## Project Proposal Form Name: \_\_\_Anika Yamdagni\_\_\_

## Period: \_\_\_4\_\_\_

**Topic to be addressed:**

Web App Development

**Problem to be addressed:**

Volunteering system management and efficiency

**Product to be created:**

A completed web application, which will track information on volunteer sessions done by the members of Science National Honor Society (SNHS) at Clements High School.

**Hardware/Software needed:**

For hardware requirements, I will need a server to host my web application (most likely MyASP.Net). For software requirements, I will need a database server (MySQL or MSSQL), a webserver (Apache or IIS), and developed RESTful web APIs to facilitate communication between web and database (Java or ASP.NET Core).

**Describe the social significance of this problem:**

As a previously volunteering member within SNHS and the former Vice President of Volunteering and Recruitment, I noticed a significant problem with the club’s volunteering system. Volunteers are typically unsure about how to best help the middle school students prepare for their upcoming Science Bowl and Science Olympiad competitions since they do not have any knowledge about how the previous volunteer had assisted the students at that location. As the current President of SNHS with all of the volunteering experience I have, I would like to make a positive change in the club through this web app. In broader terms, my web application will serve as a volunteer management software, as used by nonprofits, that manages volunteer relationships within SNHS.

**What do you anticipate your final product looking like?**

My final, completed web application will address these problems by allowing a member to use it to review the information about the last session at their location, including suggestions for their volunteering time, and log information about their volunteering session for future volunteers. There will be a list of all of the volunteer sessions on one page and a button that allows the user to record the information on their volunteer session.

**By what criteria will your final product be evaluated?**

My final project will be evaluated based on visual quality, the ease of user interface, and the reasonable functionality of the web application as a whole.

**Instructor Use Only:**

\_\_\_\_\_\_ Approved

\_\_\_\_\_\_ Approved with changes described below

\_\_\_\_\_\_ Not Approved – resubmit

Changes needed:

Anika Yamdagni

Period 4

Background Research

With a steady rise in the number of volunteers giving more of their time and resources to organizations they feel passionate about, the need for a systematic and logical process of working with and through volunteers to achieve an organization’s objectives is heightened. This process, known as volunteer management, is gaining more and more traction as time goes by. Consequently, it is essential to have a good understanding of the importance and implementation of volunteer management systems in order to maximize effectiveness.

While they might not contribute financially to an organization, volunteers play a major role in the impact of an organization. To ensure their continued presence and assistance, it is crucial for nonprofits to prioritize their engagement. By contrasting how volunteer management was conducted in the past with how it is being executed today, it is clear to see the evolution of effectiveness and how this will impact the future. In the past, the volunteer systems of many nonprofits were solely reliant upon volunteer coordinators or volunteer managers. These managers would have limited time, a lot of responsibility, and many relationships to manage over the course of a given day. As a result, the entire process would be unorganized, out-of-date, and unnecessarily lengthy. Now, in present day, strategic volunteer management is facilitated through the combined use of volunteer managers and volunteer management software. This reduces administrative time by enabling organizations to run reports, much easier, when data is organized, accurate, and optimized for decision-making, make communication, based on each individual volunteer, more streamlined, and save an organization time by allowing volunteers to self-manage their accounts and access the data they need about their volunteerism experience and hours provided to an organization. This is exactly what I hope my web application will achieve.

As a previously volunteering member within Clements Science National Honor Society (SNHS) and the former Vice President of Volunteering and Recruitment, I noticed a significant problem with the club’s volunteering system. Volunteers are typically unsure about how to best help the middle school students prepare for their upcoming Science Bowl and Science Olympiad competitions since they do not have any knowledge about how the previous volunteer had assisted the students at that location. As the current President of SNHS with all of the volunteering experience I have, I would like to make a positive change in the club through my web app. My final, completed web application will address this problem by allowing a member to use it to review the information about the last session at their location, including suggestions for their volunteering time, and log information about their volunteering session for future volunteers. In broader terms, my web application will serve as a volunteer management software that manages volunteer relationships within SNHS.

Earlier this year, I began working on this project by focusing on the front-end, or "client side," where I had used HTML 5, JavaScript (Vue.JS), and Bootstrap CSS to create the GUI and facilitate user interaction. Now, I am now hoping to be able to shift my attention to the back-end, or "server side,” to store all the information and connect the web to the database using Java. I am already familiar with the syntax and structure of Java, but I will need to learn some new concepts such as how to develop and utilize web APIs in facilitating the communication between the web and the database.

Sources

1. [https://doublethedonation.com/tips/nonprofit-software-and-resources/volunteer-management-guide/](about:blank)
2. [https://www.volunteerhub.com/blog/volunteer-management-is-important-in-2021/](about:blank)
3. [https://jobhero.com/job-description/examples/social-services/volunteer-manager/](about:blank)