Software Engineering System Requirements Specification For Cindle

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Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

This Software Requirements Specification provides a complete description of all the functions and specifications of the web application "UNNAMED", The main part of this application we will develop a social interaction and sharing experiences throughout gathering different people with the same interests in real-life events where they can enjoy their hobbies and interests with alike minds away from social media.

1.2 Document Conventions

Lucidchart: site we use to create a Use case and all diagrams for the project

Term	Definition
IEEE	Institute of Electrical and Electronic Engineers
SRS	Software Requirements Specification
FAQ	Frequently Asked Question
os	Operating System
REQ	Request

1.3 Intended Audience and Reading Suggestions

- Developers who can review the project's capabilities and more easily understand where their efforts should be targeted to improve or add more features to it.
- Project testers can use this document as a base for their testing strategy as some bugs are easier to find using a requirements document.
- End-users of this application who wish to read about what this project can do.

1.4 Product Scope

The scope of this project is to develop a web application for building a small communities of people that share the same interests and hobbies, enhance them to develop their skills and increasing the learning curve of each one, we aim to make an optimal meeting with a comfortable place with suitable time to allow people to share interests, as initial start we will work in Alexandria, Cairo, Kafr ElSheikh in Egypt.

1.5 References

[IEEE] The applicable IEEE standards are published in "IEEE Standards Collection," 2001 edition [Software Engineering] book we study from it for Dr.Reda Hussien [JavaScript] is a scripting language, primarily used on the Web. It is used to enhance HTML pages and is commonly found embedded in HTML code https://www.linkedin.com/

[Adobe xd] the tool we use to design the UI for the site

TODO: example tools for interface

2. Overall Description

2.1 Product Perspective

This is a web-based and mobile application. The application will connect people with the same interests. The mobile application will work on mobile Android and iOS devices and the web application will work on *every* modern web browser. It will have functions as selecting your interests and activities, data managing, matching and selecting the most suitable place, confirming the event details, communication with the attendees, collect feedback about the event, and finally arrange the next meetup/ event date. All of the information will be kept on a database that can be accessed by only the users who have the right to.

2.2 Product Functions

The application will consist of these main tasks:

- Authentication.
- Selecting your interests and activities.
- Matching and selecting the most suitable place.
- Confirming the event details.
- Communication with the attendees.
- Collect feedback about the event.
- Arrange the next meetup/ event date.

To start the user will have to create an account or login if the user has created an account previously. Then the user will choose his desired interests and activities. After a number of people select an interest or activity at the same time spot the application will match the users based on the nearest available places for all of them. Then, the user will select and confirm the most suitable place for him. After that, the user will be able to see and communicate with all of the attendees of the event. After the event is finished the attendees will be able to give feedback about the event. Finally, the application will ask the user if he needs to attend the next event.

2.3 User Classes and Characteristics

The application should cater to the following user classes. Our primary user is someone who wants to share his interest with others and connect with people with the same interests as him.

2.4 Operating Environment

The web application will operate on modern web browsers and the mobile application will operate on Android or iOS depending on the device itself.

2.5 Design and Implementation Constraints

One important constraint is privacy and security. Users should be accessing only the authenticated data. The application will be based on the following technologies for the web-based version: HTML, CSS, JavaScript, Angular, NodeJS, Express. The mobile application for the iOS version will be based on Swift and the Android version will be based on Java. The database used for our application is MySQL. The management tools that will be used is Trello. Finally, we will use Git as version control technology for the application.

2.6 User Documentation

- User Manual: To help users navigate their way through the application.
- FAQ: Answers to the most asked questions.

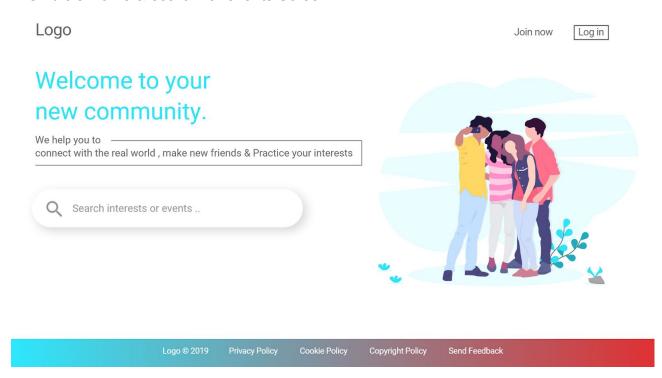
2.7 Assumptions and Dependencies

Users of this application are any Android, iOS or the web browser that loads this application in their device. All of the users are in the same class, only one type of user exits. The operating environment is, as just mentioned above, is a mobile or a computer device. A mobile or a computer device that can support basic dependencies of the application is expected for proper user experience. On the other hand, our database server and services can operate on any OS like Windows or Ubuntu that can supply the database server's fundamental dependencies and needs

