Software requirements specification for Supportmyphone

Group #1

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# Introduction

## 1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the "SupportMyPhone" , ticket management system regarding cellular technical support.

Using "SupportMyPhone" technical support representatives can provide quick and efficient solutions to company customers.

This SRS describes a single system.

## 1.2 Document Convention

When writing this SRS the following terminologies are used:

Ticket means a detailed customer request for any service from the organization.

Circles or indents specify the above.

## 1.3 Intended Audience and Reading Suggestions

This document intended to the software team who develop this system include reviewers, software developers.

The organization managers who buy this system can read about features and functions that the system has to offer.

## 1.4 Product Scope

The final product enabling to save time for the organization by managing all the contact support freeing up valuable time for more important work.

Get better and faster support, happier contacts,

By categorizing tickets correctly, a ticketing system allows for proper management of incidents leading to quicker resolution times.

## 1.5 References

This document builds on the architecture for ticketing system that is suitable for customer service.

# 2. Overall Description

## 2.1 Product Perspective

This program is a self-contained product. It will help the representative in cellular company to record and manage tickets of contacts. And will help managers managing supervision and producing reports.

Main goals of SupportMyPhone:

* Recording and managing customer tickets.
* Save time and money.
* Improved service.

Customer service on a larger scale:

* The tickets database is shared by all representatives, allows treatment by several representatives.
* Stakeholders can check what is the most common problem of customers and improve it.
* Stakeholders can check who uses the most in their service to offer them additional services and earn more money

## 2.2 Product Functions

The program will have the following functions:

Functional:

* Sort tickets on verity of parameters
* Store tickets into tickets’ database
* Create contact profile
* Create ticket
* Most common problems report
* Most active contacts report

Non-Functional:

* Search contact by ID
* Find the most active customers
* Solutions suggestions for common problems

## 2.3 User Classes and Characteristics

Users of the product, the representatives and managers should be able to use the program very easily duo the friendly work environment our system is giving.

The only requirement of using the program is to be familiar with Windows O/S.

Representatives can be classed to specific specialty or seniority.

For better integration, new representatives will have to pass a quick course about the program which the experienced employees can instruct them.

## 2.4 Operating Environment

The system will work on windows environment.

Hardware:

|  |  |
| --- | --- |
| Requirements |  |
|  |  |
| Operating system | Windows 8 or superior |
| CPU | Core 2 Quad Q6600 at 2.4 GHz or AMD Phenom 9850 at 2.5 GHz or superior |
| Memory | 4 GB RAM |
| Hard drive | 10 GB of free space |
| Media | DVD-ROM, 8x or higher |
| Graphics hardware | DirectX 10-compatible |
| GPU | GeForce 6800GT 1GB or  ATI Radeon HD 3870 1GB |

## 2.5 Design and Implementation Constraints

The challenges in developing the system include also hardware and backup problems,

In some computers can run out of storage, another computers might shut down for any reason and lose important information.

The organization who use the system responsible to increase and backup the database.

## 2.6 User Documentation

Along with the software product, a user manual would be written to help the organization how to backup the database.

## 2.7 Assumptions and Dependencies

Each representative and manager will receive a user name and password from the organization to login the system.

Representatives and managers will fill out the tickets, so there is a possibility of human error and damage to the credibility of the tickets.

Every "ticket number" (ticket id) will be filled by the system in ascending order.

Tickets database updating each computer is used in the system.

# 3. External Interface Requirements

## 3.1 User Interfaces

## This section describes the logical characteristics of each interface between the intended software product and the users.

In each screen the user can go back for comfortable use of the software.

When the existing contact need support the user can insert his id and the contact profile will appear, in addition when the user opens a new ticket for existing contact he should not enter all his details again.

## 3.2 Hardware Interfaces

The relationship between software and hardware in our system is that all the data that the user enters, all the tickets will be saved in the ticket's database on the hard disk in the computer first, then the data will be uploaded and sync with the main database.

## 3.3 Software Interfaces

Our product has a connection to using databases.

In order to save all the tickets, we must use ticket's database

In our system we will use a table-shaped database, each line represents one ticket.

## 3.4 Communication Interfaces

Our product requires communication requirements.

Except for two cases when the organization wants a shared database for all computers or back up the database in external cloud, in these cases it is the responsibility of the organization to have an Internet connection.

# 4. System Features

The major services and functional requirements for the product can be illustrated by system features.

this section is expected to go through iterative improvement to make the most logical sense for the intended product.

