Software Requirements Specification Document

Software Requirement Specification Document for PC BUILD project.

Version 1.0 approved

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Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
|  |  |  |  |
|  |  |  |  |

# Introduction

## Purpose

## The purpose of this project is to provide the solution to everyone to help in building the personal computer(PC) and gaining some information about PC components.

## Document Conventions

**SRS :** Software Requirement Specification

**PC :** Personal Computer

**DESC :** Description

**Sign up :** Creating a New User

**Log in :** Logging as Existing User

## Intended Audience and Reading Suggestions

PC Build Project involves the different types of reader that the document is intended for such as project developer, project manager, users, software testers, documents writers.

## Product Scope

PC Build Project helps everyone to get information about PC building and PC components. They get to know about how and what component must be used while building. They get score of a PC that is added components to a PC. The main goal is to build a PC with some information.

## References

https://www.wired.com/story/how-to-build-a-pc/

# Overall Description

## Product Perspective

PC Build Project is done new. There is no existing project to upgrade into new. An Internet connection is necessary to access the system , to fetch and display the results and to sign up and log in. Since the project is new , all the information about each component will be in detail to know much information for users.

## Product Functions

*Functionalities are*

*1. Cost Efficient for Customers*

*2. Score of a PC*

*3. Wide choice of Accessories*

*4. Description and Comparison of components*

*5. Recommendations*

## User Classes and Characteristics

<Identify the various user classes that you anticipate will use this product. User classes may be differentiated based on frequency of use, subset of product functions used, technical expertise, security or privilege levels, educational level, or experience. Describe the pertinent characteristics of each user class. Certain requirements may pertain only to certain user classes. Distinguish the most important user classes for this product from those who are less important to satisfy.>

## Operating Environment

Hardware Requirements

* 256 MB RAM
* Pentium IV or Higher
* 1 Gb hard free drive space

Software Requirements

* HTML
* JavaScript
* Web Browser : Google chrome, Mozilla, Microsoft Edger and later.
* Operating System: Windows XP, Windows 7,Windows Vista and later.

## Design and Implementation Constraints

There is no Design and important constraint.

## User Documentation

<List the user documentation components (such as user manuals, on-line help, and tutorials) that will be delivered along with the software. Identify any known user documentation delivery formats or standards.>

## Assumptions and Dependencies

* The performance will depend upon hardware components of the client/customer.
* The product will take initial load time depending on internet connection.

# External Interface Requirements

## User Interfaces

<Describe the logical characteristics of each interface between the software product and the users. This may include sample screen images, any GUI standards or product family style guides that are to be followed, screen layout constraints, standard buttons and functions (e.g., help) that will appear on every screen, keyboard shortcuts, error message display standards, and so on. Define the software components for which a user interface is needed. Details of the user interface design should be documented in a separate user interface specification.>

## Hardware Interfaces

<Describe the logical and physical characteristics of each interface between the software product and the hardware components of the system. This may include the supported device types, the nature of the data and control interactions between the software and the hardware, and communication protocols to be used.>

## Software Interfaces

<Describe the connections between this product and other specific software components (name and version), including databases, operating systems, tools, libraries, and integrated commercial components. Identify the data items or messages coming into the system and going out and describe the purpose of each. Describe the services needed and the nature of communications. Refer to documents that describe detailed application programming interface protocols. Identify data that will be shared across software components. If the data sharing mechanism must be implemented in a specific way (for example, use of a global data area in a multitasking operating system), specify this as an implementation constraint.>

## Communications Interfaces

<Describe the requirements associated with any communications functions required by this product, including e-mail, web browser, network server communications protocols, electronic forms, and so on. Define any pertinent message formatting. Identify any communication standards that will be used, such as FTP or HTTP. Specify any communication security or encryption issues, data transfer rates, and synchronization mechanisms.>

# System Features

## Cost Efficient for Customers

4.1.1 Description and Priority

*People may get proper and budget friendly PC Build Idea. Though there is a silicon shortage in industry, you may get good and proper budget friendly PC according to your own budget idea.*

*Priority : High Priority*

4.1.2 Stimulus/Response Sequences

<List the sequences of user actions and system responses that stimulate the behavior defined for this feature. These will correspond to the dialog elements associated with use cases.>

*4.1.3 Functional Requirements*

REQ-1:

I/P: State the PC component name

O/P: Displays the searched PC component at various prices and brands.

