Business Case for Daily Roar
Date 2/7/2023
Version 1.0 Baseline
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1.0 Introduction/ Background

Students tend to ignore informative emails that are being sent by key figures in the computer science/ information technology department. This leads to students missing very important and impactful opportunities that can help kick start their career. We propose a platform for the department that allows a faster way for faculty to email students about events, local REU, job/internship opportunities, and any important information. The system will allow faculty to reach out to targeted groups of students, based on their class level, their major, their degree program.

2.0 Business Objective

Increase the viewing rate of emails by 66% and increase job posting link click-through rate by 100%.

3.0 Current Situation and Problem/Opportunity Statement

Faculty have a difficult time reaching out to students with job/internship opportunities, research opportunities, events, or club events. With the current system faculty is unable to reach out to students based on a given category (major, class level, degree program). If an email is being sent out it is to everyone.

The current system being used to notify students of just job postings is Handshake. Based on their statistics The current rate at which the students are viewing informative emails is about 25% of the time, whereas the click-through rate of job postings in the emails is less than 5%.

The department only has statistics on emails which are being sent via Handshake. The department needs a system that will give statistics on emails being sent through gmail.

4.0 Critical Assumption and Constraints

Assumption:

- Students have access to their Kean emails
- Student data is being provided to us rather than gathering it ourselves
- Security will be an important factor due to the sensitivity of the data being provided
- Only key members of the department will be using the web app to send emails (Nohelia Diplan, Patricia Morreale, Nancy Amador) not accessible for every faculty member.

- Graduate Assistants will be able to access the web application to performs given functions: upload csv, manually insert students not already in the csv

Constraints:

- Wifi reliability
- Third party database reliability
- Time constraint of three months
- Lack of meeting attendance from team members
- Lack of performance from team members
- Scope creep (scope of project grows past feasibility)
- Failure to find a suitable API for email tracking

5.0 Analysis of Option and Recommendation

Develop Application in house

- Pro: save money, more knowledge about the system and the end user requirements
- Con: a lot of time

Outsource to another company

- Pro: will save time
- Con: less customizability,spending more money, less knowledge of the whole system and will need to learn,

Do nothing

- Con: We don't graduate and the application doesn't get developed. Students will be unable to have opportunities presented to them in a more efficient manner.

Conclusion

- The project should be developed in house as our budget is low, and we will be able to have a better understanding of the user requirements

6.0 Preliminary Project Requirements

1. Data visualization page for email tracking statistics:
    a. Viewing rate
        i. based on major
        ii. based on grade level
    b. Hyperlink clicking rate
2. Broadcast mass emails
    a. Ability to send to categorized groups of students
3. Point system, reward at end

7.0 Budget Estimate and Financial Analysis

Estimated Budget: $0.00

8.0 Schedule Estimate

Sprint 1(Feb 1 - Mar 15):

- Software Design Document (SDD)
- Implement the relational database tables
- Implement functionality in the front end:
    - CSV upload
    - Rich text editor
    - Implement APIs
    - Manually add students to database
    - Email testing with mock data

Sprint 2 (Mar 16 - Apr 19):

- Integrate and connect front-end with back-end database.
- Email testing with real data
- Email testing by categories
- Completed UI
- Implement data visualization for email statistics
- Implement student dashboard

9.0 Potential Risks

- Students information getting leaked (security issue)
- Unreliable network
- Third party APIs have vulnerabilities
- Difficulty in communicating with stakeholder
- Stakeholders changing requirements

10.0 Exhibits

Exhibit A: Financial Analysis