Proposal for SACO
*S*cheduling *A*ssistant *C*lass *O*rganizer

By Evan Kiser, John Hudnall, Devin Pardo, Blake Opial

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Executive Summary

Scheduling is a very important part of any college student's life. Each new semester brings new schedules and with that, organizing and finalizing those schedules. With technology today, almost everything is done online including scheduling courses. The system that is in place for each college or university needs to be well put together and user friendly.

SACO would be an API for current scheduling system for LSU's schedule request. SACO would help to alleviate any problems with the current scheduling system in place. It would give LSU students a quick and easy way to look up their classes and give a calendar visual of how their classes stack up on any given day. Our system would make it more efficient to schedule classes than the current system.

We would develop SACO using JavaScript and Codex OpenAI, which is open source. This makes it more cost efficient on the development and maintenance side.

Gap in the Market

There are other scheduling applications in the market, but LSU seems to favor the one that they made for the university. SACO would be developed with LSU in mind so that they would be more willing to switch to our system. We would get in touch with students as well as faculty members to get their input on what they would like to see. Doing this would make it a more viable option because it would be mostly developed from the suggestions of the people who constantly use the current system. The university will want to implement our system so their students will have an easier time using it and to save the university money and time on maintaining the system.

Meeting the Market's Needs

SACO will provide LSU with a cheaper and more user-friendly system. We want SACO to be easy for students to use so they don't have to spend so much time having to figure out how to schedule classes. As well as giving students a more appealing visual to look at once their classes are scheduled. A big factor in using SACO is to cut down on the time of students using the system and LSU administration having to explain how to use the system. The system will also be developed in a way that is easy to integrate into the current system.

Implementation

Management

SACO will be managed by its contributors: John Hudnall, Evan Kiser, Blake Opial, Devin Pardo

Development

SACO will be Developed using the following technologies:

- Frontend (User Interface)
    - Codex OpenAI
    - React - "A JavaScript library for building user interfaces."
    - Relay - "A JavaScript framework for building data-driven React applications."
- Backend (Web Server/ Database)
    - Node - "A JavaScript runtime environment."
    - Express- "Fast, unoppoinionated, minimalist web framework for Node.js"
    - GraphQL - Query language, alternative to REST API
    - MongoDB - NoSQL database

Marketing and Distribution

The system will allow the school to upload its schedule booklet to the system and create a test account so they can see how the system works as a student. The school will be able to test out all the features of the system, including letting students try it out to get their thoughts as well. The school will then be able to pay the one-time payment to get it fully integrated into their system. With additional fees for extra features that can be removed or added at any time.

Monetization

Our app will be a one-time payment for the full integration. With the users able to pay additional fees for separate additional add-ons/features.

The Problem and Our Solution

The current problem with this market is that LSU most likely wants to have decent control over what is implemented into their system. Other systems that are already made might sound good for the students, but they will not appeal to the university.

Our solution to this problem would be making SACO cost efficient for LSU to use as well as be developed with the university's standards in mind. This way, both the school and its students may like our system.

Industry Need for Our Technology

Scheduling classes is very important for any university. The demand for systems involving scheduling will be there for a long time. SACO will be fast, efficient, and user friendly; it will be a nice implementation into LSU's system.

Market Analysis / Primary Market / Secondary Market

Our main competition for SACO could be the many other free scheduling sites out there today. However, those are not too much of a competition for us because we are developing specifically with LSU in mind. We want LSU to pick up and implement our system to make it easier for the students to schedule their classes. Therefore, our primary market, our only market, would be LSU.

Marketing Strategies

Overview

SACO is targeting any school system that has students create their own schedules with LSU in mind as its first client. SACO aims to constantly grow to help students by getting feedback to add features later in the future. Having the one-time payment for the overall system will guarantee the school will want to keep our system.

