Software Requirements Specification

Software Name: Share Karo

Version 1.0 approved

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September 17, 2016

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1. Introduction

1.1 Purpose

The major purpose of our app is to set up a sharing platform of various media in the fields of entertainment as well as academics. This app also offers cap sharing facility for the students and faculty members of NIIT University. We aim to provide an easy platform to share various things in campus.

1.2 Document Conventions

This particular SRS is inspired and written on the IEEE guidelines. This document is written in the simple "Helvictica" font type with font size 11 so as to make the document easy to read. The document presents equal and same priorities for each requirement statement. The high level requirements are highlighted wherever required in the document.

1.3 Intended Audience and Reading Suggestions

The document is designed for various people like developers, project managers, marketing people, testers and documentation writers. The users are the end viewers and the target audience for the whole documentation and the product. The SRS is indexed and the sequence is top-down approach starting from Overviews and Sub-Sections are further inherited and documented according to priorities.

1.4 Product Scope

The "Share Karo" app provides a simple platform for sharing various entertainment things and study material for the students of NIIT University. In the long run, this app would have more number of downloads as the population in the campus increases gradually. There will be a common platform for all the residents.

1.5 References

This System Requirements Specification document refers to the IEEE standards of documentation. The Use case documents are developed over Argo UML software and derived from the same.

The references are:

1) <a href="https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiD9syNjpbPAhWLt48KHbmQCUAQFggdMAA&url=http%3A%2F%2Fwww.csse.monash.edu.au%2F~sitar%2FCSE4002%2FLectures%2Fsrs_template-1.doc&usg=AFQjCNF2DZX7_wbYlZyeAcrgjpYYTOhF6g

- 2) http://searchsoftwarequality.techtarget.com/answer/Software-requirements-specification-and-the-IEEE-standard
- 3) <a href="https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwiD9syNjpbPAhWLt48KHbmQCUAQFggvMAM&url=https%3A%2F%2Fredmine.studenti.famnit.upr.si%2Fattachments%2Fdownload%2F138%2FIEEE%2520Standard%2520SRS%2520Template.doc&usg=AFQjCNEZkGaUM7sC5yXUV6hbbgJ3kfQhw
- 4) <a href="https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0ahUKEwiD9syNjpbPAhWLt48KHbmQCUAQFgg6MAU&url=http%3A%2F%2Fitech.fgcu.edu%2Ffaculty%2Fzalewski%2Fism4331%2Fwritingsrs.doc&usg=AFQjCNFCiaSylCS3fjOGPtLJAZxBmAXPJA
- 5) <a href="https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjl7PuqjpbPAhVJPY8KHeydDTkQFggbMAA&url=https%3A%2F%2Fwww.ibm.com%2Fdeveloperworks%2Fcommunity%2Fwikis%2Fform%2Fanonymous%2Fapi%2Fwiki%2F336d1dbb-5203-4eb3-8542-f4a2d1af056c%2Fpage%2Fd9b0b712-ac9d-43ac-b430-0bc76b7edc31%2Fattachment%2F921e2bcf-2349-42d3-976b-0e23f7d6ff61%2Fmedia%2Fsrs%2520format.pdf&usg=AFQjCNG5oXPXYDtLmBCD1S1bdInIIDQ5Og&bvm=bv.133178914,d.c2I
- 6) http://techwhirl.com/writing-software-requirements-specifications/
- 7) <a href="https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=10&cad=rja&uact=8&ved=0ahUKEwjI7PuqjpbPAhVJPY8KHeydDTkQFghTMAk&url=https%3A%2F%2Fcs.gmu.edu%2F~dfleck%2Fclasses%2Fcs421%2Fspring10%2Fproject%2Fsrs_template.doc&usg=AFQjCNFLKrMJFVl2haJg_G4905Q2PCddnQ&bvm=bv.133178914,d.c2l

2. Overall Description

2.1 Product Perspective

The basic idea of this project is to set up a common platform for the student fraternity of NIIT University. The idea is derived from the daily needs of the students. Other colleges also have same kind app at a small scale which works only for the campus residing members.

2.2 Product Functions

The functions that product is capable of performing are:

For Media Sharing:

The user can sign up with the university's email id and share their contact email id or phone no. The user have to fill their field of interests regarding genre, type of entertainment media which they prefer. This will help to link up with people of same taste together. If any other user wants to search for some movie, so other users with common interest will get the request notification for that particular people.

For Travel:

All the users can update their their respective journey schedule to the shared document in the app, hence every other member will get to know the about the timings of each other and it will be easy for them to pool a cab together.

For Study material:

Each user can either request for a particular study material or they can look up at all the available study material for sale by the other users.

