification duh

Login ID used to log in to the software or website.

**GUI**

GUI stands for graphical user interface

A user interface based on graphics (icons and pictures and menus) instead of text; uses a mouse as well as a keyboard as an input device, where the user clicks on a visual screen that has icons, windows and menus, by using a pointing device. GUI makes it easy for the user, therefore makes user-friendly.

**ASCII**

ASCII stands for American Standard Code for Information Interchange  
  
ASCII is a code that assigns a number to each letter of the alphabet (lower case and upper case) and to each special character found on a standard English typewriter, plus various special codes (backspace, space, delete, carriage return, line feed, etc)

**Smart Device**

A smart device is an electronic device that is cordless (unless while being charged), mobile (easily transportable), always connected (via Wi-Fi, 3G, 4G etc.) and is capable of voice and video communication, internet browsing, "geo-location" (for search purposes) and that can operate to some extent autonomously.

**Market survey**

Market surveys are related to any upcoming product.

**Customer survey**

Customer surveys are about company existing products.

**1.4 REFERENCES**

* IEEE Std 830-1998 .IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.
* http://www.scribd.com/doc/9138468/Software-Requirement-Specification-SrsMidtems
* <http://www.processimpact.com/process_assets/srs_template.doc>

**1.5 OVERVIEW**

The rest of this SRS is organized as follows:

* Section 2 gives an overall description of the software. It gives what level of proficiency is expected of the user, some general constraints while making the software and some assumptions and dependencies that are assumed.
* Section 3 contains most important features presented with detailed description, and requirements. It gives specific requirements which the software is expected to deliver. Functional requirements are given in this section. This section is written primarily for the developers and describes in technical terms the details of the functionality of the product and about safety and performance.

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

# GENERAL DESCRIPTION

## PRODUCT PERSPECTIVE

This mobile application will be used by marketing team of an organization. The environment where the project will be implemented in a multinational company that offering several products and needs to conduct market and customer surveys.

## PRODUCT FUNCTION

* + 1. **For Data entry operator**

User will go to different groups of people and organization to conduct surveys via mobile phones. The user is provided a mobile phone in which our application will be installed. To conduct surveys he needs to open that application in which survey form is available.

After entering data user will submit that form which is stored in our database that will be access through web service.

* + 1. **For Administration**

The administrator will be managing website of the application which includes surveys. Upload new survey forms and update website.

* + 1. **Business Analyst**

Business analysts are required to analyze data and then select attributes to generate different graphs and reports.

## USER CLASSES AND CHARACTERISTICS

We will be having different classes for following users.

## 2.3.1 Data Entry Operator

This class will contain the function to open survey form, fill form and submit the form to the database through web service.

## 2.3.2 Administration

This includes function to view website and edit website.

## 2.3.3 Business Analyst Operator

This class contains functions to generate graphs and reports.

## GENERAL CONSTRAINTS

## 2.4.1 Hardware Limitations

Hardware limitation of this software product can be unavailability of mobile. If cell phone not available then the employee can’t use the software to conduct survey.

## 2.4.2 Security Consideration

Security issues can be that if any employee or any other person using id of other employee. May be that person login with the id of any other employee and order food but the amount of food will be deducting from the salary of the person from which order was given. There can be misuse of any employee id by other employee if he knew his/her password.

* 1. **ASSUMPTIONS AND DEPENDENCIES**

## ****Assumptions****

For mobile application, cell-phone may not be available and if available then they might not be charged. The electricity failure may occur where the website going to be use by administrator.

## ****2.5.2 Dependencies****

This software is highly dependent on the availability of cell-phone, computer and internet connection where the website going to be accessed. The software also depends on the users handling the application either on mobile or computer.

# SPECIFIC REQUIREMENT

## FUNCTIONAL REQUIREMENT

## For Data Entry Operator

1. The user will open the application via mobile.
2. Once the application is opened user will be able to access the survey forms.
3. User select one of two categories of surveys i.e. market or customer by clicking on respective hyperlink.
4. If user selects market survey he will be provided by 2 survey forms i.e. Soap and Shampoo.

D.1 If Soap is selected then soap survey form will be open.

D.2 If shampoo selected then respective survey form will be open.

1. If user selects customer survey he will be provided by Medicine survey form.
2. Then user will conduct the survey and post the survey form to the web service by clicking on submit button.

## For ADMIN

1. The user will login to the system by entering user name and password.
2. The user once logged in will be managing the data.

## For Data Analyst Operator

1. The user will login to the system by entering user name and password.
2. The user once logged in will be doing analysis by generating graph by applying data mining algorithm (i.e. decision tree).
3. Data analyst generate reports by selecting appropriate field that will print after that

## NON FUNCTIONAL REQUIREMENTS

**3.2.1 Product Requirements**

* **Usability**

Our software does not need to be that much user friendly as it is designed for the organizations. It is a user centered designed. On source code comments are also encoded. Tools are user friendly which made easier for the user to use our software.

* **Reliability**

It analysis testing procedures that allows previewing of software warranty and service cost long. Our software can be worked for a wide range of time. It will be worked on without any failure.

## Performance

It is open software. It can create powerful, realistic work for thousands of users running software. The website will respond to user request within 2 seconds if user wants to see the graphical analysis enlarged it will immediately display it to user

* **Efficiency**

Our software provides easy to use tools that any user can access software that are appropriate and well managed. User login will not take much time. It will operate quickly with acceptable system performance.

* **Portability**

Our software can run on the environment that support network domain like Windows7(for mobile application) and windows XP, windows 7 etc (for web service) .Time requirement is needed to move the software.

**3.2.2 External Requirements**

**Ethical**

* The user will not find any odious data in the software.
* The software’s abusive and fake usage will highly be condemned.

**Safety**

No such heavy downloadable in the software which can lead to system crash.

## Security

No external user is allowed to make changes in the software, only administrator can make changes. The whole login time should not take much time and the password entered by the administrative person display as ASCII character”\*”.

## EXTERNAL INTERFACE REQUIREMENTS

**3.3.1 Hardware Interfaces**

The software requires windows 7 mobile for the mobile application but for the web service no hardware is required.

### 3.3.2 Software Interfaces

SQL Server 2008 r2 is used for storing database. The system must provide SQL data table definitions and all commands used in SQL Server 2008.

ASP.NET 2010 is used which provides the front end coding i.e. user login options, graphical analysis, information and designing of the whole website is done by using ASP.NET 2010.Visual C# 2010 edition is used for coding . Smart Device 2010 is used for the mobile application design.

## 3.3.3 Communications Interfaces

There are no special communication interface requirements.

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