Requirements Specification

Title: NativeToMe

Version 1.0

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1. Introduction

1.1 Project Overview

In today's social media landscape, there is a wide variety of content ranging from politics to funny cat videos. The common theme through it all is that all social media platforms today are orientated towards the individual. While this orientation is useful, NativeToMe aims to provide a social media platform that focuses on community rather than individuals. NativeToMe will address the lack of community by focusing on the qualities and attributes of a community. Consequently, NativeToMe will form a community of communities rather than a community of individuals.

1.2 Definitions, Acronyms, and Abbreviations

1.2.1 User: The person using the client.

1.2.2 Customer: The person who pays for the product and decides the requirements.

1.2.3 Developer: The person, or persons, who produce a product for a customer.

1.2.4 Tribe: A collection of people with similar values, characteristics, interests, and qualities

1.2.5 Open-Door Policy: An open-door policy is a common communication policy in which someone in a position of authority leaves the door "open" in order to encourage openness and transparency among their constituents.

1.2.6 Tribe house: A tribe house is a gathering place for tribe members.

1.2.7 GUI: Graphical User Interface

1.2.8 Web interface: The interaction between the user and software running on a web server.

1.2.9 FR-XX: Functional requirement

1.2.10 Communication Layer: Handles all communications between the web interface and the database

1.3 Purpose, Scope, and Organization of this Document

1.3.1 Purpose

The purpose of this application proposal is to help focus on groups of users and their qualities and attributes rather than the characteristics of the user themselves. The product will allow for the formation of communities consisting of users who have similar interests, characteristics, and values as one-another. The intended audience for this product is for both users who want to be a part of a community that is not foreign to them and want a sense of home and comfort, or users who are looking to explore different communities to better themselves.

1.3.2 Scope

The application is suitable for users over the age of 16 due to social interactions. As long as the user has a legal interest, NativeToMe, will have a place for them. Whether that means they start a new tribe and become the tribal leader, or joining an existing tribe, there will be a tribe for everyone. To use NativeToMe, users will be required to make an account and input some basic information and their interests. The users can opt to make their account public or private based on the needs and wants of the user. Additionally, based on the interests of the user, certain tribes will be suggested to join to get them started. Once they are members of a tribe, they are able to participate in tribe functions.

# 2. Overall Description

2.1 Product Environment

The components of NativeToMe will consist of a central database, a web interface and a communication layer.

The database will contain all system data: user accounts, user data, tribe data, etc. The database will also handle managing tribes. The database will handle requests sent from the communication layer as well as send data that should be displayed on the GUI.

The Web Interface consists of the GUI displayed in a browser such as Google Chrome, Internet Explorer, or Safari. The web interface will handle displaying information to the end user as well as receiving input events and sending those to the communication layer.

The communication layer will handle all communication that must be sent between the web interface and database, including data and events. The communication layer will also oversee ensuring all data is formatted in ways that the appropriate component can work with.

The following diagram illustrates the relationship between these three components.
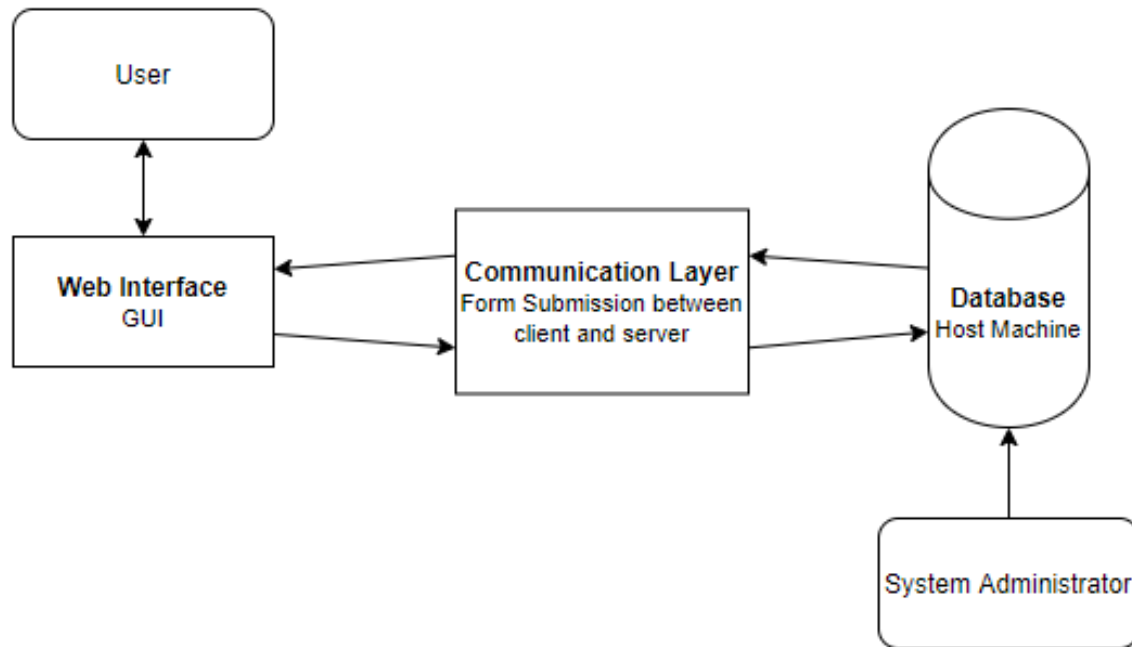
2.2 User Characteristics

2.2.1 Users

Any specified user can use this product. Background or occupation of the user does not play a factor in the ability to access the use of the product.

