

# **Software Requirements Specification**

**for**

**SOCIO - A Social Networking System**

**Version 1.0 approved**

**National Institute Of Technology Karnataka, Surathkal**

**January 16 , 2019**

## Table of Contents

<b>Table of Contents</b>	<b>ii</b>
<b>Revision History</b>	<b>ii</b>
<b>1. Introduction</b>	<b>1</b>
1.1 Purpose	1
1.2 Document Conventions	1
1.3 Intended Audience and Reading Suggestions	2
1.4 Product Scope	2
1.5 References	2
<b>2. Overall Description</b>	<b>3</b>
2.1 Product Perspective	3
2.2 Product Functions	3
2.3 User Classes and Characteristics	3
2.4 Operating Environment	4
2.5 Design and Implementation Constraints	4
2.6 User Documentation	4
2.7 Assumptions and Dependencies	4
<b>3. External Interface Requirements</b>	<b>5</b>
3.1 User Interfaces	5
3.2 Hardware Interfaces	6
3.3 Software Interfaces	6
3.4 Communications Interfaces	6
3.5 IDE Interfaces	7
<b>4. System Features</b>	<b>8</b>
4.1 Flight-Related Information	8
4.2 Food and Beverage Facilities in Airport	8
4.3 Statutory Rules and Regulations For Passengers	9
4.4 Facilities in Airport Lounges	9
4.5 Transport Facilities	10
4.6 Tourism-related Information	11
4.7 Hotels/Resort-related Information	12
4.8 Other Features	13
<b>5. Other Nonfunctional Requirements</b>	<b>14</b>
5.1 Performance Requirements	14
5.2 Safety Requirements	14
5.3 Security Requirements	14
5.4 Software Quality Attributes	14
5.5 Business Rules	15
<b>6. Other Requirements</b>	<b>15</b>
<b>Appendix A: Glossary</b>	<b>15</b>
<b>Appendix B: Analysis Models</b>	<b>16</b>
<b>Appendix C: To Be Determined List</b>	<b>16</b>
<b>Project Budget Estimation</b>	<b>16</b>

## Revision History

Name	Date	Reason For Changes	Version
-	-	-	-

# 1. Introduction

## 1.1 Purpose

The SRS will provide a detailed description of the requirements for Socio - A social networking system. This SRS will allow for a complete understanding of what is to be expected from the newly introduced system which is to be constructed. The clear understanding of the system and its functionality will allow for the correct software to be developed for the end user and will be used for the development of the further stages of the project.

## 1.2 Document Conventions

The document is prepared using Google Docs and has used the font type 'Times New Roman'. The font size that has been used to type this document is 14pt for the headings and 11pt for the corresponding body. Standard IEEE template is the template used to recognize the appearance of the document and its flow.

## 1.3 Intended Audience and Reading Suggestions

This document is made by keeping in mind different types of readers. This document will be useful for different audience in various ways.

Audience	Use
Developers	They will use this document as a guidance for design and implementation phase.
Managers	They will see all the constraints are covered properly. Time and cost is within limits or not.
Marketing Staff	They can use this document to make advertisements for this android app because by reading this document they will know what the system will do? How this system is different from others.
User	By reading the SRS they can ensure whether their needs are being met by the App or not.
Testers	They will test the implementation of the project according to the SRS base.

Documentation Writer	They will use this document during the documentation of the project.
-------------------------	--

## 1.4 Product Scope

- The System developed will enable the users to socialize over the internet. The users can make friends, chat with them, create posts to share among friends, like or comment on posts, create groups and have group chats and also share files. Since everyone is leading a busy and stressful life, socializing means a lot to everyone.

## 1.5 References

- IEEE. IEEE Std. 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

## 2. Overall Description

### 2.1 Product Perspective

The SOCIO - A Social Networking System project is a new, self-contained product intended for use on the Web platform. Socio App enables us to interact with other users through chat, posts, comments, messages, groups and many more.

### 2.2 Product Functions

- Serves dynamic data related to the users profiles, posts.
- Serves up to date dynamic data related to chats.

### 2.3 User Classes and Characteristics

User	Characteristics
System Admin	It will be the system administrator. He will maintain the overall App.
Users	It includes the people who use the social networking app.

## **2.4 Operating Environment**

Socio is the software application, which will be limited to a web application. The application is not resource- or graphics-intensive, so there are no practical hardware constraints. The app will rely on several functionalities built into Django's framework and API, so ensuring appropriate usage of the API will be a major concern.

The system shall be deployed on a Heroku platform which is a service providing platform to host with Ver. 5.7.21 MySQL Database to maintain the databases. The system shall be accessed on multiple browsers e.g. Google Chrome, Mozilla Firefox etc. The Operating System on the front-end PCs/Laptops can be MS Windows, Unix, Linux or Apple Mac.

## **2.5 Design and Implementation Constraints**

The primary design constraint is the mobile platform. Since the application is designated for any device which can access the web, adaptive screen size and resolution will be a major design consideration. Creating a user interface which is both effective and easily navigable will pose a difficult challenge. Other constraints such as memory and processing power are also worth considering.

## **2.6 User Documentation**

- A brochure will be provided describing the functionality of the Web App.

## **2.7 Assumptions and Dependencies**

- The app requires Django framework and REST API.
- A NodeJs server will be required which will be a socket server for real time chats and posts.
- The project requires a host and server, heroku account to publish the app.

### **3. External Interface Requirements**

#### **3.1 User Interfaces**

- The Web application will have an initial login page where users would enter their respective login credentials. It would also have an option to allow new users to Sign up.
- The Sign up page would prompt the user to enter email id, username and password.
- Logging in would land the user on the Home Page. Posts would be displayed on the Home page. There would also be an option for the user to create new posts.
- Home page would have a navigation bar having options to view User Profile, Find Friends, Chat, Logout, etc. Also there is a form for creating posts.
- The posts will have an option to like/dislike and a form for commenting. If one's own post, an option to edit/delete the post will be available.
- The chat page would show chat history with the respective person/group and a form to send a chat message.
- The profile page would have an option of sending/cancelling a friend request to that person if he/she is not yet a friend or it would have an option of sending a message or unfriending that person if he/she is a friend.

#### **3.2 Hardware Interfaces**

- The System shall be deployed on Heroku Platform. All the Stakeholders are supposed to login into the Socio website where there will be a specific URL to access the System. Hardware Requirements for stakeholders:
- Pentium 4 processor or higher

- Approximately 100 MB of free harddrive space
- Minimum 128 MB RAM

Hardware Requirements for hosting:

- Minimum 1GB database space
- Minimum 2GB RAM
- Wearable devices will not be supported with this application.

### **3.3 Software Interfaces**

Software Requirements for Hosting:

- Django 2.0
- MySQL

Software Requirements for Stakeholders:

- Browser ( Google Chrome, Mozilla Firefox, Safari etc.)
- Operating System supporting the above browsers.



### **3.4 Communications Interfaces**

The System will be operational using standard web-browsers like Safari, Google Chrome and Firefox. Users will connect- through a secured encrypted connection over internet. Since the data communicated over internet is confidential it is imperative that encrypted protocols are used to prevent data leakages.

### **3.5 IDE Interfaces**

- IDE Pycharm for development using Django Framework.