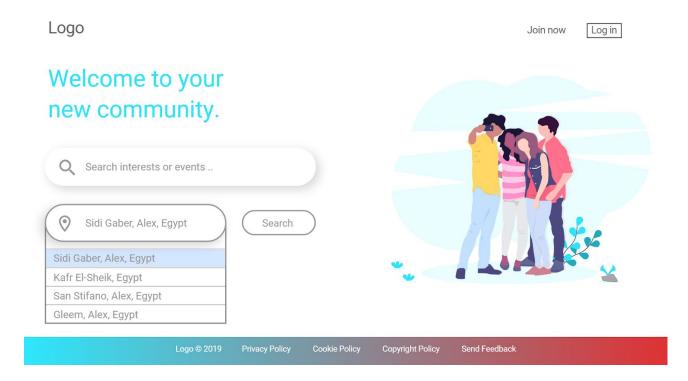
3. External Interface Requirements

3.1 User Interfaces

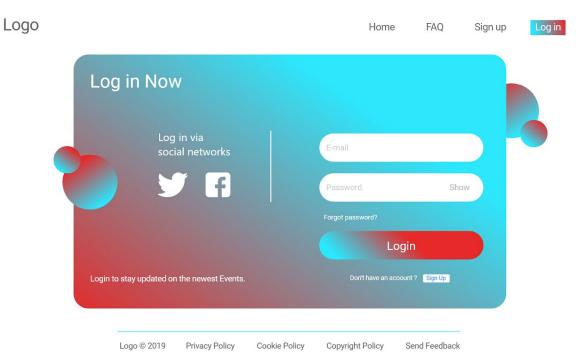
1. Cindle's Home & search for events Screen:



2. Cindle's Home & search with location Screen:



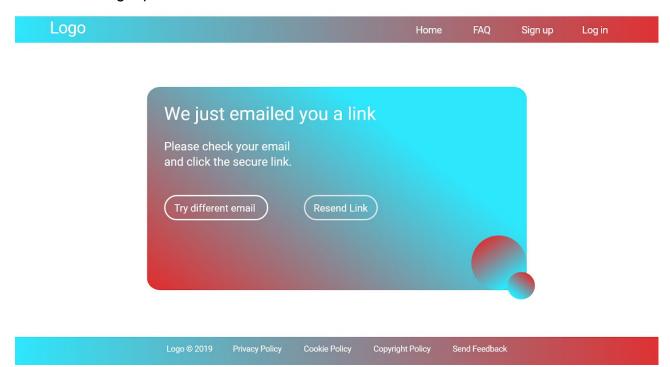
3. Cindle's Login Screen:



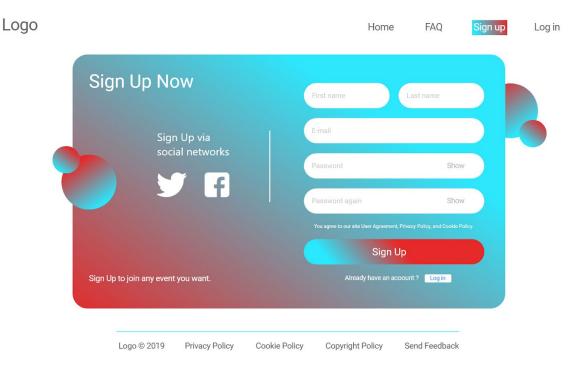
4. Cindle's Forget password Screen:



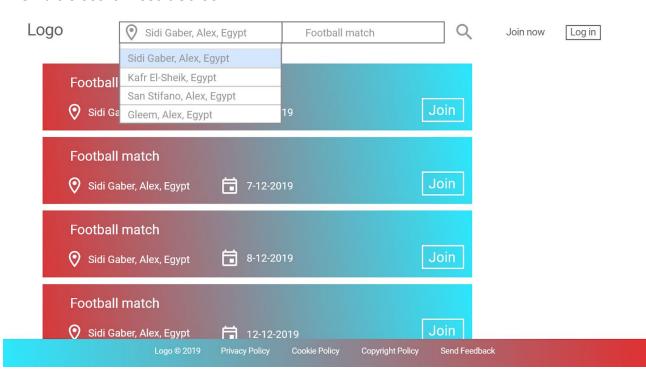
5. Cindle's Forget password result Screen:



6. Cindle's Sign up Screen:



7. Cindle's search result Screen:



3.2 Hardware Interfaces

Since Cindle must run over the internet, all the hardware shall require to connect the internet will be hardware interface for the system. For e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

3.3 Software Interfaces

Cindle needs a web browser that supports scripts like Google Chrome or Mozilla Firefox by which users can access the system.