2.2.2 Experience

If a user has used a social media application prior to the use of the product, they will know how to maneuver around the UI with ease. If NativeToMe is their first social media app, there should be no difficulties using the product due to its simplicity and friendly environment.

2.2.3 Technical Expertise

No expert technical background is needed to use this product. Basic computer knowledge and skills are helpful but are not required. NativeToMe is a user-friendly application and is not meant to be difficult to use.

2.2.4 Primary Concerns

Concerns the user may have when using NativeToMe is how their private information will be secured from possible hackers or other users who attempt to take their account. This concern will be answered in section 3.4.

2.3 Product Functions

Login - Users will be able to login or create an account.

Logout - Users will be able to securely logout of NativeToMe.

Post - Users will be able to post messages and other multimedia messages within their tribe.

Share - Users will be able to share posts from other tribes they are a part of or external links with their fellow tribesmen.

Like - Users will be able to like posts from other tribe members.

Comment - Users will be able to comment on other users' posts.

Search - Users will be able to search within their tribe or search for other tribes. If a tribe has an "open door policy" the user can join.

Request Entry - Users will be able to request access to a tribe.

Merge - If two tribes have similar traditions, qualities, and values and want to merge their tribes, the tribe leaders can do so without the consent of the rest of the tribe.

Tribe Leader functions - A tribe leader will have administrative rights over the tribe such as:

- **Warning:** Asking a user to change their behavior else consequences.
- **Suspension:** Allow the tribe leader the ability to suspend tribe members as an intermediary action before banning
- **Ban/Removal:** Remove a tribe member who does not adhere to the tribe's standards.

2.4 Assumptions and Dependencies

- The user will have access to the internet.
- The user will have a valid email address for account creation.
- The user will not use an email that has already been used for registration.
- The user will meet the minimum age requirement.
- Up to date operating systems should be used.
- The user will have basic knowledge on how to use a computer and access applications.

2.5 Constraints

Compliance: Since NativeToMe will be a social media application privacy of user's information is of the utmost importance. If any local or federal government policies are applicable, they will be adhered to.

Architectural Constraint: Furthermore, a website needs to be hosted for users to use. To achieve this, a third party provided, or a personal server will be required.
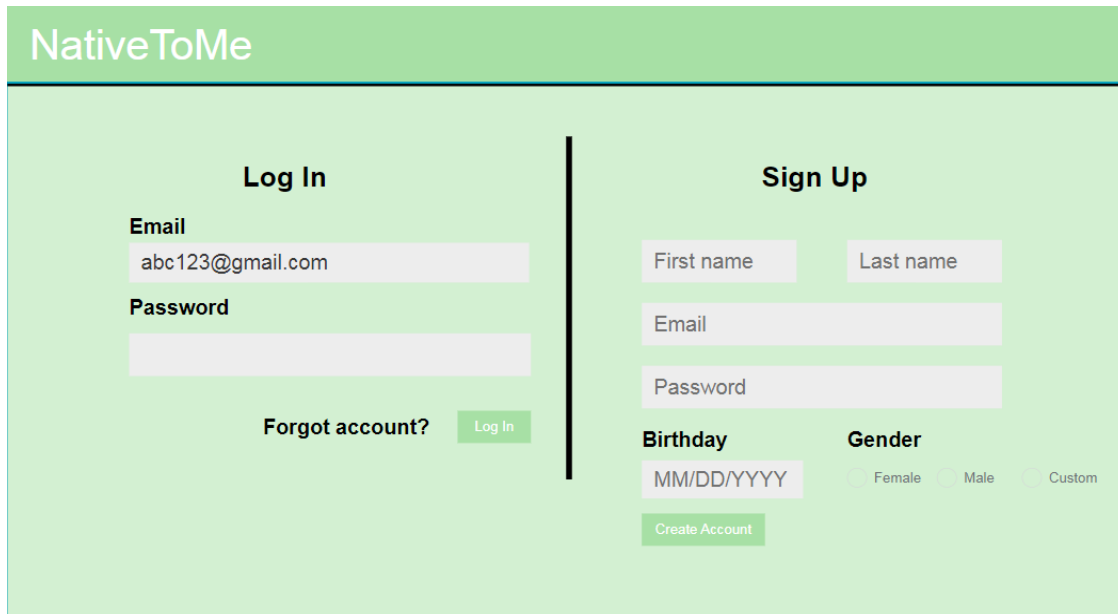
Development Constraint: This project will be developed over the course of approximately 3 months. Because of this relatively small-time window, the product will be available in the form of a website. A mobile version of the product will not be available.

