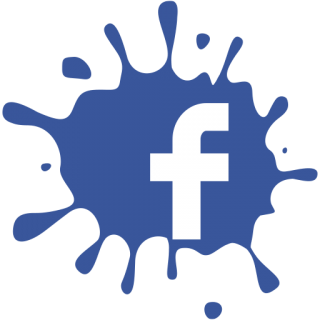
**Software Requirement Specification FACEBOOK CLONE**



**Introduction:**

This document is prepared in order to determine a software requirement specification for Facebook Clone.

Facebook is a social network on which people can add their friends, share videos and photos, send and receive messages, comment on the links etc.

**Purpose:**

The purpose of this document is to give a complete description about how Facebook Social Network System Clone can be developed.

It allows us to use React and Firebase features that we wouldn't be able to use in a normal CSS stylesheet. The issues which are basically addressed are functionality such as adding photos and uploading it. In this system, we are logging in using our facebook account and it takes the user name and picture from it.

**Scope:**

This project is great because it covers a lot of topics that are always present in ReactJS workflow, some of them are: project structure, destructuring, state management, passing props, Context APIs, Material UIs and also got hands on experience about firebase.

**Definitions ,Acronyms, and Abbreviations:**

When the user logins Facebook, they can see their home page, which is named as “Feed” that provide users to see what they share, what they write their status and their friends’ stories.

Moreover, at the left of this page, the user can see different functionalities such as friends, events, memories, etc. and at the right of this page, the user can see their pages and contacts. Therefore the Feed is the main page which combines daily interactions.

**Reference:**

This web application has been prepared on the basis of discussion with Team members, faculty members and also taken information from following website.

Websites:

1. [www.google.com](http://www.google.com)

2. [www.wikipedia.org](http://www.wikipedia.org)

3. [www.facebook.com](http://www.facebook.com)

**Product Perspective:**

Facebook is an independent and world-wide social network website. Every person can use it online without a fee. The Facebook is not a part of a larger system, it is an independent system. People from different regions of the world can connect to it and exchange information with other people. In order to control the contents of the sharings and comments done by the other people, Facebook has also a control mechanism. People can deliver their complaints about any part of the Facebook to the “Facebook Administrators”. Then, “Facebook Administrators” might take appropriate actions according to the complained situation which is against the rules.

**Performance Requirements:**

This software will have following requirements:

* Access and knowledge of any text editor (such as Atom or Visual Studio Code)
* A terminal
* A server to run
* General knowledge of React and JavaScript
* Material UI
* Firebase

**User Characteristics:**

Facebook does not require any specific computer knowledge to use it except the developers and administrators of it. Standard users are thought to be from any age, any gender and from any nationality who can use just computer’s browser. On the other hand, administrators and potential developers need a high level of expertise to understand web technologies.

**Hardware Requirements:**

As this system is an online Web-based application so a client server will be the most suitable Organizational style for this system. Computer systems will be needed by each of the actor as well as that user must be connected to the internet. So, concisely following hardware will be needed.

* Computer system.
* Internet availability

**Functional Requirements:**

Following are the services which this system will provide. These are the facilities and functions required by the user.

* Login
* Create Post
* Upload Images
* Update status

**Workflow**

* Building the Header & the Sidebars
* Building the Feed page
* Building the Create Post pop-up
* Installing Material UI
* Connecting the firebase
* Run npm start to run the project
* Open your browser : "http://localhost:3000/" to run the project

**Software’s needed to run the Facebook Clone**

* React JS
* Visual Studio Code
* Firebase

**Non-Functional Requirements:**

Non-Functional requirements define the needs in terms of performance, logical database requirements design constraints, standards compliance, reliability, availability, security, maintainability and portability.

**Performance Requirements**

* System shall be available from all over the world at all times. Being a social network, any interruption in the sharing chain will cause people to give up on Facebook, therefore it is essential that the system shall be available at all times.
* System shall not be affected from the number of active users in the system until half of the registered users become active. Being a worldwide network, assuming that half of the registered users are reaching to the website is a legitimate and necessary requirement.

**Safety Requirements**

If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a server crash, there cover method restores a past copy of the data base that was backed up to archival storage (typically tape) and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed-up log, up to the time of failure. And in the meanwhile, the server switch to the backup servers to keep the site working.

**Security Requirements**

Security systems need database storage just like many other applications. However, the special requirements of the security market mean that owner must choose their database partner carefully.

All the private data uploaded by the user is absolutely confidential to the other users. User can also report for if the find any suspicious activity in the Facebook, so the security department can take care of that.

**Software Quality Attributes**

***AVAILABILITY***: The site is available for the users 24x7.

***MAINTAINABILITY***: The developers and a team of software engineers work on the maintenance and the updates of the site.

***USABILITY***: The site can be used anywhere if the connectivity to the internet and a device