**Software Requirements Specification**

**For**

**Our Meraki Web Application**

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INDEX

[1 Introduction 4](#_Toc81238393)

[1.1 Purpose 4](#_Toc81238394)

[1.2 Target audience 4](#_Toc81238395)

[1.3 References 4](#_Toc81238396)

[1.4 Abbreviations 4](#_Toc81238397)

[1.5 Overview 4](#_Toc81238398)

[2 Overall Description 5](#_Toc81238399)

[2.1 Product Perspective 5](#_Toc81238400)

[2.1.1 System Interfaces 5](#_Toc81238401)

[2.1.2 User Interfaces 5](#_Toc81238402)

[2.1.3 Hardware Interfaces 5](#_Toc81238403)

[2.1.4 Communications Interfaces 5](#_Toc81238404)

[2.1.5 Software Interfaces 5](#_Toc81238405)

[2.1.6 Memory Constraints 5](#_Toc81238406)

[2.1.7 Site Adaptation Requirements 5](#_Toc81238407)

[2.2 Product Functions 5](#_Toc81238408)

[2.3 User Characteristics 6](#_Toc81238409)

[2.4 Constraints 6](#_Toc81238410)

[2.5 Assumptions and Dependencies 6](#_Toc81238411)

[3 Specific Details 7](#_Toc81238412)

[3.1 External Interface Requirements 7](#_Toc81238413)

[3.1.1 User Interfaces 7](#_Toc81238414)

[3.1.2 Hardware Interfaces 9](#_Toc81238415)

[3.1.3 Communications Interfaces 9](#_Toc81238416)

[3.1.4 Software Interfaces 9](#_Toc81238417)

[3.1.5 Design Constraints 9](#_Toc81238418)

[3.1.6 Software Attributes 9](#_Toc81238419)

[3.1.7 Installation. 10](#_Toc81238420)

[3.1.8 Version Numbering 10](#_Toc81238421)

[3.1.9 Database Requirements 10](#_Toc81238422)

[3.1.10 Excluded Features 10](#_Toc81238423)

[3.1.11 Other Requirements 10](#_Toc81238424)

# Introduction

## Purpose

The purpose of this document is to identify the software requirements for development of online pet adoption, fostering and volunteering application.

## Target audience

The target audience includes all team members of Kertech Info Solutions and <client name here>.

## References

[1] Discussions with team members on WhatsApp

.

## Abbreviations

|  |  |
| --- | --- |
| ANSI | American National Standards Institute |
| API | Application Program Interfaces |
| ISO | International Standards Organization |
| LAN | Local Area Network |
| N.A. | Not Applicable |
| SQA | Software Quality Assurance |

## Overview

Section1 "Introduction" provides an overview of the Software Requirements Specification document.

Section 2 "Overall Description" describes the general factors that affect the product and its requirements. This chapter contains background information.

Section 3 "Specific Requirements" describes all software requirements at a sufficient level of detail for designers to design a system satisfying the requirements and testers to verity that the system satisfies requirements

# Overall Description

This section describes the general factors that affect the product and its requirements.

## Product Perspective

<Client Name Here> wants to develop a software which allows them to manage pet adoption, fostering and volunteer activities online. This involves a website.

### System Interfaces

The application to be developed in two major parts:

1. Web Application Server- A service will provide database access and data processing services.
2. Web GUI: A web site which will interact with users.

### User Interfaces

This will be provided by a website.

### Hardware Interfaces

NA

### Communications Interfaces

The communication will be over the internet.

### Software Interfaces

Web GUI (website) will interact with Web Application server to save and retrieve the data.

Web Application Server will interact with both database and GUIs.

### Memory Constraints

This will depend upon the web server load i.e. number of users to be supported. Since it’s not data intensive, load will be less.

### Site Adaptation Requirements

Web site hosting.

## Product Functions

This product will basically allow the client to provide pet adoption, fostering and volunteer services online by managing the pet information and partner organizations and providing other services discussed in document.

## User Characteristics

Not applicable.

## Constraints

So far not visible but may be added in future.

## Assumptions and Dependencies

Need to be discussed with client.

# Specific Details

This section contains all the software requirements at a level of detail sufficient to enable designers to understand the requirements, and testers to test that the system satisfies those requirements.

## External Interface Requirements

### User Interfaces

#### Web Application: This is the main website which will have following main pages:

##### **Home page:**

Home page will show summary info about the various services offered by the website. Prototype of the same is available at <https://nooraynsayed10000.wixsite.com/my-site> . Home page will have following menus and submenus:

##### **Our Animals:**

* Showing dashboard of various pets available for adoption/fostering. Clicking on card of each pet will take user to the details of that animal. Search bar on top including options like searching for breeds or qualities such as fur coat type, age etc.

