Software Requirements Specification

for

Electronic Component Database for Lab

Version 1.3

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Revision History

Name	Date	Reason For Changes	Version
Updating	07-07-2019	Making the website more functional	v_1.3

1. Introduction

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the "Electronic component database for lab" software. It will illustrate the purpose and complete declaration for the development of system. It will also explain system constraints, interface and interactions with other external applications. This document is primarily intended to be version of the system for the development team.

1.2 Project Scope:

The project 'electronic component for lab' is a simple website where specification of elements which are used in EEE lab for graduation and post-graduation level will be shown, Usually we need to use various kind of material which specification is different from one another. If we get a database system we can find specification easily. We shall also include information of market dealer and position of elements in self. Web apps like map, calculator is also included here!

2. Overall Description

2.1 Product Perspective

The system will help the students to find the components from self in the lab and use them correctly during their required tasks.

2.2 Product Features

This system will collect the specification of the elements used in electronics lab and will do the following tasks:

1 Students can search elements to know its specification.
2 Students can know position of elements in the self.
3 Students can know who sell their required elements
4 Students can calculate resistance and other calculation using scientific calculator in this site.

2.3 User Classes and Characteristics:

There is two kinds of users. One is lab demonstrator and other is students. Lab demonstrator can add .delete, update the information of the system.

2.4 Operating Environment:

Our system is a web site which can browse from any kind of operating system in PC and also brows by mobile, tab.

2.5 Design and Implementation Constraints:

Element's position, price, datasheet need to be updated frequently.

2.6 Assumptions and Dependencies:

One assumption about the product is that it will always be used on device that have enough performance. If the device does not have enough hardware resource available for the application the application might not work as it is intended. Also net speed is a factor to use this system as it is a web site.

3. System Features:

This system is very user friendly and easy to use. It gives better features in order to serve the users a better experience.

3.1. Search element specification:

In lab students need to use different kinds of elements. It is hard to memorize Each specification separately. Student can search the product and can get Specification of each elements.

3.2 Search position of elements:

Students can search where their required element's position in lab self.

3.3 Search suppliers:

Students can know details about the suppliers and price of the product.

3.4 Search datasheet:

Various vendors provide various datasheet parameters and it differs from vendor to vendor. Students get confused which vendor's datasheet they have to download. In this site, they can easily download the desired datasheet files.

4. External Interface Requirements

1. User Interfaces:

User can navigate this easily. They will see option to access all features. They can access more than one feature at a time.

2. Hardware Interfaces:

It is a software based system and we do not use any hardware.

3. Software Interfaces:

This system is very user friendly and easy to use. It gives better features in order to serve the users a better experience.

4. Communications Interfaces:

Our system will communicate with users through internet network and other networking devices if we manage the hosting of the site.

Sample: