

Requirements

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Abstract

This requirement document is intended to define what we are going to do for this project and what requirements of redesigning database system we need to meet for STEM Academy. We list our goals for this project at individual task levels. As we learn more about the project, our interpretation of some requirements may change. In that case, we will update this document accordingly with the client's approval.

1 OVERVIEW

STEM Academy currently has very good data on about one-third of their camps, however an efficient system that collects more data on time will help them make a stronger case to their funders. Although there is a functional database system, it has flaws that prevent STEM Academy from using it. The system administrator uploads a csv file with participant names for each camp. This file is linked to a pre and post camp survey. Once the camp starts, each participant chooses their name and takes the pre-survey, and the post survey is taken at the end of the camp. And then, the data collected needs to be displayed in a fully usable format, including graphics. Our clients would share this information with funders to show them what differences STEM Academy can make and apply for future funding.

2 USER STORIES FOR PROJECT REQUIREMENTS

As the database administrator, I want to be able to add new participant names during a camp without replacing the csv file, so that participants who are added after the start of a camp are also able to take the survey without impacting others.

As the database administrator, I want to be able to manually add survey data, so that I can later input data for camps which had no computer access.

As the database administrator, I want to be able to overwrite or delete surveys that I don't want, so that I can make changes when a mistake is made or we want to change something, without having to input another survey with a similar name.

As a camp participant, I want a fully functioning survey page, so that I can make changes when I accidentally select a wrong answer. So I do not have to enter all the details again and just make changes for the incorrect answer. As the database administrator, I want a functionality that generates standard reports including graphics, so they look finished enough to share with outside entities.

3 TIME ESTIMATION

Our team estimates it might take approximately 5 months to work on the project and a month to check if the individual tasks were complete and all requirements were met. We would also use the remaining time to check if the system is usable and fix bugs if there are any.

4 DIFFICULTY SCALE(/10) ?

5 SPECIFIC REQUIREMENTS

Database-

The current database system is functional but has many problems. The problems have been specified in Problem

Statement document. The first thing we are doing is to get all of code files and study their structures, functions, etc. And then we are going to find all of problems codes to see why they have problems. After that, we will recode them and debug them until all of problems are solved.

Survey Data-

Based on the reflection we got from the last capstone team, we are going to try to use some survey softwares, like Qualtrics, to collect data. Participants could take the survey with that software. Our client could export survey data using the survey software. We will find a good survey software first and test it if it is usable for our client.