

# **SOFTWARE REQUIREMENTS SPECIFICATION**

for

**BLOG WEBSITE**

**Version 1.0 approved**

**Prepared by Prashant sagar**

**ITM University Gwalior**

**Friday, 28 August 2020**

## TABLE OF CONTENTS

Table of Contents.....	2
RevisionHistory.....	2
Introduction.....	3
1.1 Purpose.....	3
1.2 Document Conventions .....	3
1.3 Intended Audience and Reading Suggestions .....	3
1.4 Product Scope .....	3
1.5 References.....	3
OverallDescription.....	4
2.1 Product Perspective .....	4
2.2 Product Functions .....	4
2.3 User Classes and Characteristics .....	4
2.4 Operating Environment.....	4
2.5 Design and Implementation Constraints .....	4
2.6 User Documentation .....	4
2.7 Assumptions and Dependencies .....	5
External Interface Requirements.....	5
3.1 User Interfaces .....	5
3.2 Hardware Interfaces .....	5
3.3 Software Interfaces.....	5
3.4 Communications Interfaces.....	6
System Features.....	6
4.1 System Feature 1.....	6
4.2 System Feature 2 (and so on) .....	6
Other Nonfunctional Requirements.....	7
5.1 Performance Requirements .....	7
5.2 Safety Requirements.....	7
5.3 Security Requirements .....	7
5.4 Software Quality Attributes .....	7
5.5BusinessRules.....	8
6. Other Requirements.....	8
AppendixA:Glossary.....	8
Appendix B: Analysis Models.....	8
5Appendix C: To Be Determined List .....	8

# 1. INTRODUCTION

## 1.1 Purpose

Purpose of developing this website is to get everything related to study materials in one website, and also where user can get blog of their interest. If you are a student then you can't get your study material easily. you have to scrap different site to get all the things, And for getting all these things you are dependent on your classmates and seniors.

Just looking all these problem I thought why don't I develop a platform where all students get everything easily under one website.

## 1.2 Document Conventions

<Describe any standards or typographical conventions that were followed when writing this SRS, such as fonts or highlighting that have special significance. For example, state whether priorities for higher-level requirements are assumed to be inherited by detailed requirements, or whether every requirement statement is to have its own priority.>

## 1.3 Intended Audience and Reading Suggestions

<Describe the different types of reader that the document is intended for, such as developers, project managers, marketing staff, users, testers, and documentation writers. Describe what the rest of this SRS contains and how it is organised. Suggest a sequence for reading the document, beginning with the overview sections and proceeding through the sections that are most pertinent to each reader type.>

## 1.4 Product Scope

This site is so beneficial to all students specially if you are a college student. The goal of this site is to make every student a solopreneur. No need to wandering for study material in different sites. When you enrol the site first time you have to pay some money just for get subscription, after that you will get to excess every things. It might be open source website.

## 1.5 References

I didn't take any references till now. Try to develop it by myself as much as I can.

<List any other documents or Web addresses to which this SRS refers. These may include user interface style guides, contracts, standards, system requirements specifications, use case documents, or a vision and scope document. Provide enough information so that the reader could access a copy of each reference, including title, author, version number, date, and source or location.>

## 2. OVERALL DESCRIPTION

### 2.1 Product Perspective

It just a new, self-contained product. All features that I add in this website is my own creation.

<Describe the context and origin of the product being specified in this SRS. For example, state whether this product is a follow-on member of a product family, a replacement for certain existing systems, or a new, self-contained product. If the SRS defines a component of a larger system, relate the requirements of the larger system to the functionality of this software and identify interfaces between the two. A simple diagram that shows the major components of the overall system, subsystem interconnections, and external interfaces can be helpful.>

### 2.2 Product Functions

Till now I thought only these following features will be in my site:

- Hand written study materials(class notes, ppt, assignments etc)
- Introduce every single club of all the colleges, where if you have skills to do or develop something new or creative apart or related to your studies.
- All inter & outer colleges events and their details and how to enrol on it.
- Provide open source ebooks.

### 2.3 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.>

### 2.4 Operating Environment

This website is fully develop in python framework Django and some python models. And for recommendation I use ML(collaborative filtering, content-based filtering, hybrid recommendation systems.)

