SOFTWARE REQUIREMENT

SPECIFICATION

WEB PORTAL

FOR

ADIT BIOSCIENCES

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1. INTRODUCTION:

This section gives a scope description and everything described in the SRS document. Also the purpose of the document is described and a list of abbreviations and definitions provided.

1.1 Purpose:

The purpose of this document is to give a detailed description of the features and requirements of the web application software of “Adit Biosciences”. It also gives a detailed description of the interface and various forms of user interactions. This is intended for the approval by the concerned faculty and customer and also as a reference for software development team

1.2 Scope:

The aim of this web based application for ‘Adit Biosciences’ is to make a variety of audience like veterinary doctors and others concerned with the area of research being carried out by Adit Biosciences aware of their work.

In addition to this, the application also aims at bringing about awareness among the various sections of the farming community about the advantages of following the methods being developed at Adit Biosciences. This will be done primarily by providing the necessary information in various sections of the website.

Added to the above, online blogs and chat boxes will be available for the people visiting the website so that they can interact directly with people concerned, at Adit Biosciences.

The website also provides an option for online purchase of products from Adit Biosciences wherein the user gets to choose from a variety of products and their costs. The information of the products will be stored in a database. The users can navigate through the products using a user free interface. Users will be given an option to make their purchases either by logging into the website (if they already have an account) or by signing up or as a guest. The user will also be provided with the options of net banking, debit cards etc.

1.3 References:

1. Avi Silberschatz, Henry F. Korth, S. Sudarshan, Database System Concepts, McGraw Hill Education.

1.4 Overview:

The remainder of this document includes two sections. The second one provides an overview of system functionality and it’s interaction with other systems. This sections also gives introduces different types of stakeholders and their interaction with the system. Further the chapter also mentions the system constraints and assumptions about the product.

The third chapter provides the requirements specification in detailed terms and a description of the different system interfaces. Different specification techniques are used in order to specify the requirements more precisely for different audiences.

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2. OVERALL DESCRIPTION:

This section will give an overview of the whole system. The system will be explained in its context to show how the system interacts with other systems and introduce the basic functionality of it. It will also describe what type of stakeholders that will use the system and what functionality is available for each type. At last, the constraints and assumptions for the system will be presented.

2.1 Product perspective

This system will consist of one web portal. The web portal will be used for managing the information about the products offered and the system as a whole.

Since this is a data-centric product it will need somewhere to store the data. For that, a database will be used. The web portal will communicate with the database. The web portal will add and modify data. All of the database communication will go over the Internet.

2.2 Product functions

The web portal will provide information regarding the various services and products provided by Adit Biosciences. This includes their products, their distributors etc. Prospective customers can consult with the experts from Adit Biosciences to clarify anything about the products they are interested in purchasing.

The web portal will have the facility of a feedback forum which will allow the users to give feedback about the services and product provided by Adit Biosciences. The web portal will also contain a section of queries, where the people visiting the website may ask the experts from Adit Biosciences about any query they have in the form of post like a blog by providing their email and would get an appropriate response regarding it. Those considered important or frequent by the admin/people at Adit Biosciences will be made available to everyone so that they could also get benefit out of it.

The web portal will also contain a section which will give latest news and updates from Adit Biosciences regarding their services and products. The web portal will also contain a section educating the farmers and dairy owners regarding the proper upbringing of their livestock, which will be maintained by the people concerned at Adit Biosciences.

The web portal will contain a login system consisting of three categories. One for the workers in the Adit Biosciences containing useful information regarding themselves. One for the customers who have purchased the services and products provided by Adit Biosciences. And last one for the administration who would maintain the web portal. The web portal will also contain a section about the general background of Adit Biosciences and its members/staff and contributors. The web portal will also contain basic contact information.

2.3 User characteristics

There are three types of users that interact with the web portal: prospective customers/information enthusiasts, people of Adit Biosciences and administrators. Each of these three types of users has different use of the web portal so each of them has their own requirements.

The prospective customers/information enthusiasts can only use the web portal to browse the web site for services, products, information regarding proper upbringing of their livestock, any queries and contact information.

The people of Adit Biosciences will use the web portal to manage the information about their company, for example a description of the services and product, contact information, answering people’s queries etc.