Primary Customer analysis and entry strategy

The strategy that SACO is going to take is to make a well know school to be the first to accept SACO to improve the quality of life for the students. Once that happens other schools will begin to accept SACO as well, increasing the cliental.

Core competency

The core competency of SACO is it is the first scheduler that can be implemented on to a school's schedule request. SACO will constantly have new features being developed as well. It will also allow clients to make requests for new features to add. SACO could also be implemented to take the place of any kind of scheduling system down the road.

Sales Strategy

Pricing

The clients will start with a demo of the fully operational system with all the features to test out. The client will pay the one-time payment and add-on any additional features for additional fees. These features can be removed or added at any time. Clients can also purchase new features at any point.

Positioning

SACO will be useful for clients to have a better quality of life for the students enrolled.

Promotions

SACO will use various promotional strategies such as internet marketing and. advertising, direct contact with potential clients, offline marketing, and other marketing forms.

Place

SACO will be able to run on any device that can access the clients schedule request system.

Competition

Currently there is no other competition that can be implemented into a school scheduling system. The only competition would be LSU itself. SACO would have to be better than the current system so that they will want to implement the API onto their system. Once LSU becomes a client it will become a viable option for other schools to use thus growing clients.

Development Strategy

SACO will be developed in Codex OpenAI. Our strategy will be to develop the scheduling system with what we have planned. We will then apply anything that the school wants us to add to meet their standards. We then will gather any additional ideas that we got from the interviews and implement those where we see fit. Throughout the development process, we will be following the spiral process model loosely as a guide. We will go through the stages of development and keep circling back as each stage is completed to make sure that everything is still going smoothly.

Barriers

SACO will come across a few barriers when entering the market. Some of these barriers are:

- Having a price while the alternative is free
- A slow transition for students early on
- To make SACO more well known, we may have to start partnerships early on

Critical Risks

One major risk that could affect SACO would be the fact that some students would prefer to use the old but free schedule request on myLSU. Many students have already gotten used to the way that myLSU has made the schedule booklet and schedule request. Also, even if the product is available for a cheap price, LSU may not want to spend any money.

Our team believes that SACO will deliver what we have promised and create a system that will help students produce a quick and organized schedule. We will always try to make the program even better than before and be quick to fix any problems that students face.

Interviews (face-to-face)

The following questions were asked to LSU Students:

What do you like about the current schedule request?

- *I like how easy it is to add multiple classes at once.*

- *I like that it tells you when classes conflict/overlap*
- *Multiple course additions, waitlist options, add/remove for courses and course conflicts.*
- *I like how easy it is to find classes with available seats.*
- *Allows you to join a waitlist.*

What do you dislike about the current schedule request?

- *The capacity problem that the myLSU has when most students try to schedule all at once.*
- *I dislike it when I get kicked out and then have to wait until the website isn't overfilled*
- *I hate the wait timers to get into such a small server for the scheduler.*
- *I hate the wait time when too many students use it at once.*
- *The layout is terrible so it is hard to read.*

What would you like to see implemented in the schedule request?

- *A better and more organized way of selecting classes along with improving the myLSU website to allow a greater capacity of students to enter without being kicked out.*
- *I would like to see a larger capacity for the number of students scheduling that day*
- *Should have the schedule booklet built into it*
- *The ability to hold more students on the site at a time.*
- *A new layout so you can actually read it.*

How would you feel if "rate my professor" was easily accessible when scheduling?

- *I think that would be sick*
- *I would like that because it would be quicker and more convenient than cross referencing the course offerings with rate my professor before scheduling*
- *That would be awesome*
- *I would think that would be a great idea, as it would allow me to easily find which professor would suit me better when scheduling.*
- *It would be great and time saving.*

Would you use an API that goes on top of the current schedule request(?); that allows for easier view of the request, a calendar view of your request, a rate my professor link and many more features.

- *That would be great*
- *Yes*
- *Most definitely*
- *I would appreciate that.*

- *Definitely*