2.3 User Classes and Characteristics

The software widely focuses on the people living in local society or common campus. The other user classes can be of faculty. The frequent users will be mostly the hostel students who indulge into movies, TV series etc. for most of their entertainment in hostels. The other local users can belong to a common society, clubs, etc.

2.4 Operating Environment

The app is cross-platform and can operate on all Windows, Linux and iOS, Google Andriod operating systems over all current versions.

2.5 Design and Implementation Constraints

The software requires a mail system login because it is location specific. The privacy policy offers the users of the app, the authority of whether they want to share their contacts/files on the portal or with a particular person. The app requires lower RAM specifications, so that it is user friendly for every student. The software's database is highly secured with the hosting security for privacy purposes. The app/software is designed in English language only and is designed to provide the users with contact information. There will be no virtual chat station protocols. The programming has been done with html, css and Java script languages. The app isn't organization based and hence it doesn't requires any maintenance from institution.

2.6 User Documentation

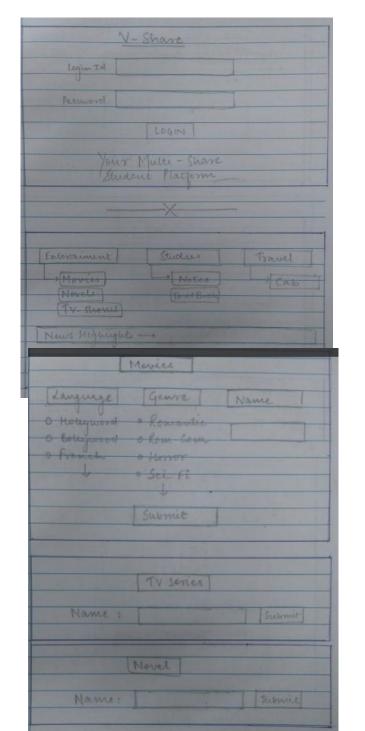
The app is designed with a simple user interface and with basic general steps at the time of registrations. User manual information will be added in the app.

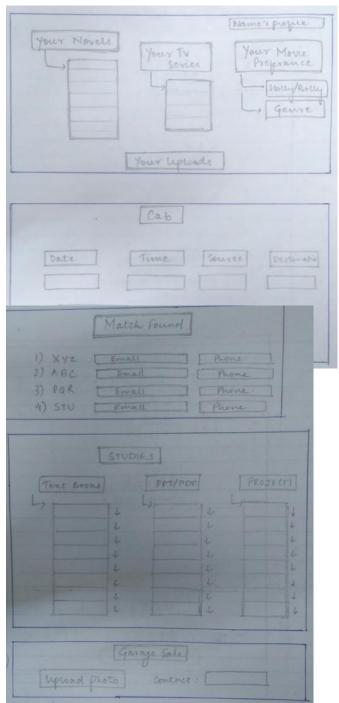
2.7 Assumptions and Dependencies

The software is designed and developed by noticing all the facts that people are willing to share their entertainment and study measures. There have been surveys performed regarding the same and the results have been majorly positive. The software design is completely original, newly planned and developed from scratch.

3. External Interface Requirements

3.1 User Interfaces





3.2 Hardware Interfaces

The Front-End User development is done with HTML, CSS and Java Script. This interface is the window to what the end user sees. However, the external layer interacts with the stored Mongo database with the help of node JS scripting. The data flow is simple and is defined on the Visual Studio software framework with interactive coding.

3.3 Software Interfaces

The software is built with the definition of following frameworks:

- 1) The database is designed using the Mongo DB framework.
- 2) The languages (html, CSS, java script, node JS) are built upon the Visual Studio 2015 Enterprise software.
- 3) The software is majorly designed upon the Microsoft Windows OS and it is created as a cross-platform forum to work over Linux and iOS as well.
- 4) Communication protocols that interface between the front-end and back-end codes.