The administrator/s manages the overall system so that there are no discrepancies in the website. The administrator/s can manage the information for each member having login credentials for the web portal. They will also handle any updates to web portal as per the requirement.

2.4 Constraints

The web portal will be using a database to store the necessary information. Therefore, it will be constrained by the capacity of the database.

3. SPECIFIC REQUIREMENTS:

This section contains all of the functional and quality requirements of the system. It gives a detailed description of the system and all its features.

3.1 External interface Requirements

This section provides a detailed description of all inputs into and outputs from the system. It also gives a description of the hardware, software and communication interfaces and provides basic prototypes of the user interface.

3.1.1 User interfaces

Any user of the web portal on visiting it would be taken to the homepage of the web portal. This page would show the basic information to guide the user and also the information of any latest news/updates in the Adit Biosciences. From this page the user can access the ‘Products and Services’, ‘Farmer’s Education’, ‘News’, ‘About Us’, ‘Contact Info’ and ‘Login’ pages of the website.

The ‘Products and Services’ page will display a list of all the products available and all the services provided by the Adit Biosciences to the prospective customer along with all the necessary details about them. This page will also contain the facility to give feedback about the products and services purchased by the user.

The ‘Farmer’s Education’ page will contain information regarding the proper upbringing of their livestock. This page will also contain the facility to ask questions related to the topic to the experts of Adit Biosciences. Their will also be a separate section where the user can give feedback about the education provided.

The ‘News’ page will contain information about the latest products and services launched by the Adit Biosciences as well as any important information regarding the company.

The ‘About Us’ page will contain the general information about the Adit Biosciences and the people working in it. It will give a general idea about the working of the Adit Biosciences and the technology used in their products and services.

The ‘Contact Us’ page will contain the contact information to get in touch with the experts in Adit Biosciences like their emails and phone no.s.

The ‘Login’ page will allow the user to login to the web portal. Based on their type, the user would be logged in as customer, employee of Adit Biosciences or administrator of Adit Biosciences. The customer would be taken to a page showing their purchase history with necessary details. They would be provided with their login credentials after their first purchase and later will use the same for more. The employee will be taken to a page showing their records in the Adit Biosciences. They would be provided with their login credentials by the company after employment. The administrator would gain access to make necessary changes/updates to the web portal content as seen fit by the company. They would be provided with their login credentials by the company after employment.

3.1.2 Hardware interfaces

Since the web portal doesn’t have any designated hardware, it does not have any direct hardware interfaces. The hardware connection to the database server is managed by underlying operating system on the web server.

3.1.3 Software interfaces

The communication between the database and the web portal consists of operations concerning both reading and modifying the data.

3.1.4 Communications interfaces

The communication between the different parts of the system is important since they depend on each other. However, in what way the communication is achieved is not important for the system and is therefore handled by the underlying operating systems for the web portal.

3.2 Functional requirements

This section includes the requirements that specify all the fundamental actions of the software system.

3.2.1 User Class 1 – Prospective Customer

3.2.1.1 Functional requirement 1.1

ID: FR1

TITLE: Browsing Available Services

DESC: A user should be able to browse all the services and products provided by Adit Biosciences with all the necessary details regarding the product.

DEP: None.

3.2.1.2 Functional requirement 1.2

ID: FR2

TITLE: Purchasing Available Services

DESC: A user should be able to purchase any of the available the services and products provided by Adit Biosciences. The user should be informed about the payment method to be used after deciding to purchase the service. Additionally, upon purchasing their first service the user should be given a login credential for the web portal for convenience in future.

DEP: FR1

3.2.1.3 Functional requirement 1.3

ID: FR3

TITLE: User log-in – Web Portal

DESC: Given that a user has purchased at least one service provided by Adit Biosciences, the user should be able to log in to the web portal. The log-in credentials will be provided by the company after first purchase.

DEP: FR2

3.2.1.4 Functional requirement 1.4

ID: FR4

TITLE: Retrieve/Change Password

DESC: Given that a user has login credentials for the web portal, the user should be able to retrieve/change his/her password by e-mail.

