### **Inf 117 –** Spring **201**6 **– Requirements Document**

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| Awarded Points | Maximum Points | Document Aspect |
|  | 15 | Clarity of writing (spelling, grammar, sentence construction) and Clarity of expression (flow, structure, making logical arguments). Roughly 7.5 each. |
|  | 7.5 | Introduction / Executive Summary (can be different sections or combined into one) |
|  | 7.5 | Application Context / Environmental Constraints (can be different sections or combined into one) |
|  | 7.5 | Use Cases |
|  | 32.5 | Functional Requirements Specification |
|  | 7.5 | Software Qualities and Non-functional Requirements |
|  | 7.5 | Other Requirements |
|  | 7.5 | Assumptions / Risks (can be different sections or combined into one) |
|  | 7.5 | Priorities / Implementation Phases; Future Directions and Expected Changes |
|  | **100** | **TOTAL** |

*Weave* System Requirements

###### April 9, 2016

Team WEAVE 1.0

##### **Introduction**

The main objective of this requirements document is to provide an overview and context of the system to be designed (*Weave*), its intended audience, and the specifics that will go into developing the prototype for *Weave 1.0* including, but not limited to constraints, use cases, different requirements, assumptions and risks, implementation phases, and expected changes in the future.

Photos often represent precious memories of our loved ones, but what makes each photo special is the story behind them. A picture is worth a thousand words, but without knowing what those words behind every picture is, those pictures can lose their value, especially when those loved ones have left our lives and can no longer tell those stories. With these concerns and considerations, our primary stakeholders commissioned for Team WEAVE 1.0to develop the mobile application, *Weave*.

*Weave* is a collaborative photo-directed storytelling and story gathering mobile platform that will operate in a social media-like setting, but focus on the intimate and private aspect of storytelling in a closed network. *Weave* is not about networking and sharing stories publicly, but instead emphasizes on a secure and private platform where families and close friends can share photos and stories behind each photo via “Threads”. Each photo can be associated with multiple Threads or multiple photos can be associated with one Thread. Each Thread can be either text or audio form, in which they will represent a story or discussion about the photo.

The intended audience of *Weave* is for all family members, close friends of families, and any users interested in collaborating to share photos and stories behind those photos. The motivation behind developing *Weave* is to provide an easy, convenient, and user friendly solution to preserving the stories behind every photo.

##### **Overview / Executive Summary**

The goal of developing *Weave* is to build a platform where people can take their photos of loved ones and share it amongst their friends and families to ask questions and encourage storytelling. *Weave 1.0* (the prototype) will aim to get a critical mass of people to use it and complete some beta testing with the following major features included:

**Upload Photos**

Users shall be able to upload photos directly onto the *Weave* application in order to be able to collaborate and share them with close friends and family.

**Create Threads & Conversations**

Users shall be able to create Threads and hold functional conversations or discussions on the Threads to encourage asking questions and storytelling between the user and their private network of *Weave* contacts.

**Tagging**

Users shall be able to tag other users from their *Weave* contacts in their photos in order to start a Thread to encourage users to ask questions, discuss, and begin their storytelling experience.

**Scroll Through Photos & Threads**

Users shall be able to scroll through photos they uploaded, photos shared with the user, and Threads associated with photos they have access to. This will allow users to have convenient and easy access to the stories related to each photo.

**Multiple Threads**

Users shall have the ability to create multiple Threads associated with a single photo and vice versa, so that there can be multiple questions, discussions, and storytelling between different users associated with the photo(s).

*Weave 1.0* may affect different existing social medias, social processes, and how people of the older demographics may shift toward a social platform. *Weave 1.0* emphasizess a new way to share stories via photos unlike other social platforms. It also affects social processes because rather than just uploading a photo publically like in traditional social medias, *Weave* prompts other users who view the story to share their experiences as well.

**The following general assumptions were made about the application:**

* The audience of *Weave* include users from an older generation who may not be tech-savvy or familiar with social medias.
* The users of *Weave* will require an Android device to use the application.
* There is a rather large market for this application because of our distinct human need to be social creatures.
* People want an intimate and private network to tell stories about meaningful photos with their close friends and family.
* Our clients seek to form a startup base on this application and will require documentation for future references.

##### **Application Context / Environmental Constraints**

Design Constraints

**CO-1:** *Weave* shall be a mobile application that must support and be compatible to run on all Android devices, regardless of tablet or mobile phone.

**CO-2:** The *Weave* mobile application shall be coded in the Java programming language.

**CO-3:** The user interface of *Weave* shall be designed in pale colors for the background and contrast with earthy tones for the text and layout.

**CO-4:** *Weave 1.0* shall support between 5-20 users.

**CO-5:** *Weave 1.0* shall have the ability to create around 20 threads, or as many as it takes to functionally test the features.

**CO-6:** The terminology used on *Weave* shall provide affordance to give users a sense that they are participating in a story or asking questions about the story as opposed to making a comment.

**CO-7:** *Weave 1.0* shall support connecting to the app through Wi-fi only.

**CO-8:** Thread conversations shall be in the form of text or audio recording.

**CO-9:** Users shall be restricted to only “tagging” the people from their *Weave* contacts in their Threads or photos.

**CO-10:** Users shall only be able to view or edit the photos and Threads that they are tagged in.

##### **Use Cases**

Use Case #1: Create account

The *Weave* application will allow new users to create a login and become a registered user through inputing an email address and password. The user is then prompted to input a username and upload a profile photo. The user is then prompted to confirm the account by pressing “Create Account”.

* User - creates account by filling out a list of information.
* System - Registers user

Use Case #2: Signing into the application

The *Weave* application will allow existing users to access an account by signing in with the correct username and password.