Financial Constraint: Funds will need to be sourced for the continuous operation of NativeToMe. Additionally, regular maintenance is required for continued optimal performance. Maintenance would include hiring a software developer to implement updates and patches as needed as well as a system administrator to handle account issues.

3. Requirements

3.1 User Interface Requirements

Log-In User Interface

The interface above represents the page the user interacts with initially when using NativeToMe. First option, the user is asked to log in to their account with the email and password they used to sign up and then click "Log In". If the user forgets their password, they can click on "Forgot account?" and re-acquire their password. Second option, the user is asked to create an account if they do not currently have an existing account by using their first and last name, a valid email and password, and their birthday and gender; then they can proceed to click "Create Account" and begin using NativeToMe.

Exploring Tribal Houses Interface

NativeToMe

Tribe Houses

Tribe Name: Tribe of Power

Main Tribe House

House of Food   **House of Love**

Tribe Values:
-Respect
-Honesty
-Love
-Creativity

Traditions:
-Friday Movie Night

Qualities:
-Friendly
-Energetic

Users can look at other tribes and inspect the tribe houses values, traditions, and qualities. Users can also view the main tribal house along with the other houses that are included within the tribe which hold fun and interesting information.

Individual User Page Interface

NativeToMe

Tents

Jane Smith's Tent

Profile Picture:

Tribes:
-Tribe of Power

Profile Banner:

Likes:
-Animals
-Coffee
-Music

Dislikes:
-Video games
-Rude people
-Math

Hobbies:
-Bike riding
-Reading
-Collecting coins

Interests:
-Gardening
-Learning about other cultures

Users can create or look at other users' individual pages. Listed on the page, you can see the user's profile picture, profile banner that best represents them, and the tribes that the user is included in. On the left side of the page, you can view the user's likes, dislikes, hobbies, and interests about the user. The user is able to update any of the information they place on their page, however, the list of tribe's updates by itself when the user joins or leaves a tribe.

3.2 Functional Requirements

Req#	Requirement	Comments	Priority
FR-01	The system shall allow users to login and logout securely.		1
FR-02	The system shall grant users different permissions based on their tier in a tribe.		3
FR-03	The system shall allow users to post content on their tribe's page.		1
FR-04	The system shall be able to appoint a new tribe leader based on the next longest membership within the tribe if the current tribe leader(s) leaves.		2
FR-05	The system shall allow users to request entry into an existing tribe		2
FR-06	The system shall allow tribe leaders to set privacy mode for the tribe	Open Door Policy, or Requested Entry	2

FR-07	The system shall allow each tribe to create tags based on its values and qualities.		3
FR-08	The system shall allow leaders to moderate their tribe.		2
FR-09	The system shall allow each tribe to create houses.		2
FR-10	The system shall allow tribes to merge with the consent of leaders.	Consent of tribe members is not necessary	2
FR-11	The system shall allow users to post content on their tent (profile page)		1
FR-12	The system shall allow users to like posts.		1
FR-13	The system shall allow up to 10 houses per tribe.	For better resource management server side	2
FR-14	The system shall dynamically limit features available to a tribe based on how many members it has.	A tribe cannot establish more houses until requirements are met.	2
FR-15	The system shall allow users to search for and filter tribes based on qualities.		1

FR-16	The system shall allow users to share content with their tribe.		2

3.3 Availability

The system will be online and available for use 24 hours a day, 7 days a week to allow users to access the website at their own convenience.

3.4 Security

User data will be securely stored and encrypted using AES 128 bit-keys to ensure that only the user is able to access their information. User data includes passwords and other stored information that the user has not set to be publicly visible.

3.5 Performance

The amount of time for any action to be processed by the database will be under 1 second to ensure a fluid user experience.

4. Requirements Confirmation/Stakeholder sign-off

Meeting Date	Attendees (Name and Role)	Comments
2/14/2020	Ralph Lira, David Miller, Kevyn Higbee	Initial meeting to delegate tasks for requirement document
2/17/2020	Ralph Lira, David Miller, Kevyn Higbee,	Follow up meeting to verify progression and finalize details

2/18/20	Ralph Lira, David Miller, Kevyn Higbee	Confirmed Functional and Quality Requirements

Stakeholder sign-off: <u>Daniel Eduardo Medina</u>

References

IEEE Computer Society. (1998). *IEEE Recommended Practice for Software Requirements*

Specifications. Retrieved from https://standards.ieee.org/standard/830-1998.html

"Open Door Policy (Business)." *Wikipedia*, Wikimedia Foundation, 20 Nov. 2018, en.wikipedia.org/wiki/Open_door_policy_(business).

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