### 2.5 Design and Implementation Constraints

<Describe any items or issues that will limit the options available to the developers. These might include: corporate or regulatory policies; hardware limitations (timing requirements, memory requirements); interfaces to other applications; specific technologies, tools, and databases to be used; parallel operations; language requirements; communications protocols; security considerations; design conventions or programming standards (for example, if the customer's organisation will be responsible for maintaining the delivered software).>

### 2.6 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.>

## 2.7 Assumptions and Dependencies

<List any assumed factors (as opposed to known facts) that could affect the requirements stated in the SRS. These could include third-party or commercial components that you plan to use, issues around the development or operating environment, or constraints. The project could be affected if these assumptions are incorrect, are not shared, or change. Also identify any dependencies the project has on external factors, such as software components that you intend to reuse from another project, unless they are already documented elsewhere (for example, in the vision and scope document or the project plan).>

# 3. EXTERNAL INTERFACE REQUIREMENTS

## 3.1 User Interfaces

Firstly user get verify by a simple authentication system then user get enrol the site or get a landing page where he got all the details new. Features and news.

<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.>

## 3.2 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.>

## 3.3 Software Interfaces

### Technology:

#### 1. For website:

Front end : Html, css, JS.

Backend : Django, python

**Database:** SQLite

**ML:** recommendation system

(collaborative filtering, content-based filtering, hybrid recommendation systems.)

<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.>

### 3.4 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 synchronisation mechanisms.>

## 4. SYSTEM FEATURES

<This template illustrates organising the functional requirements for the product by system features, the major services provided by the product. You may prefer to organise this section by use case, mode of operation, user

class, object class, functional hierarchy, or combinations of these, whatever makes the most logical sense for your product.>

### 4.1 System Feature 1

<Don't really say "System Feature 1." State the feature name in just a few words.>

#### 4.1.1 Description and Priority

<Provide a short description of the feature and indicate whether it is of High, Medium, or Low priority. You could also include specific priority component ratings, such as benefit, penalty, cost, and risk (each rated on a relative scale from a low of 1 to a high of 9).>

#### 4.1.2 Stimulus/Response Sequences

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

#### **4.1.3 Functional Requirements**

<Itemise the detailed functional requirements associated with this feature. These are the software capabilities that must be present in order for the user to carry out the services provided by the feature, or to execute the use case. Include how the product should respond to anticipated error conditions or invalid inputs. Requirements should be concise, complete, unambiguous, verifiable, and necessary. Use “TBD” as a placeholder to indicate when necessary information is not yet available.>

<Each requirement should be uniquely identified with a sequence number or a meaningful tag of some kind.>

REQ-1:

REQ-2:

## **4.2 System Feature 2 (and so on)**

# **5. OTHER NONFUNCTIONAL REQUIREMENTS**

## **5.1 Performance Requirements**

<If there are performance requirements for the product under various circumstances, state them here and explain their rationale, to help the developers understand the intent and make suitable design choices. Specify the timing relationships for real time systems. Make such requirements as specific as possible. You may need to state performance requirements for individual functional requirements or features.>

## **5.2 Safety Requirements**

<Specify those requirements that are concerned with possible loss, damage, or harm that could result from the use of the product. Define any safeguards or actions that must be taken, as well as actions that must be prevented. Refer to any external policies or regulations that state safety issues that affect the product’s design or use. Define any safety certifications that must be satisfied.>

## **5.3 Security Requirements**

<Specify any requirements regarding security or privacy issues surrounding use of the product or protection of the data used or created by the product. Define any user identity authentication requirements. Refer to any external policies or regulations containing security issues that affect the product. Define any security or privacy certifications that must be satisfied.>

## **5.4 Software Quality Attributes**

<Specify any additional quality characteristics for the product that will be important to either the customers or the developers. Some to consider are: adaptability, availability, correctness, flexibility, interoperability, maintainability, portability, reliability, reusability, robustness, testability, and usability. Write these to be specific, quantitative, and verifiable when possible. At the least, clarify the relative preferences for various attributes, such as ease of use over ease of learning.>

## **5.5 Business Rules**

<List any operating principles about the product, such as which individuals or roles can perform which functions under specific circumstances. These are not functional requirements in themselves, but they may imply certain functional requirements to enforce the rules.>

# **6. OTHER REQUIREMENTS**

<Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalisation 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 organisation, 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.>