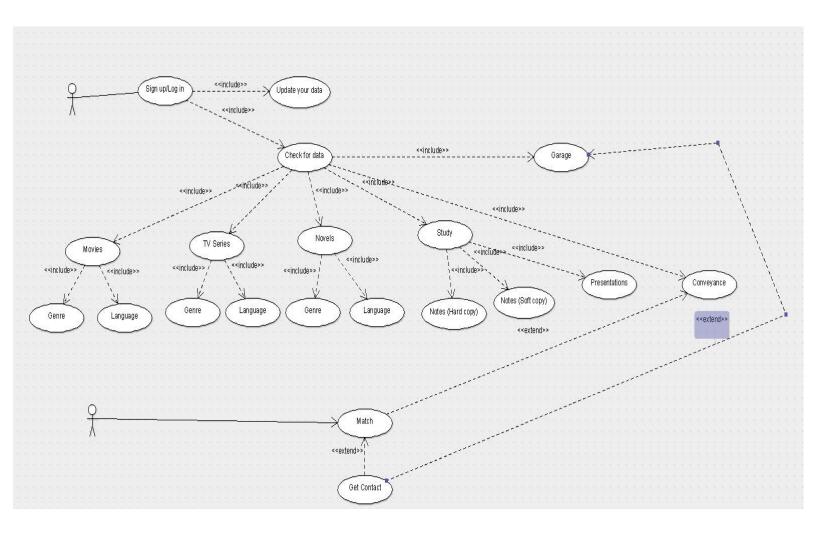
3.3 Communications Interfaces

The requirements associated with the product are:

- 1. Login details: E-Mail login
- 2. Cross platform on majorly all browsers
- 3. Sign-up and user information via forms created by Java Script.
- 4. HTTP is defined as the major communication standard.

Name Login ID Password Movie Interest Novel Interests TV Series Get match ()

4. System Features



4.1 Movie Sharing

4.1.1 <u>Description and Priority</u>

Students in campus mainly like to watch movies to pass most of their time in the hostels. Thus, this feature is on the high priority level on the software. The software gives them an option to put up their preferred movies and search for the ones that they feel like watching.

4.1.2 <u>Stimulus/Response Sequences</u>

- The user have to sign up and put his/her genre preferences on the software.
 The movies are going to be categorized into genres and languages so that the user can update the movies they own.
- If a user needs a particular movie, the user can match the genres with the ones already uploaded and make a request, which will go to the people with the same genre listed.
- If one user matches with other one and they are willing to share contacts, the contacts are made visible on the approval of both.

4.1.3 <u>Functional Requirements</u>

Sequence number	Requirement	Service provided	Constraints
X 4.1.1	Sign up	Allows user to create a new account and login	Required
X 4.1.2	Update movie preferences: genres and languages.	Gives a common line of interest for various different users.	Needs to be correct in order to stimulate exchange process in the right direction.
X 4.1.3	Search for needed movies	Helps to find people with similar interests.	The user with matched interests should be willing to share the contact.

request to a particular person

4.2 Novel Sharing

4.2.1 <u>Description and Priority</u>

Students (hostellers majorly) like to read and understand novels to pass their time in the hostels and to widen their horizons into the world of literature. Thus, this feature is again on the high priority level on the software.

4.2.2 Stimulus/Response Sequences

- The user can sign up and put his/her novel collection on the app. The novels are going to be categorized into genres and languages so that the user can update the novels they own.
- If a user needs to find a novels, the user can match the genres with the ones already uploaded and make a request to the people with the same genre listed.
- If one user matches with other one and they are willing to share contacts, the contacts are made visible.

4.2.3 Functional Requirements

Sequence number	Requirement	Service provided	Constraints
X 4.2.1	Sign up	Allows user to create new account.	Required
X 4.2.2	Update novels preferences like genres, languages.	Gives a common line of interest for various different users.	Needs to be correct in order to stimulate exchange process in the right direction.
X 4.2.3	Search for	Helps to find people with	The user with matched

	needed novels	similar interests.	interests should be willing to share the contact.
X 4.2.4	Post a request to a particular user	If matched, then the user can post request to a particular person	TBD

4.3 TV-Series Sharing

4.3.1 <u>Description and Priority</u>

Students in campus indulge into TV series (from all around the world) to get an idea of what all things are happening all around the world. The application gives them an option to put up their preferred movies and search for the ones that they feel like watching. Thus, this is another feature on the high priority level on the software.

4.3.2 <u>Stimulus/Response Sequences</u>

- The user can sign up and put his/her name of series collection on the app.
 The series are going to be categorized into genres and languages so that the user can update the TV series that they own just as of movies.
- If a user needs to find a particular series, the user can match the genres with the ones already uploaded and make a request to the people with the same genre listed.
- If one user matches with other one and they are willing to share contacts, the contacts are made visible.

4.3.3 Functional Requirements

Sequence number	Requirement	Service provided	Constraints
X 4.3.1	Sign up	Allows user to login or create new account.	Required
X 4.3.2	Update TV-series preferences like genres, languages.	Gives a common line of interest for various different users.	Needs to be correct in order to stimulate exchange process in the

			right direction.
X 4.3.3	Search for needed movies	Helps to find people with similar interests.	The user with matched interests should be willing to share the contact.
X 4.3.4	Post a request to a particular user	If matched, then the user can post request to a particular person	To be decided later.

