**Software Requirements Specifications**



Course Name : Software Engineering 1

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Team

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Document Purpose and Audience

* **Any document anywyere should tell us 2 things: What is this document? Who is execpetd to read it?**
* **Write in simple notes, What is this documet?**
* **List the taget audience to read this document (e.g. CEO? Project Manager? Customer...?)**

Introduction

Software Purpose

the purpose of the system is to develop an API for social network that allow users to stay connected and interact with each other.

it is simple and clear program and you can use it easily and don't require a big effort to use

it is free and available for all people

it'll offer basic services :create account , add friends,make groups and pages,message friends and receive messages ,etc..

it'll offer some features for premium users.

Software Scope

This is an API for any social network to depend on.

This software focuses on the basic operations that a user of a social network can perform, such features include:

1. create a new account (normal , premium)
2. add,view,delete a friend
3. make,edit,remove,like,share a post
4. upload some photos
5. create,join a group (private , public)
6. create,like,share a page and post to it (if administrator)
7. like,share,comment to friends' posts or pages
8. add a new hashtag to his posts or view posts with specific hashtag
9. message his friends and receive messages from his friends

it will not go through the complicated matters of advertising or any other monetary features (except for premium users)  
groups can have more than one administrator, but pages only have one.

Definitions, acronyms, and abbreviations

* **In a table, list all needed ones. Consider the audeicne**
* **Think as following: Document has abbreviation ATM..IFF audience doesn’t know it, let’s calrify it.**

Requirements

Functional Requirements

* **This is the most critical part...** **functional requirements describe what the system should do**
  + **E.g. an ATM allows you to enter Card, enter user name password and withraw a money**
* **List all the system requirements, respecting the problem statement giving by your TA**
  + **Make sure to go in the missing details for the mentioned features/components**
    - **Discuess with TA**
  + **Going byeond them (e.g. adding new complete major feature / component) is breaking the statement scope**
* **Each requirement should be clearly described, such that it can be understood without the presence of the one who wrote it.**

Non Functional Requirements

* **Non-functional requirements describe how the system works**
  + **E.g. Withdraw operation will be done within 20 second. Network is using secured protocols. System allows up to 30,000 withdrawal per minute.**
  + **Think about the operation / system quality**
* **There are too many non functional requirements. Read in** [**wiki**](http://en.wikipedia.org/wiki/Non-functional_requirement) **and Chapter 4. Pick the suitable ones for your system. Non-functional requirements must be VERIFIABLE, i.e., MEASURABLE.**
  + **Some Types as just examples: Usability, Reliability, Performance, Security, Scalability, Portability, Maintainability**
  + **Select the sutiable ones, for each one write the details**
  + **Be realistic **

|  |  |
| --- | --- |
|  | **Details** |
| **Performance** | * **Withdraw operation will be done within 20 second** |
| **Scalability** | * **System could be horizontally ....** * **And** * **In addition** |

System Models

Use Case Model

* **Using UML, write the use case model expressing the system actors & operations**

Use Case Tables

* **Using below table template, for each requirement write a use case table that shows user/system interaction**
  + **If one requirement is so big, you could divide it to more than table**
  + **If some requirements are not major, you could plugin them in other senario**
    - **E.g. you may not do LogIn Usecase table as it is simple functionality**
* **Flow of events should be very detailed**

|  |  |  |
| --- | --- | --- |
| Use Case ID: |  | |
| Use Case Name: |  | |
| Actosr: |  | |
| Pre-conditions: |  | |
| Post-conditions: |  | |
| Flow of events: | **User Action** | **System Action** |
| 1- User Enter Card and Password. |  |
|  | 2- System Verify user data |
| 3- User Select Vodafone from the list |  |
|  | 4- System retrieves Vodafone bills |
| and so on |  |
| Exceptions: |  | |
| Includes: |  | |
| Notes and Issues: |  | |

Ownership Report

* **Remove the following notes and any red notes**
* **For every item in this document, write the owners. If someone is owner of something, s/he understands it 100.%**
* **Team leader must verify the table with the team members.**

|  |  |
| --- | --- |
| **Item** | **Owners** |
|  |  |
|  |  |