## 4.1 Add a new customer problem

4.1.1 Description and Priority

Allows the user to add a new ticket to the ticket's database, this feature is the main idea of all the ticketing system with high priority (9),

Documentation of each customer's call to customer service.

4.1.2 Stimulus/Response Sequences

The user can choose whether to add a new card to a new customer or an existing customer, if an existing customer is selected, a customer search page will be opened by ID, then the user should enter only the problem details.

If an existing customer is selected, the user will enter the customer details and the details of the problem, the system will know how to open a new contact profile and a new ticket.

4.1.3 Functional Requirements

REQ-1: Create contact profile.

For every new contact the system should create contact profile that includes name, ID, phone number and email, the system will help the user to prevent human errors, if the user will type invalid input the system will print an error massage.

The integrity of the customer's information is essential to achieving the system's goals.

REQ-2: Create ticket template

For every contact's call the user will type the problem details,

Tagging the problem by types will help achieve system goals.

every ticket will be linked to a contact profile, in addition Every ticket will include:

* Checkbox for problem type:

Internet:

* Slow connection
* Capacity connection
* Inappropriate content

Hardware:

* Battery problem
* Broken device
* Camera problem

Calls:

* Signal problems
* Travel package

Massages

* MMS problems
* SMS problems
  + Verbal description of the issue
  + Date
  + Severity
  + Status –open, in handling or closed
  + Stakeholder – contact service / technical support
  + Add comments or documents.
  + Every new ticket the program will transfer information to the Analysis system.

REQ-3: All data will be securely stored.

After the user types the problem details, the system will save the ticket in the ticket's database and save local on the hard disk and option to upload all data to an external cloud.

This will allow us to manage all tickets according to the goals of the system.

## 4.2 Manage Tickets

4.2.1 Description and Priority

The system will show all the tickets in a friendly way to the user.

This feature has high priority (8).

in a way that saves time in handling problems and streamlines customer service.

4.2.2 Stimulus/Response Sequences

The system will sort all the tickets by status by default, the user can choose other parameters to sort.

The user can press any contact ID and all the contact's history tickets will appear.

4.2.3 Functional Requirements

REQ-1: Sort tickets by different parameters.

* Option to sort tickets by:
  + Status
  + Contact id
  + Date
  + Severity
  + Ticket number

The program will show all the tickets sorted by the chosen parameter.

* The user can choose any ticket and program will show all the details about this ticket.
* The user can sort by contact id, click contact name and the program will show all his tickets history.

## 4.3 Analysis ticket's database.

4.3.1 Description and Priority.

To improve customer service we will need to learn lessons from previous problems, this feature help us understand this.

This feature has high priority (8), one of the system goals is to improve service.

4.3.2 Stimulus/Response Sequences

The user can choose between two options.

First, he can choose to see the most common contact's problem types, the system will sort first to last.

In addition, the system can show the user some solutions for the common problem types that may help.

Second, the user can choose to see customers who consume the most internet surfing.

4.3.3 Functional Requirements

REQ-1: Analysis system to improve service.

First, sorting problems by the most common problem types will help the user to learn from it, the user will know what to improve in the organization.

Second, the system will be able to identify which customers use the most of the organization's services according to its Internet or call inquiries.

The user will be able to offer these customers various internet packages, various packages of calls abroad, etc.

In this way, he can increase the organization's income.

# 5. Other Nonfunctional Requirements

## 5.1 Performance Requirements.

## The system must be interactive and the delays involved must be less, so in every action-response of the system, there are no immediate delays. In case of opening windows forms, of popping error messages and saving the settings or sessions there is delay much below 2 seconds.

## 5.2 Safety Requirements.

To prevent data damage and data reliability, it is necessary to back up the database after each change.

## 5.3 Security Requirements.

In order to verify the identity of the user, the agent will receive a user name and password from the organization, this user name and password will be predefined in the system.

Information transmission should be securely transmitted to server without any changes in information.

Protecting the cloud-backed database will be the responsibility of the organization.

## 5.4 Software Quality Attributes.

It must be made sure that the system is reliable in its operations and for securing the sensitive details,

As the system is easy to handle and navigates in the most expected way with no delays.

In that case the system program reacts accordingly and transverses quickly between its windows.

## 5.5 Business Rules.

Only users that approved by the organization can make changes in the system platform.

# 6. Other Requirements

REQ-1: In our system we will use a table-shaped database.

Any other requirement is mention already in this SRS.

# Glossary

Ticket - means a detailed customer request for any service from the organization.

# Analysis Models

A diagram appears in 2.2 section – "Product Functions".

**To Be Determined List**

Nothing TDB, it means everything was defined unequivocally in the document.