4.4 Study Material Sharing

4.4.1 <u>Description and Priority</u>

Students of college prefer their respective course ppts, projects, important questions papers and presentations with seniors. This feature is at the low priority level on the app. The app gives them an option to put up their used projects and ppts as reference for juniors and search for the ones that their seniors have uploaded and vice-versa.

4.4.2 <u>Stimulus/Response Sequences</u>

- The user can sign up and put his/her projects on the app. The projects are going to be categorized into courses, providing a separate space for both.
- If a user needs to find a particular project under one course, the user can download from the ones already uploaded.

4.4.3 Functional Requirements

Sequence number	Requirement	Service provided	Constraints
X 4.4.1	Sign up	Allows user to login or create new account.	Compulsorily required
X 4.4.2	Update their projects to be available for	Let people download looking at the	Needs to be correct in order to stimulate exchange

	download.	list.	process
X 4.4.3	Search for needed projects and presentations.	Let user to download their required	Normal download.

4.5 Conveyance Sharing

4.5.1 Description and Priority

Students actively supports pooling a cab to a common destination to reduce upon the total cost per head. Thus, this is another feature on the low priority level on the app. The app gives them an option to put up their travel schedule (date, time, source and destination) and search for the ones with same interests. This would provide them with an option to pool.

4.5.2 Stimulus/Response Sequences

- The user can login and put his/her travel schedule on the app. Then the user can come back and check if anyone matched up with the same.
- If a user needs to find pooling option, the user can click on the similar conveyance schedule already uploaded by someone and get their contact for the same.

4.5.3 Functional Requirements

Sequence number	Requirement	Service provided	Constraints
X 4.5.1	Sign up	Allows user to login or create new account.	Required
X 4.5.2	Update their travel schedule.	Let people to pool up conveyance and share the total travel.	Needs to be correct in order to stimulate pooling in the right direction.
X 4.5.3	Search for people with	Let user to obtain contacts	Display contact

similar travelling plans.	of the person for pool.	of user.

4.6 Garage Sale

4.5.1 Description and Priority

Students sometime wants to share the reusable items with their colleagues and mates to save money. The app provides them with a photo upload option so as to upload and share what they want to sell in second hand. Thus, this feature is also set at the low priority level on the app. The user can search for the items they desire and can procure the contact of the person concerned with the item.

4.5.2 <u>Stimulus/Response Sequences</u>

- The user can login and put his/her sharable item on the app. Then the user can come back and check if anyone requested up for the same.
- If a user needs to buy the item, the user can click on the contact uploaded for the item interest and buy it.

4.5.3 <u>Functional Requirements</u>

Sequence number	Requirement	Service provided	Constraints
X 4.6.1	Sign up	Allows user to login or create new account.	Required
X 4.6.2	Update their selling item	Let people to find what they want to sell	Needs to be correct and clear for better buyers
X 4.6.3	Search for desired items.	Let user obtain contacts of seller.	Displays contact of the user.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The performance requirements are stated as follows:

- 1) The software is successful in the group of users that are living in a local community or campus and are open to sharing and knowing new people through a social application.
- 2) The users prefer simple UI with an easy understanding layout. Hence, the design is completely lucid and simple.
- 3) The sign up function (4.1.1, 4.2.1, 4.3.1, 4.4.1, 4.5.1) requires a user login through Gmail (Google accounts) or Facebook.

5.2 Safety Requirements

The software takes care of both privacy and content safety. The product is specially designed keeping the sense of sharing in mind. In case the user doesn't want to share their respective contact publically, the user should only provide E-mail details. Contacts can be provided in case of one on one mode. The app admin can remove content, disable accounts, and work with law enforcement when we believe there is a genuine risk of physical/mental harm, violate laws or direct threats to public safety.

5.3 Security Requirements

The application is designed and developed to keep the user account safe, secure and protect their personal information. By joining the app and signing up, the user agrees to provide their authentic name and identity. The app cannot publish the personal information of users without their consent.

5.4 Software Quality Attributes

Some quality attributes of the software are listed here: adaptability, availability, correctness, flexibility, interoperability, maintainability, portability, reliability, reusability, robustness, testability, and usability.

5.5 Business Rules

The admins of the database have the right to remove or block a specific user and cease their rights to use the software in case of any breach of privacy or uploading any wrong content.

6. Other Requirements

Since the app is locality specific, the app can't be generalized across demographics and on a bigger level. It can only be used in physical space areas with a locality. The database doesn't require a physical stake hold.

Appendix A: Glossary

Appendix B: Analysis Models

Appendix C: To Be Determined List
