Innovation Institute for Tomorrow

Executive Summary

Community Partner
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Student Consulting Team
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Background

The Innovation Institute for Tomorrow, Inc. (II4T) is a 501(c)(3) education nonprofit located in Franklin, Pennsylvania. Founded in 2018, II4T serves as a thought leader within a robust STEM ecosystem, aiming to advance K-12 STEM education by removing barriers and creating opportunities for students and teachers. II4T offers a comprehensive array of STEM education initiatives aimed at engaging and preparing students for 21st-century careers such as robotics and drones, including skills from computer science and engineering designed to inspire and excite students about STEM fields. These programs include training and competitions for students, and workshops and professional development opportunities for teachers.

Innovation Institute For Tomorrow's mission is stated as follows:

> *"Provide sustainable, world-class STEM experiences to prepare all students for the 21st-century workforce."*

Project Description

Project Opportunity

II4T faces the challenge of providing access to their resources. Valuable resources that the nonprofit possesses such as the Robot Doctor PBS miniseries, a downloadable virtual reality game, and Esports' 45-day curriculum using Overwatch are underutilized. These resources are free for everyone to explore and use, but instead they are currently stored away in a Google Drive folder. Second, II4T recognizes the importance of data collection for reporting outcomes, particularly when applying for grants and program evaluation purposes. However, their current methods are primarily reliant on Google Forms, but they lack a streamlined approach to gathering and analyzing data, and rely mainly on verbiage when reporting numbers.

Project Vision

Our project vision was two-fold. First, we aimed to incorporate a way to release all hidden resources to the public in a centralized location through their website. Second, we researched to find the most efficient and easily adaptable data collection and analysis method.

Project Outcomes

To meet the project opportunities, the team:

1. Created a resource tab on II4T's website with dedicated pages for students, teachers, and parents. All resources that were inaccessible have been either linked or implemented on the website for public use.
2. Developed a fleshed out plan for data collection and analysis. Data collection will be through their current use of Google Forms and data collection will be through Looker Studio. There are visual graphs and data that our community partner can now use towards grant writing and we have even added a Python script for data cleaning purposes.

Project Deliverables

To ensure that our deliverables can be continuously used, the team included:

- **Low-fidelity wireframes** - original designs for the resources tab
- **Survey templates** - can be reused and easily modified for every event
- **Python script documentation & video** - our community partner or any employee can simply refer back to the guides for any questions they have
- **Looker studio documentation & walkthrough** - paper writeup of how to perform data aggregation and general overall process of inputting data to getting results, video walk through is just a more visually easier way to watch process
- **Project proposal** - detailed report of initial ideas and research by the team
- **Meeting notes** - Taken during every meeting for community partner to reference if needed

Recommendations

1) Focus on marketing strategies to promote the website since spreading awareness was an initial goal that was discussed. The website is ready to be released and II4T has a designated marketing guy that can now focus on marketing the website with a physical product.
2) Assign someone to be in charge of surveys since it is a new process and our community partner easily forgets about it. This could be a task assigned to the program manager, including modifying the template for the event, initial setup with QR code/tinyurl link, and post survey distribution
3) Further explore Looker Studio and create more visualizations as they come to mind. Looker Studio has so many unique features that can be further explored that can make our community partner's grant writing outcomes even more appealing.

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Student Consulting Team

Megan Baker served as the project manager. She is a fourth-year student majoring in Information Systems with a minor in Cybersecurity and International Conflict. She will be working at the Department of Defense as a General Engineer in Chantilly, VA upon graduation.

Ronit Batchu served as the technical lead. He is a third-year student majoring in Information Systems and double minoring in Computer Science and Artificial Intelligence. He will be at Deloitte this summer as an Applied AI intern and is looking toward a career in machine learning.

Kaylin Yeoh served as the project and client relationship manager. She is a third-year student majoring in Information Systems with a minor in Business Analytics and Optimization. She will be at Deloitte this summer as a Solutions Engineering intern and hopes to pursue a career in product management.