Processing : Searching from list of all components.

REQ-2:

I/P: Input Price

O/P: Displays the Pre-Build PC.

## Score of a PC

4.2.1 Description and Priority

*People may get a score(value) of a PC for which they added a components. This score indicates how PC will be performed.*

*Priority : High Priority*

4.2.2 Stimulus/Response Sequences

<List the sequences of user actions and system responses that stimulate the behavior defined for this feature. These will correspond to the dialog elements associated with use cases.>

4.2.3 Functional Requirements

*REQ-1:*

*I/P: Select the PC components.*

*O/P: Score of your final PC Build*

## 4.3 Wide Choice of Accessories

*4.3.1 Description and Priority*

*Since there are many components at different price people may choose least Price and get their specifications or People may get a PC component at higher price where the additional functionalities are added. Example Buying a DDR4 RAM at price of Rs.1000 will be Non-RGB. Buying a DDR4 RAM at price of Rs.1500 will RGB.*

*Priority : High Priority*

*4.3.2 Stimulus/Response Sequences*

<List the sequences of user actions and system responses that stimulate the behavior defined for this feature. These will correspond to the dialog elements associated with use cases.>

*4.3.3 Functional Requirements*

*REQ-1:*

*I/P: Enter the desired component.*

*O/P: Displays the various component.*

*Processing: Searches from list of all components.*

## 4.4 Description and comparison of components

4.4.1 Description and Priority

*People will get information about PC component before building a PC. PC builder should know about each component before they build. Once PC is built, they can compare with pre-build pc or they can compare with other components while adding a components.*

*Priority : High Priority*

4.4.2 Stimulus/Response Sequences

<List the sequences of user actions and system responses that stimulate the behavior defined for this feature. These will correspond to the dialog elements associated with use cases.>

4.4.3 Functional Requirements

*REQ-1:*

*I/P: Enter the desired component.*

*O/P: Describes the various component.*

*REQ-2:*

*I/P: Enter the desired component to compare with others.*

*O/P: Shows the other components as well.*

## 4.5 Recommendations

4.4.1 Description and Priority

*Home page of this project will contain a recommendations of newest arrivals of component or PC and most viewed PC.*

*Priority : Low Priority*

4.4.2 Stimulus/Response Sequences

<List the sequences of user actions and system responses that stimulate the behavior defined for this feature. These will correspond to the dialog elements associated with use cases.>

4.4.3 Functional Requirements

*REQ-1:*

*I/P: Click the Desired PC or Component.*

*O/P: Displays the PC or Component.*

# Other Nonfunctional Requirements

## Product Requirement

### Performance Requirements:

REQ 1: To make the software work in proper way

Description : User or Client must get result within short period of time.

I/P : User tries to activity

O/P : Displaying or Getting the result

REQ 2: To have a good reliable software

Description : User must feel free to use the software

I/P : User enters the software through his/her login id or password

O/P: User credentials are logged in or Registered Successfully.

## Safety Requirements

The PC build Software will not will give the credentials outside database. It cannot cause any damage to the phone or any other PC. User must select the proper components while building. Without knowing much information about any PC component he/she may connect the cables in a wrong way which may cause the new PC to get damaged.

The customers web browser will never display a customers password. It will be displayed with special characters representing typed characters. The systems back-end servers will never display a customers password. The customer may able to reset his/her password.

## Software Quality Attributes

To ensure reliability and correctness, there will be zero tolerance for errors in the algorithm. To maintain the flexibility and adaptability, the software will take into account situations in which a user loses internet connection or for whatever reason cannot establish a connection with the server. The user will be still able to use the application.

## Business Rules

These are the operating principles about the product such as which individuals or roles can perform which functions under specific circumstances.

# Other Requirements

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>

Appendix A: Glossary

<Define all the terms necessary to properly interpret the SRS, including acronyms and abbreviations. You may wish to build a separate glossary that spans multiple projects or the entire organization, and just include terms specific to a single project in each SRS.>

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: To Be Determined List

<Collect a numbered list of the TBD (to be determined) references that remain in the SRS so they can be tracked to closure.>