Small.World System Requirements

Functional Requirements

ID	Requirement	Priority
FUN-01	Application shall integrate with Facebook and Google+ by use of a common user account.	Mandatory
FUN-02	Application shall provide chat functionality	Mandatory
FUN-03	Application shall use Facebook, Google+ and user's email account as a contact feed for the user.	Mandatory
FUN-04	Application could provide video conference functionality.	Optional
FUN-05	Application shall enable to tag multiple users on map or other entities.	Mandatory
FUN-06	Application shall feature a recommendation system based on data about user and their FOAF (Friend of a Friend/mutual friend)	Mandatory
FUN-07	Application shall enable user to check-in at current location.	Mandatory
FUN-08	Application should track FOAF of user in real time by use of GPS.	Nice To Have
FUN-09	Application shall display already collected data on FOAF and current location in offline mode.	Mandatory
FUN-10	Application should alert on presence of known FOAF within 5 miles proximity.	Nice To Have
FUN-11	Application shall display location of FOAF on a multi-layered map.	Mandatory
FUN-12	Application should allow user to schedule their meetings, display time left and alert on it.	Nice To Have
FUN-13	Application shall feature a log of past activities and conversations.	Mandatory
FUN-14	Application shall enable user to alter their visibility settings and turn-off GPS tracking.	Mandatory
FUN-15	Application shall notify user on events, contacts, recommendations and meetings via Facebook and email with an option to turn some or all notifications off.	Mandatory
FUN-16	Application should display the key information about selected FOAF's such recent places they have been to or interests/hobbies.	Nice To Have
FUN-17	Application could feature in-app sound notifications.	Optional
FUN-18	Application could display discrete personalised adverts to support its free of charge business model.(PPC-pay per click advertisement).	Optional

FUN-19	Application shall allow user to post and share reviews of locations, events, products and services.	Mandatory
FUN-20	Application shall inform the mutual friend of two people when they moved in a same new place and allow that person to recommend the basic information. This function can use push notification.	Mandatory
FUN-21	Application shall inform the sender of the message that the receiver has read it and the ability to mark them unread.	Mandatory
FUN-22	Application shall allow for sharing pictures, voice notes and videos.	Mandatory
FUN-23	The event manager should be able to announce events from businesses in the area.	Nice To Have
FUN-24	Application shall allow users to filter which friends and notifications are visible, this includes filtering by date.	Mandatory
FUN-25	Application should allow user customize its layout.	Nice To have
FUN-26	Application shall allow for mutual friends to suggest their friends that could meet or share interests.	Mandatory
FUN-27	Application shall utilise SMS protocol to enable text messaging and SMS-based geolocation.	Mandatory
FUN-28	Application could offer users GPS outdoors gaming functionality.	Optional

Non-Functional Requirements

Usability

ID	Requirement	Priority
USA-01	Application shall make use of GPS services.	Mandatory
USA-02	Application should operate in both landscape and portrait mode on mobile devices.	Nice To Have
USA-03	Application shall operate effectively in online mode.	Mandatory
USA-04	Application shall store certain data in local storage to retrieve when not connected to Internet (offline mode).	Mandatory
USA-05	Application shall be easy to use - the average time for novice user to learn to use this application must be not more than 5 minutes.	Mandatory
USA-06	Application should ask user for confirmation of deletion of any important data.	Nice To Have
USA-07	Application shall have user input validation. System must validate name, email, phone number, date format and other necessary details.	Mandatory

Efficiency

ID	Requirement	Priority
EFF-01	Application should be fully operational on devices with at least 512 MB RAM	Nice To Have
EFF-02	Application should be fully operational and usable on all computing devices with a screen of above 4 inch and resolution of 720p and more.	Nice To Have
EFF-03	The application shall quickly respond to user actions; the application response should be not more than 3 seconds when user perform an action	Mandatory

Dependability

ID	Requirement	Priority
DEP-01	Stable operation of the application shall be assured at all the time, both in online and offline mode.	Mandatory
DEP-02	The target number of all defects reported by user shall not exceed 5 during application testing.	Mandatory

Compatibility

ID	Requirement	Priority
COM-01	Application shall be compatible with all major browsers, including: Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, Opera, Apple Safari, and with mobile platforms: Apple iOS, Google Android, Microsoft Windows Phone.	Mandatory

Operational

ID	Requirement	Priority
OPE-01	Application shall be available to general public for free as both a web application and a mobile app.	Mandatory
OPE-02	Application shall be designed to run 24 hours per day and 7 days a week and be readily available to the user	Mandatory

Development

ID	Requirement	Priority
DEV-01	Application shall be developed for native application using Google App Engine and Python as language. For the mobile application: Java for Android, Objective C for iOS and XAML and C# for Windows Phone.	Mandatory
DEV-02	Application shall be thoroughly tested on all major desktop browsers, and the following mobile platforms: Apple iOS, Google Android, Microsoft Windows Phone.	Mandatory
DEV-03	Application could use a NoSQL solution for database storage.	Optional

Regulatory

ID	Requirement	Priority
REG-01	Application shall meet all the Facebook, Inc. requirements regarding platform integration.	Mandatory

Ethical

ID	Requirement	Priority
ETH-01	Application shall be accessible by maximum possible number of potential users, including those with disabilities.	Mandatory
ETH-02	Application shall not require from user or disclose any sensitive data.	Mandatory

Legislative

ID	Requirement	Priority
LEG-01	Application shall be in compliance with Data Protection Act 1998.	Mandatory

Security

ID	Requirement	Priority
SEC-01	Application shall give different permissions to administrators and users. (e.g. change profiles)	Mandatory
SEC-02	Application shall check the type and content of an image uploaded into the website as a valid image.	Mandatory
SEC-03	Application should limit the times of incorrectly typed passwords in order to avoid *brute force attack*.	Nice To Have
SEC-04	Application shall keep all software it uses up to date.	Mandatory