Instructions/Overview

The project spotlight is a look inside your teams project. It should take the reader from no knowledge of your project to a solid understanding of how it works and why it is important. Make sure you write your descriptions so that a general, non-technical member of the public would find it easy to understand what you're explaining. The following format is a recommendation, not set in stone. The project spotlight is a place for your team to shine! If you'd like to veer from this format feel free just make sure to include text and pictures/visual media.

Email your project spotlight content and pictures to Shannon, svharris@ucsd.edu when you are done so she may look them over and publish them for you. If you have any questions about this assignment or otherwise don't hesitate to shoot Shannon an email.

Recommended Content

It’s recommended to split your descriptions into the following four headings: Client’s Needs, Our Solution, How it works, and Project Impact. For each section use the questions as a brainstorming tool. Your actual content should be in paragraph form.

Client’s Needs
This should be a short description of your client and what problem they have that's created the need for them to partner with global TIES.

Some questions to answer
- Who is your client? Where are they located?
- What do they do?
- Why do they need your team? What would your client's life be like without what your team delivers?

Our Solution
Give an overview of what you're doing to meet your client's needs.

Some questions to answer
- What will your project look like when it's finished?
- How will your client interact with your completed project?

How it works
Without getting too technical, dive into the engineering behind your project.

Some questions to answer
- How does it work? What technologies do you use?
- What engineering goes into the creation of your project?
- How will your finished project be operated?
Project Impact
Tell the reader why your project is important to your client and to the broader world.

Some questions to answer
- How will your client's life/work be affected when your project is completed?
- Who does your project help? How does it impact their lives?
- How is your project relevant on a larger scale? Is it new, innovative, cheaper, faster, more sustainable, etc?

Your update to the Project Spotlight Page must include at least 3 pictures. It cannot be all text. You may also include a video with/instead of pictures, or include other media.

Example Content

![PROJECT SPOTLIGHT]

Digital Vision Screening

The Client's Needs

The Shiley Eye Center's Save Our Children's Sight Program, performs vision screenings for young, often underprivileged children. The traditional method of screening uses an autorefractor and requires a child to focus on the device as it is held up onto his or her forehead. This is troublesome for young children with short attention spans, children with special needs, or children who do not like to be touched.

Our Solution

We're working to develop a camera and bracket system that, through computer vision and image analysis, allows a screener to simply snap a few photos of a child from approximately 8 feet away and instantly get an accurate, easily readable result.
How it works

Our system utilizes a behavior of the eye called the Bruckner reflex. When a "red eye" photo is taken of an abnormal eye a crescent shaped reflection can be seen in the pupil. By analyzing the size and location of this crescent, we can tell whether a child is, for example, short-sighted or near sighted.

Our camera system mounts onto a specially designed bracket in order to be able to consistently produce red eye photos. The bracket also rotates so that two photos can be taken in order to normalize and further analyze the crescent shape. These photographs are then sent to a laptop with our software installed. The screener can enter some information about the child and then finally they obtain an easily readable "Refer" or "Don't refer" result.

Project Impact

Our project will not only allow our client to screen more children with as little discomfort as possible but it will also drastically lower the cost of such a screening device. Our software is open source and our bracket design is easily made from cheap materials. Thus our system could be replicated by other schools or vision organizations in need and the clarity of results means you don't have to be a trained expert to change a child's vision and help shape her future.