vi, Application Documentation

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Abstract

This document provides an in-depth look into the creation of the web and mobile application, Vi (a networking app for women and GNC individuals in the field of engineering and computing). Firstly, covering the current issues gender minorities face in the field of engineering and computing, and what Vi as a platform will do to assist gender minorities in such issues. Following, the development plan to ensure the success of the app and the long-term maintenance required. Lastly, ...

I. Addressing the Issue

Problem Statement

In the predominant male-dominated field^[1] of engineering and computing, women and GNC individuals are often excluded and underheard within important discussions^{[2][3]}. This results in, but not limited to undermining of key skill-sets^[4], enabling workplace/academic sexism^[5] and harassment^[6], and starvation of career opportunities^[7].

Proposed Solution

Develop a web and mobile application to provide networking opportunities for gender minorities in the field of engineering and/or computing.

Expected Outcome

By enabling women and GNC individuals to network with one another, we can provide the safe space and resources necessary for enabling opportunities (e.g., career guidance, project partners, etc.) to succeed in the field of engineering and/or computing.

II. Planning and Specifications

Development Process

The following stages will be taken with its respective considerations:

- Product Design: Demographic, delivery, sustainability.
- 2. System Design: Security, scalability, database.
- Application Development: Proposed Stack - ReactJS & React Native, NodeJS, MySQL, GCP.
- 4. Product Deployment: Fail-Safes, down time.
- 5. Quality Assurance: Accessibility, user testing, platform moderation, support.
- 6. Maintenance: User Feedback, CI/CD.
- 7. Impact Measurement: Survey.

It is also important to continuously receive and consider user feedback and concerns to better accommodate the needs of women and GNC individuals.

App Requirements

The following features should be implemented to achieve the ultimate objective of the app:

Account system, user profile pages, direct messaging system, user personal network list, community groups, public posting, user base searching ...

Additionally, to improve the application's quality of use, the following features should be implemented:

User base search filter, user & post reporting, account recovery, ...