##### **Our Services:**

* **Adopt a Pet:** This will show a page full of cards each showing brief info and picture of the pet available for adoption. Clicking on the card will take user to the adoption page. <details for adoption page here>
* **Fostering:** This will show a page full of cards each showing brief info and picture of the pet available for fostering. Clicking on the card will take user to the adoption page. <details for fostering page here>. Please clarify difference in fostering and adoption.
* **Volunteer:** This will take user to a page where he/she can enter details about him/her to volunteer. <please enter more info her to explain volunteer process and pages to be shown>
* **Meet & Greet:** <Need more info here>

##### **About Us:**

* **Who We are:** <Please define the contents of this page>
* **Our Team:** Takes user to page showing cards briefly showing details of the team members.

##### **Advice & Updates:**

* **Updates:** This page will have information about adoption/ suggestions/articles.
* **Advice:** The page where people can ask questions and get reply in 24 hrs.

##### **Contact Us:** Same as shown in prototype. < Need following info here: What happens when user enters details and presses the submit button? Option could be someone receives a mail/SMS regarding the same or it goes into database to be viewed by website administrator>

##### **Log in:**

* A casual visitor will have guest status assigned to him/her. If he/she wants to access following services <Service list here> he/she will have to login. User will have access to sections of website as per his/her role. Roles will be defined and assigned by website administrator. <Need to discuss if partner organizations need to sign-up or their logins are to be created by website administrator>

##### **Sign up:**

* The link for sign-up will be provided on top menu. On selecting the link user will be taken to sign-up page. After filling details user will receive verification email/SMS to verify his/her email id. By clicking on the email link his/her account will be activated. Optionally we can provide signup through Google/Facebook, is this option to be provided?

##### **Forgot Password Feature:**

* To allow user to reset his password in case he/she has forgotten the same. The use will enter his/her email address and on submission will receive an email containing the new password. Since passwords will be stored as hashed string in database for security reasons, it would be impossible to retrieve them.

##### **Website Administrator Section.**

This section is only accessible to website administrators. This will allow website administrators to perform following tasks:

* **Animal Information Section:** This will allow admin users to enter/modify/delete details of animals in the database.
* **Contact Us Section:** This will allow admin users to read/reply to the messages entered by users.
* **Updates Section:** Enter/modify/delete the updates/news to be displayed on Updates/News page.
* **Adoption / Fostering / Volunteer management:** This section will enable admins to view and respond to adoption, fostering and volunteer requests.
* **Meet & Greet:** This section will enable admins to enter, modify and delete the content on Meet & Greet section.
* **User Administration:** This section will enable admins to enter, modify and delete the users, assign them roles etc.
* **Team Member Section:** This section will enable admins to enter, modify and delete the team members info.
* **General Settings:** This section will enable admins to enter, modify and delete the application settings.

### Hardware Interfaces

NA

### Communications Interfaces

The communication between web site and web application server will be over the internet. The html pages and JavaScript will run on user’s browser and interact with Web Application server over the internet.

### Software Interfaces

Web GUI (website) will interact with Web Application server to save and retrieve the data.

Web Application Server will interact with both database and GUIs.

### Design Constraints

* To allow the website to be hosted on any operating system Java web services developed with Spring boot technology will be used.
* Web GUI will be developed using Angular as it supports all major browsers.

### Software Attributes

#### Security

Standard security to be provided using https and secure communication. Please note use of https requires purchase of a SSL certificate from reputed issuer who charge for such services. This is a recurring expense as certificate is valid for a limited period i.e., 1 year. Passwords to be stored in database as hashed values as plain text passwords are accessible by anyone having access to database.

#### Reliability

Application must be reliable with

* Adequate testing.
* Keeping modular design and following the standards for Java programming in the respective module.

#### Portability

The web application should work on PC/Laptop and on mobile devices such as mobile phones and tablets.

#### Internationalization

Need details about which other languages other than English are to be supported?

#### Maintainability

The software is to be divided into separate module such as web application server, Web GUI, database which can be maintained separately.

### Installation.

1. Client will provide details about where the application is to be deployed, on their own machine or commercial web hosting service.

### Version Numbering

Version will be in format Major Version.Minor Version. Revision.Build i.e. First version will be 1.0.0.0. and it will be incremented as per features added.

### Database Requirements

One of the following databases to be used as per availability, Client should inform us which database is available, and which version free or paid version to be used. All these databases provide free data up to 10 GB

* Microsoft SQL Server
* Oracle
* MySQL

### Excluded Features

NA

### Other Requirements

To be added by discussion.