



# Starr Sponsorship Website

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## Problem Statement

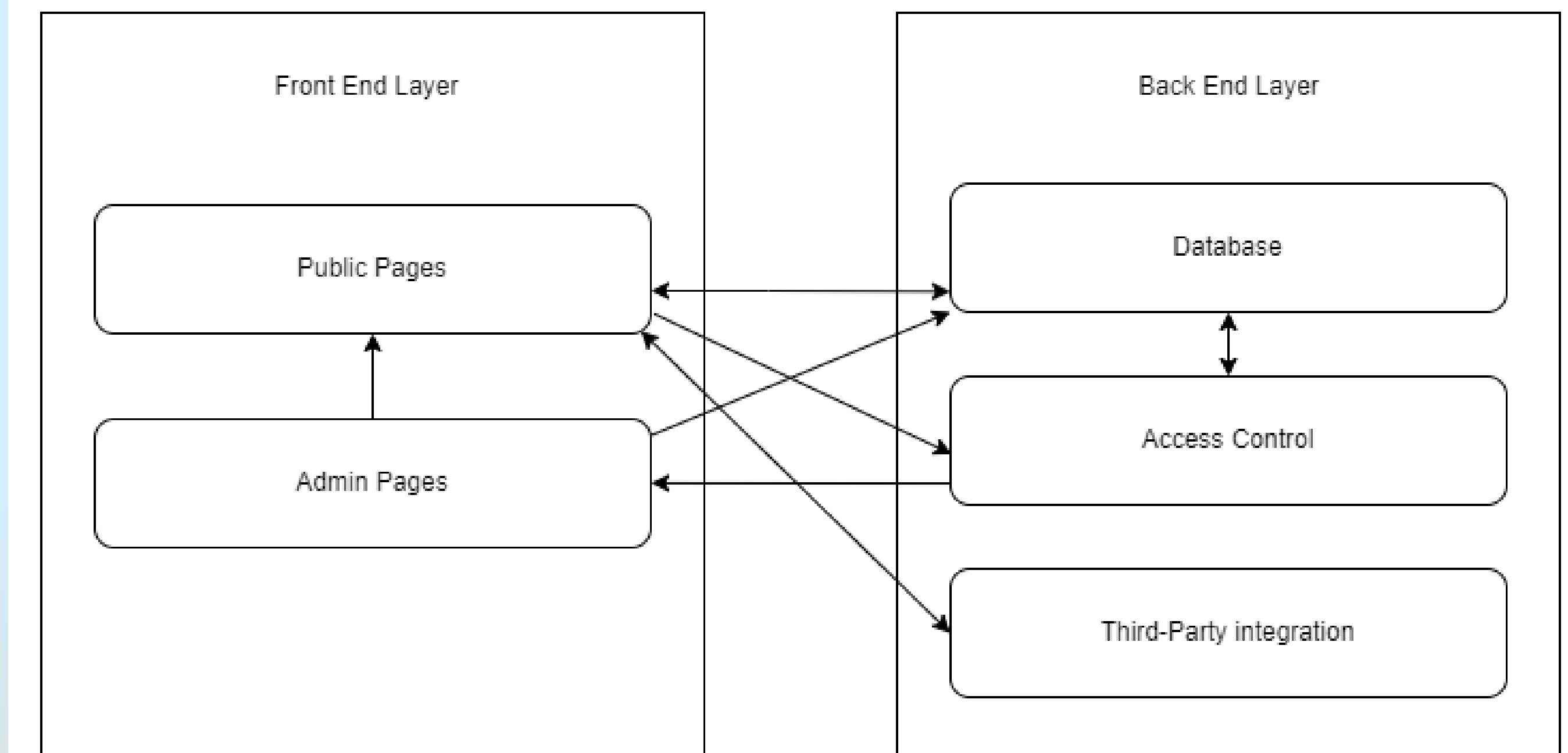
There are many children that hunger for education that do not have the finances to support and prepare them for the future. The lack of education in children makes future economic improvement and redressing social inequities more difficult. The STAR Sponsorship program are a group of compassionate businesses and community leaders that are passionate in offering opportunities to low-income families that want to choose a better fit for their child. It is clear that education is essential to students at all socioeconomic levels and the STAR Sponsorship Program focuses on addressing the issues of poverty-related problems affecting Forth Worth and Tarrant County.

## Core Features and Requirements

**Front End-** The front end of our project mainly focuses on the public pages for our website and the admin pages for our website. The public page is a display of data/information gathered from Starr Sponsorship. Which includes information about the STARR Sponsorship Program, success stories from students, social media posts, and many more features. The admin pages of our website allows modifications to be made whether it is to add a post, delete a post, add admins to the website and more. The admin page is secured by an activity timer that automatically logs a user out after a certain time for security/safety reasons.

**Back End-** The back end of our project mainly focuses on the database, access control, and third-party integration. The database stores data (pictures, photos, links, etc) pertaining to what we want to display on the website. Access control enforces security and safety by identifying users then determining the level of control and access they have based on their permissions to deny unauthorized access. Lastly third-party integration allows our product to use features through such as displaying database information or posting from social media platforms without developing our own features, displaying amount of times website is visited, and more. These features are accessed by making API calls through our code which can always be managed if changing services or adding more would be beneficial.

## System Architecture Diagram



## Background

The old website was designed with a Wordpress template that is no longer supported. This means that the website has not received important updates for security and compatibility. Since the website needs to be recreated anyway, it was decided that a complete redesign of the website would allow the new website to take advantage of new design techniques and a more modern appearance. The redesign will also focus on ease of editing, to allow for easier maintenance and alteration of the new website.

## Design Details

The Starr Sponsorship is a website that can be accessed by browsing through any electronic device that has access to the internet. The user interface (front end) was designed through html and css files while using JavaScript to perform functionality (back end). We used firebase and real time database for our database to maintain, store, and display data on the Starr Sponsorship website. Firebase was beneficial due to the large quantity of data allowed to be stored and real time database was beneficial due to the responsiveness. Each component relies on one another as shown in the system architecture diagram to produce the Starr Sponsorship website.

## Conclusions

There was a good number of features implemented such as new pages, restoring database, security, authentication, etc, however, there are still features that need to be added for it to be an efficient website such as having a functional database schema, possible edits for the website, and more. Initially we mainly focused on the flexibility of editing for the website but then had to switch our goals to other tasks towards the end due to the complexity of the feature. We hope that in the future there was be other senior design teams to continue progressing the product as we believe there is a solid foundation to the website. We thank Starr Sponsorship and Professor Conly for giving us the opportunity to work on this project as have learned a lot from this experience.

## Methodology

The STAR Sponsorship Program teams a child that is sponsored to give them an opportunity for a better education. The STAR students are corresponded with their sponsor by sending letters, schoolwork, photographs, etc and each child's academic profile will be monitored through our program. We are building and updating the STAR Sponsorship Program website by adding functionality to the website while keeping the information secure.