DEP: FR3

3.2.1.5 Functional requirement 1.5

ID: FR5

TITLE: Web Portal- Profile Page

DESC: Given that a user has login credentials for the web portal, the user should have a profile page. On the profile page the user can edit his information which includes the password, e-mail address, phone no., delivery address.

DEP: FR3

3.2.1.6 Functional requirement 1.6

ID: FR6

TITLE: Purchase History

DESC: Given that a user has login credentials for the web portal, the user should be able to see all the past purchases he has made along with the necessary details.

DEP: FR5

3.2.1.7 Functional requirement 1.7

ID: FR7

TITLE: Feedback

DESC: Given that a user has purchased a service provided by the Adit Biosciences, he should be able to review and give feedback about the said service.

DEP: FR5

3.2.1.8 Functional requirement 1.8

ID: FR8

TITLE: Farmer’s Education

DESC: The user should be able to access all the information supplied by the experts of Adit Biosciences through the web portal ‘Farmer’s Education’ page.

DEP: None

3.2.1.9 Functional requirement 1.9

ID: FR9

TITLE: Enquiry

DESC: The user should be able to ask question related to the farmer’s education.

DEP: FR7

3.2.2 User Class 2 – Adit Biosciences Employee

3.2.2.1 Functional requirement 2.1

ID: FR10

TITLE: Web Portal- Employee Login

DESC: Given that a user is an employee of the Adit Biosciences, he should be able to login to the web portal. The login credentials will be provided by the company after user’s employment.

DEP: None

3.2.2.2 Functional requirement 2.2

ID: FR11

TITLE: Password Retrieval/Change

DESC: Given that a user is an employee of the Adit Biosciences, he should be able to retrieve/change the password by e-mail.

DEP: FR10

3.2.2.3 Functional requirement 2.3

ID: FR12

TITLE: Web Portal-Profile Page

DESC: Given that a user is an employee of the Adit Biosciences, he should have a profile page. On the profile page he can edit information like password, phone no., residential address. He should also be able to see information regarding his current post, salary.

DEP: FR10

3.2.2.4 Functional requirement 2.4

ID: FR13

TITLE: Answering Questions

DESC: Given that a user is an employee of the Adit Biosciences, he should be able to answer the questions posed by the users of Farmer’s Education and Products and services section related to their field of expertise.

DEP: FR10

3.2.2.5 Functional requirement 2.5

ID: FR14

TITLE: Managing Education Information

DESC: Given that a user is an employee of the Adit Biosciences, he should be able to add/delete/edit the information of Farmer’s Education section related to their field of expertise as per necessity.

DEP: FR10

3.2.3 User Class 3 – Administrator

3.2.3.1 Functional requirement 3.1

ID: FR15

TITLE: Web Portal- Administrator Login

DESC: Given that a user is the administrator of the Adit Biosciences, he should be able to login to the web portal as the admin.

DEP: None.

3.2.3.2 Functional requirement 3.2

ID: FR16

TITLE: Password Retrieval/Change

DESC: Given that a user is the administrator of the Adit Biosciences, he should be able to retrieve/ change the password by e-mail.

DEP: FR15

3.2.3.3 Functional requirement 3.3

ID: FR17

TITLE: Manage Information

DESC: Given that a user is the administrator of the Adit Biosciences, he should be able to add/delete/edit information on the whole web portal with the exception of user’s login credentials and personal info.

DEP: FR15

3.2.3.4 Functional requirement 3.4

ID: FR18

TITLE: Manage Users

DESC: Given that a user is the administrator of the Adit Biosciences, he should be able to create/delete a user in customer/employee/administrator category for the web portal login system. Also, for users who are employee of Adit Biosciences, he should be able to make changes to their information related to the company like salary, post etc.

DEP: FR15

3.3 Non-Functional Requirements

3.5.3 Security

ID: SR1

TITLE: Communication Security

GIST: Security of the communication between the system and server. DESC:100% of the Communication Messages should be encrypted for log-in communications, so others cannot get user-name and password from those messages.

Communication Messages: Defined: Every exchanged of information between client and server.

ID: SR2

TITLE: Login Account Security

GIST: Security of login accounts.

DESC: Any user and IP address should not be able to log-in to the web portal for a certain time period after three times of failed log-in attempts.