

# **New Sun Rising**

## **Executive Summary**

### **Community Partner**

Scott Wolovich

### **Student Consulting Team**

Mahith Edula

Neel Mandapati

Zexuan Li

Ziyan Wang

## **Background**

New Sun Rising (NSR) is a nonprofit organization that organizes and supports community development initiatives within Pittsburgh. They started in 2005 after their founder, Scott Wolovich, developed an appreciation for the value of art and culture following the aftermath of Hurricane Ivan and Hurricane Katrina. Their mission is to: “Build vibrant communities through culture, sustainability, and opportunity”. Rather than working directly with individual community members, NSR supports the community by serving as a trusted partner to nonprofits, social enterprises, collaboratives, and investors. NSR uses a variety of programs to uplift their community partners. These programs can be categorized in 3 ways: capacity building, accessible funding, and data advocacy.

## **Project Description**

### **Project Opportunity**

The biggest challenge NSR currently faces with their data management system is that they find it difficult to connect contextual data, people’s hopes and fears about a community, with their Vibrancy Portal application. Most of the data entry is done manually by staff or interns, which is inefficient and potentially rife with human errors. This process is very inefficient and time-consuming. This is an issue the team aimed to resolve.

### **Project Vision**

The project vision is to create a Google Form as the survey tool, and to develop a Google Apps script that automatically transfers data into NSR’s Postgres database. This solution provides numerous benefits. Google Forms are also mobile-optimized, which will make it more convenient to complete the survey. They can also collect different types of data, such as images, audios and videos. This will provide a diverse dataset for NSR to work with.

## **Project Outcomes**

The main project outcome is the introduction of the tool to collect and automatically transfer contextual data into NSR’s database. This is achieved by the creation of a Google Form, a programming script, and an analog version of the Google Form. Throughout the development process, the team used a variety of Agile tools and techniques, such as stand-up meetings, user

stories, and sprint retrospectives, to keep the project on track and ensure that any issues or roadblocks were being addressed in a timely and effective manner.

## **Project Deliverables**

Our most significant project deliverable is the GitHub repository containing our code that validates survey responses for safety and accuracy, automates the transfer of tagged records into NSR's Postgres database, and separating tagged and untagged records so that staff members can more easily identify which responses need to be tagged. Operating in tandem with the previous deliverable, our next deliverable is the Google Form. This form contains a list of specific questions that NSR aims to collect data on, as well as our script to transfer the data associated with it. Our next deliverable is our analog form solution. This is a pdf of a form to be filled out using a pen/pencil, without any device or internet connection. Our final deliverable is a training guide containing all the necessary information New Sun Rising needs to understand how our solution works, as well as how to customize it and things to avoid doing.

## **Recommendations**

The team has three main recommendations for NSR. Firstly, the team recommends that they should implement an automated tagging algorithm, and integrate it with the script the team developed. Secondly, the team recommends that NSR displays contextual data collected on the Vibrancy Portal through visualizations or analytics. Thirdly, the team believes that it could be beneficial for NSR to develop digital entities for the analog option, potentially text recognition or storing each response as an image. We also recommend moving to a paid solution if the number of users outpaces the capacity of our project. These recommendations aim to help NSR fully utilize our project, and further automate the data collection process.

## **Student Consulting Team**

**Mahith Edula** served as the quality assurance manager. He is a third-year majoring in Information Systems with a minor in Statistics. This summer he will continue to work with New Sun Rising and plans to pursue a career in software development.

**Zexuan Li** was in charge of client transition. She is a third-year majoring in Information Systems and Human-Computer Interaction. This summer she will be working on a research project in the HCI department at CMU. She plans to pursue a career in UI/UX.

**Neel Mandapati** was in charge of client relations. He is a third-year doing a double major in Information Systems and Statistics & Machine Learning. This summer he will be working at Capital One in McLean, VA. Neel plans to pursue a career in consulting or software development.

**Ziyan Wang** served as product manager. She is a third-year majoring in Information Systems with a second major in Statistics and Machine Learning. This summer she will be interning in Beijing, China. Ziyan plans to pursue a career in consulting or data analytics.