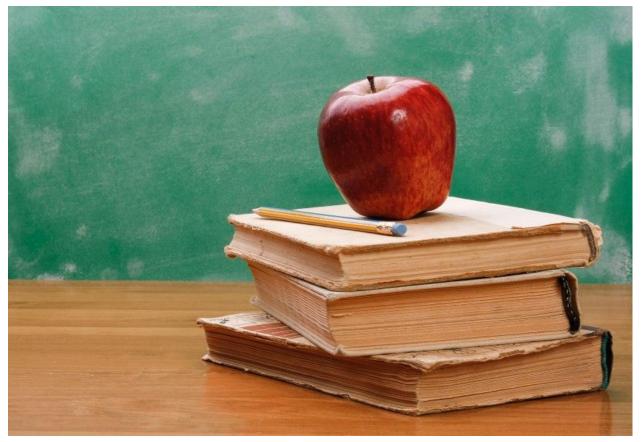# Equal Education Technical Report

CS373: Software Engineering Fall 2018

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Motivation:

Our website is designed to help people find charitable opportunities to assist underprivileged children with their education. In today's society, a strong, reliant education is essential to living a successful life; yet there are many school districts in America that lack even basic school supplies. We wanted to showcase less fortunate areas in the US and allow users the opportunity to give their time or financial support to these communities. We hope that these contributions allow less privileged children have the same opportunities and benefits as more affluent areas.

User Stories:

Our core interest is to provide an extensive database of school districts in need of assistance. The website aggregates a large number of low-income areas and links them to charitable organizations and volunteer events relevant to that area. Users can then either search for school districts within their area, donate to charity organizations that they trust, or sign up for volunteer events. We believe that many people would be willing to donate their resources, but they might not know how or whom to trust. We want to showcase to our users just how many different, reliable ways there are to help out the community in regards to education.

RESTful API:

- Developed using Postman
- TBD

Models:

Our three models are <u>school districts</u>, <u>charitable organizations</u>, and <u>volunteer events</u>.

School Districts

The school district model consists of lower income school districts in America. Each school district will have its name, state, description, and opportunities available listed. Users can sort by poverty level (using data from census.gov), and date of establishment to determine which school is the best fit. There is also an option to filter districts by state so the user can easily find opportunities within their area.

Charities

The charity model consists of several charitable organizations involved with education. Associated with each charity is the state its based, the description of their organization, and their mission statement. The charities can be sorted the name of the company, date of establishment, and rating (as done by CharityNavigator.org.) We want to make sure users feel comfortable in giving their donations to a reputable cause. The user can also directly search for any specific organization they have in mind.

Volunteer Events

The volunteer model consists of a myriad of events for users to donate their time to. Listed for each event is the location, the description of the event, and the skills required (supplied by VolunteerMatch API.) Events can be sorted by date, name, or organization involved. We realize that many people might have a strict schedule, so we want to provide users with a way to find the perfect event.

Tools:

- Team communication was done primarily through **Slack**

- **Gitlab** used as our Git-repository manager

- The **Bootstrap** framework used for front-end design

- **Postman** used to develop and test API

- **React** JavaScript library used to build the User Interface

Hosting:

- **Google Cloud Platforming (GCP)** is used to host our website/API

- **Google Cloud Storage (GCS)** is used for storing and accessing data from database hosted by **GCP**

- Domain (EqualEducation.info) provided by **Namecheap**