* User - inputs username and password
* System - validates username and password

Use Case #3: Add a user

Upon accessing the *Weave* application, the user will be able to search for specific users to add to their *Weave* contacts. Adding a user is not immediate. A request is sent and the user to be added will not be added until the request is accepted by the user with whom the request was sent.

* User - Search for username or email address of intended user
* User - request to add user

Use Case #4: Create Thread

The purpose of the thread is to start a conversation with family members or friends. The user has the ability to upload one or multiple photos by allowing the application to access the user’s phone photo album or by allowing the user to take a photo by accessing the phone’s camera. Once the user has uploaded the photo(s), the user is given the ability to provide information with regard to Thread the user is planning on sharing. Information includes the title of the thread, a comment or question (through text or an audio recording), location and date of where and when the image(s) was taken, and the users to tag and send the thread to.

* User - Uploads photo(s) by:
  + Taking photo(s) from phone’s camera  
    or
  + Selecting from photo album
* User - Enters photo(s) information
* User - posts audio comment to the photo
* User - selects user(s) to mention in the Thread.

Use Case #5: Upload a photo

User can upload a photo through camera access or photo album access

* User - open photo album
  + System - Accesses phone album
  + System - displays photos
  + User - Selects photo
  + System - uploads photo into application

Or

* User - opens camera
  + User - takes photo
  + System - uploads photo into the application

Use Case #5: Forward Thread

The purpose is to expand the circle of people that are discussing the story. The intention of this is to get more information on a story.

##### **System Requirements Specification**

The following are the system requirements for the prototype, *Weave 1.0*:

* Create “Threads”
  + The application shall allow users to make “Threads” to upload photos and share with other users to create stories.
* Share Threads with other users
  + The system shall allow Threads to be shared with users’ contacts.
* Upload photos
  + At least 5-10 photos can be uploaded within a Thread.
* Login functionality
  + Users shall log into the application before using the system’s features.
* Include audio and/or text information to a Thread
  + Threads need to have either text or audio to create/share stories with audio being the main focus.
* Tagging System
  + Users can tag other users from their contacts to interact with a Thread.
* Conversation/Discussion Section
  + Users should be able to have the ability to add comments for a conversation/discussion in a Thread.
* Profile/Account system
  + Users shall have profiles and accounts to customize their personal information.
* Contact System
  + Users will be able to add contacts based on their address book.

##### **Software Qualities and Non-functional Requirements**

* Simplicity
  + The user interface shall be easy to use for all types of users regardless of their level of familiarity with technology. It shall also be readable and easy to navigate through.
* Reliability
  + The application shall be reliable when used. Users shall be able to trust that their data and private information is secure when using the system.
* Security
  + The system must be secure by maintaining and protecting all information and photos of users from malicious intentions or unauthorized access.
* Usability
  + The system shall be usable in every aspect. It must be fully functional in order to be used.

##### **Other Requirements**

Glossary of Terms:

* Thread
  + A Thread is a collection of photos and conversations where users can interact with other users by implementing audio or text content. A Thread is often shared with other users.
* Conversation/Discussion
  + A section dedicated and associated with a Thread that encourages discussion or expansion of a story.

##### **Assumptions / Risks**

Legal Risks: All information dicussed with the client must be kept private. All materials are owned by Anikta and Andrew. Implementation of the application must be done in a confidential matter.

Finanical Risks: The client is investing 10 weeks into the project and expects a prototype (*Weave 1.0*). Each sprint and meetings must be spent efficiently as client and devleopers are spending their time to create a product.

Development Risks: The skeleton and bare code of the application might not be up to par compared to professional developers. We as developers do not have the acquired experiences to create a full scalable application.

##### **Priorities / Implementation Phases**

Priority One: Implementing the basic core function of the system which will be the Threads.

Priority Two: It should have a runnable prototype that at least have all the wireframe pages and also supports at least 10 users on the server.

Priority Three: It should have the Tagging functionality in the thread conversation.

Implementation Process: Creating the wireframes and use cases will serve as the guideline to what needs to be programed. The next phase will then be to research and divide programming and quality assurance components. Each sprint a new prototype will be made and shared with the client for feedbacks.

##### **Future Directions and Expected Changes**

Given that we are developing the prototype for the Weave application. Our clients have mentioned some expectations of future developments of the product. Future development include the following:

* Predefined questions.   
  Our clients see future versions of the application to have predefined questions to ask in a thread with regards to the photo. Questions such as, “Where was this photo taken?” The intent is to ease the process of creating a thread. However, our clients emphasized that this is not in the scope of this iteration of the *Weave* application.
* Another aspect is tagging elements within a photo.   
  Our clients describe elements as any sort of element or artifact in a photo that a user could find relevant or something searchable. The intent of tagging elements in a photo is to focus the item of interest, that the thread is intended to discuss; its a means to narrow the view in the photo to that specific area.
* Voting or ranking of photos is also an additional feature that our client is hoping the future versions of the application will implement.
* Notifications is another intended aspect.   
  The current application our team will develop has a notification aspect that only works when the application is being used. However, our clients described some notification features that the future versions of the system should develop.
  + A user should have the ability to turn notifications on and off.
  + Notifications would appear as a pop-up window.
* Album creation

In the future versions, the application shall have a feature to create albums or a library of albums/threads.

* Support many users.   
  As mentioned previously, the application to be developed by our team is intended as a prototype and thus our clients do not expect the application (*Weave 1.0*) to support a large sum of users. However, future developments of the application must change to support a large sum of users.
* Support of a large number of photos and threads.  
  *Weave 1.0* is not intended to support a large number of photos. However, other versions of the application should support storing a large amount of photos.
* There is also the possibility of expanding the app to the iOS platform.