3.4 Communications Interfaces

As Cindle is a social networking website it requires a high-speed internet modem for the use of this application. For the suitable use, there must be a correct internet connection among the users. The system shall use the HTTP protocol for communication over the internet and the internet communication will be through TCP/IP protocol suite.

4. System Features

4.1 Select Interests

4.1.1 Description and Priority

It's where the user navigates between available interests/activities to look for which is suitable for him/her to share and fill the profile with the selections.

Without these actions, the application would not work properly or it would be useless to use; Priority is High.

4.1.2 Stimulus/Response Sequences

The first step is selecting suitable interests and after proceeding it goes to our database, the user profile is updated and the available event list is also updated.

4.1.3 Functional Requirements

REO-1: Verified account, with real personal information not randomly collected.

REQ-2: Stable internet connection to be able to send packets to our system.

REQ-3: The activity user is searching for is already placed before.

4.2 Matching Event

4.2.1 Description and Priority

In this case, the user chooses the most suitable event with the time which matches his calendar.

Priority is Medium.

4.2.2 Stimulus/Response Sequences

Searching event list with his filters or keywords or category specified.

Choosing the event with matching interest and time, the system let him view the participators of the meetup and the number matched and the left ones.

after completion of registered members in the same event, it asks every one of them separately to vote for the preferred place and then sends confirmation to event users.

4.2.3 Functional Requirements

REQ-1: Already logged-in in the system.

REQ-2: The webpage already chooses a list of available events with variant times to choose from it.

REQ-3: place voting reaches all matched users.

4.3 Ending Event

4.3.1 Description and Priority

The way how the user ends his little trip with us and we want to know how it was. Priority is Low.

4.3.2 Stimulus/Response Sequences

It pops up with empty five-stars waiting for his response to fill it as much as he liked the total event then select the point he liked/disliked and there's an option to leave a comment specific or general about the event or the point he had chosen.

After submitting the system ask him if he wants to repeat the process" event" in the coming day and wait for the user response with "Yes of course!" or "No thanks".

4.3.3 Functional Requirements

REQ-1: Up-to-date browser.

REQ-2: Correct suggestion list/points in the feedback window.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The application must contain a limit for interests that the user can select, that is because if a user selects too many interests, this may affect the performance of his or her meet list. The application must support approximately "TODO" users at the same time based on the population of the city.

5.2 Safety Requirements

The application mustn't allow anyone to join it unless he or she is over 13 years old. It should also allow the user to know who else is going to the meeting.

5.3 Security Requirements

User identity must be validated before being allowed to use the site. The quality and safety of the place must be verified before doing any meeting. Make sure the user agrees to all privacy & policy of the app.

5.4 Software Quality Attributes

The application will work 24/7 if an internet connection is available. The server will be maintainable. We will do a digital test and on-site test to make sure that the app is working properly. The application will contain frequently asked questions "FAQ" to help the user in an easy way. There will be continuous maintenance of the application. The user can open the application from any device (Android, iOS, browser). The user can use the application from anywhere in the world.

5.5 Business Rules

- 1. Profit from places for more meetings "long-term plan".
- 2. Profit through Advertisements.

6. Other Requirements

As Google Places and Google Maps API is being used for this application, it is mandatory that we abide by the terms of use specified by Google, database storage and domain with host, internationalization needed for multi-languages users, the places in which event will be held in.

Appendix A: Glossary

No glossary terms available at this time.

Appendix B: Analysis Models

<Optionally, include any pertinent analysis models, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams.>

Appendix C: Use Case Diagrams

This appendix contains the use case diagrams for each actor. These diagrams demonstrate the interaction between the actors and the system

Appendix D: UI(user interface)

The user interface (UI) is the point of human-computer interaction and communication in a device. This can include display screens, keyboards, a mouse and the appearance of a desktop.