# Project Proposal for Scheduling System

## Owners

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2. Executive Summary:
The software end of many institutions is intended to aid the student body with whatever task they may need assistance with, whether that be scheduling, viewing classes, or even talking amongst classmates.

Our target clients would primarily be institutions with out of date scheduling programs that are looking to revitalize their tools for their students. University student and faculty also factor into our consumer list, we figured they would also fit into our consumer list primarily due to the fact that they will be using our software more than most people.

To make it more local, LSU's software tools have been around for quite some time, with the scheduling system just starting to take the step out of the old Cobalt system, a system that has been around for the past 40 years or so, to a new, updated client. We serve to show LSU an effective and straight to the point program that they could likely find very good use in if they so choose to implement it. Other than this, many other universities across the company frequently have students work with software systems that are very outdated.

To our company's knowledge, there are no companies that have an active stake in updating the software side of universities. Not only does this free up our creativity since we have no competition, it also allows us to attack a market that gets little to no attention from other developers.

We aim to assist the students, faculty, and the institution itself by bringing up new forms of software that hits the pain points brought up by the outdated Cobalt system. Our solution would be completely affordable, as it will likely be free. Along with the finance side, our program will be efficient and very easy to implement.

We will begin development on our software using open source technologies and we hope to bring our consumer base the best possible outcome they deserve!

3. The Vision:
The software that institutions use is in dire need of a touch-up if not a complete rebirth, with hundreds of thousands of students at schools all across the United States of America, it is important that the softwares and programs they use are up to speed and quite efficient. Recently some universities in the North have began to steer away from the old programs they used to use, however, this has not started a widespread idea for all universities to begin the switch. It did inspire us though. With a newly lit fire within all members of the team, we hope to bring forward a new program used for scheduling that will be
- Efficient
- Easy to use
- Easy to implement

4. Gap in the Market:
There is little to no competition when dealing with the software of institutions, this is primarily due to the fact that there is little to no attention being paid to the subject coming from many software developers. This makes it easy for us to attack a very large pain point and bring to the industry a solution for a problem that plagues many college students on campuses across America.

The Institution's faculty and IT department would be our primary customer target, along with students and other faculty also filling into the same role. If our software is created right it will make all of their jobs and day-to-day lives plenty times better.

5. Meeting the Market's Needs:
Our software will meet the markets' needs by providing a software that is very cheap and will likely be free. Along with this, we hope to make the software extremely easy to use and implement while having it also be user-friendly. The only loss our customers may have is the time it takes to implement our new software over the old system they have in place. Even though we hope to have a low time for how long it would take to implement, it is still something to keep in mind.

6. Implementation:
   ● Marketing and distribution strategy: Our main goal to hit our right consumer base is to make this software very efficient, easy to use, and easy to implement. As it is made by students, for students, we understand what students want the most, and that is t get whatever they need done as efficiently and precisely as possible. We wish to bring them this outcome while advertising the easy use of the new scheduling system.
   ● Developing strategy: Our software will be built in five stages using open source technology. Our software will not be applicable for all majors right once it becomes functional. Instead, our development plan lays out that we will start with one major and slowly expand out while still checking to make sure the part of the system already implemented works as we wanted it to.
   ● Financial strategy: As we have to pay nothing to use this software, and neither do our pairs, the financial side does not bring up any real concern as to how the software will be made.
   ● Management: Since we are a student-based group the primary management team will consist of four undergrad students with our class professor, Professor Supratrik Mukopadhyay, likely playing the role of our advisor

7. The Problem:

The main problem is how inefficient the scheduling system is. It takes a lot of time to schedule due to having to check all available times for each course without the option of filtering. Another problem is that it takes time to look up the course you are required to take especially when you don't have a flowchart(non-engineering majors).

8. The Solution:

The solution is to make the scheduling system easier and more efficient by adding a system to filter classes by times/dates/etc. and integrate a way to pull up your degree requirements.

9. We Provide the Solution:

Our software will work like a free upgrade to the current scheduling system. Once finished, the students will be able to schedule much easier and more efficiently.

10. Industry Need for our Technology:

With the student-base growing, the need for our technology only grows as well. Scheduling can be a pain for any student at Louisiana State University.

11. Market Analysis:

There is one service in competition with our scheduling system, the LSU scheduling system. Currently all students at the university must use this system to schedule classes. Our goal is to design an interface that outclasses that of LSU to convince student to schedule their classes using our system instead.

12. Primary Market:

The sole market of our system is students at Louisiana State University.

13. Market Size:

Attendance at Louisiana State University increases yearly, and is estimated at over 30,000 students currently.

14. Secondary Market:

There exists no secondary market for our system.

15. Competition:

LSU: LSU hosts their scheduling solution on the myLSU student portal through the "Schedule Request" feature. Being the only current option for students the university, their system leads the market.

16. Marketing Strategies:

The overall goal of our scheduler is to create a system that is more feature rich, user friendly, and more efficient when compared to LSUs current scheduling system.

Since this is a system created by students, for students, we have better insight as to what works well and what is in need of improvement. Not only that, but we communicate directly with our peers, which is the primary market, and can implement their suggested changes much more frequently. LSU is a very large university, and because of this, there are various stages of approval before the smallest change can be implemented.

17. Developing Strategy:

This system will be developed in stages. Focusing first on Computer Science classes during the initial test phases, then expanding to other majors.

First stage: Getting the core functionality of a scheduler working. This would include adding and removing classes.

Second Stage: Adding features such as a time/day filter and testing each feature as they are added

Third Stage: Coordinating with LSUs course offerings to populate our program with CSC classes and testing functionality

Fourth Stage: Populating the program with the rest of the classes LSU offers and testing

Fifth Stage: Final testing and interface tweaks

Sixth Stage: System official launch

18. Barriers:

Some of our barriers will be the following:
- Coordinating with LSUs numerous course offerings
- The learning curve associated with using a new system
- Cost of maintenance

19. Critical Risks:

A critical risk for developing a system that is used exclusively in a web browser is making the systems interface compatible with all major web browsers. Ensuring the system functions and displays properly on all platforms will make it easier to maintain, and provide support for issues encountered. Another risk is adding so many features that the system is no longer user friendly, consequently, decreasing its efficiency.