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Vision and Scope Document

For

Sear, Software Engineering for Academic Research

Version 1.0 for Group **“No Preference”**

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February 26, 2017

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# 1| Business Requirements

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## 1.1 Background

-Faculty information cards are posted outside every professor's door. Manually doing them is time consuming for the staff and has resulted in delays. Not only is formatting them a time consuming process but is needlessly complex for the person creating them.

## 1.2 Business Opportunity

-An automated process would save valuable time and make sure that the process is completed on time at the beginning of the semester. This process would not only be easier to use and to learn, it will also be more reliable. This system would have a small upfront cost but should reduce the amount of time the department takes to print out these cards resulting in a reduction of staff hours needed. This will result in a net positive for the department.

## 1.3 Business Objectives

-By establishing a system in which information simply needs to be entered in order to create information cards, we will be able to increase efficiency by 50%. Professors will no longer have to create their own information cards, and submit them, and this will save them both time and paper.

## 1.4 Success Metrics

-Create a fully functional database that allows full support of CRUD operations to the staff using it. A graphical user interface that allows the staff to easily operate the software. The system will be able to print a batch of all the cards or just a single card. A system that does not crash more than twice a semester. A system that does not lose all relevant data more than once every five years. A card printing error shall occur no more than every three printings, The staff should be able to insert a new professor in under five minutes per professor into the database.

## 1.5 Vision Statement

* For professors who have multiple classes and office hours, the information cards are cards that will provide students with the professors’ information. By having a system in which the office administrator and a clerk are able to input all of the information, all of the professors’ information will all be able to be posted in a timely manner. Unlike the current process in which a professor will individually create and format their own information for their students, our project will make the process worry-free for professors and allow students to quickly locate their professors’ information, because all information cards will now be formatted in the same way.

## 1.6 Business Risks

* Risks can always be found in any project. If this project is not finished in time, there would be a delay in getting the information out to the students, as well as further delay and a decrease in efficiency in which professors would have to continue creating their own information cards. Specifically for our project, risks include:
  + Not being able to input/print the information cards in a timely manner
  + Difficulties in inputting the information
  + Inputted information being placed in the wrong section
  + Inputting incorrect information

## 1.7 Business Assumptions and Dependencies

-The following are the technologies that the system will be built upon and compatible with.

* System will be compatible with MySQL
* System will be compatible with Windows OS & Mac OS

# 2| Scope and limitations

-This section will define the range of the solution proposed by way of features and limitations.

## 2.1 Major Features

-Functional Requirements:

* Staff information lookup available only to clerks.
* System will be capable of printing all the cards in one operation or individual cards upon request.
* Add and modify Staff information, such as office hours, to the database upon request.

-Non-Functional Requirements:

* Performance
* Expected Hardware: Standard system specifications of Sacramento State systems.
* Maintainability
* Code will be maintainable by CSC students and staff.
* Code must be readable and adequately documented.

## 2.2 Scope of Initial Release

-The scope of the initial release will provide a working iteration of the software on which the subsequent releases will be built upon.

1st Iteration:

* Database will be created to hold staff data.
* The office clerk with the ability to access and modify the database through the GUI.
* Cards will be printable in one operation.
* Testing

## 2.3 Scope of Subsequent Releases

2nd Iteration:

* To allow the generation for a new semester based on the information from the prior semester and keep both in the database.
* To create a system that can serve more than one academic department.
* Testing

3rd Iteration:

* To allow set selected users (admins) access to create a new academic department and grant authority to other users, as well as reset other user's passwords. Please note that no admin will be able to directly see the data of another department.
* Testing

## 2.4 Limitations and Exclusions

* No limitations based on the request for proposal.

# 3| Business Context

## 3.1 Stakeholder Profiles

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stakeholder** | **Major Value** | **Attitudes** | **Major Interests** | **Constraints** |
| No Preference  (CSC131 project team) | Educational value | see product as learning experience of real world situation | richer feature set than competitors; experience with databases and teamwork | Time (end of semester) |
| Office administrator | Quick access to data | Desire a product that is secure | ease of use; high reliability |  |
| Clerk | Entry of information is quick and easy | Expects straightforward system with little to no training required for use | ability to enter information into the database faster and easier than current system; easy to learn |  |

## 3.2 Project Priorities

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **Driver**  **(state objective)** | **Constraint**  **(state limits)** | **Degree of Freedom**  **(state allowable range)** |
| Schedule | Continuous delivery throughout the semester | bi-weekly status reports on February 26, March 12, March 26, April 9, April 23, April 30 |  |
| Features | Faculty member information is changeable by office admin; entry and viewing of information allowed by clerk | Trained staff must implement the system | 70-80% of high priority features must be included |
| Quality | Product should be able to pass most if not all tests |  | 90-95% of user acceptance tests must pass for release |
| Staff | produce a Systems Design Specification, a project plan for the construction phase, and a test plan that can be used to assess the quality of any construction | Size of team is 5 |  |

## 3.3 Deployment Considerations

* Once the system is released, users will be able to store and alter information about a faculty member within the database. Only office administrators can alter the data once it is entered in by the clerk. The clerk is able to enter faculty information and view it when necessary. The data can be accessed and altered at any time to keep data up to date. The system will organize the data and format them accordingly to display the selected information on a 5 ½” x 4 ¼” card. Up to four of these cards can be printed on one page. The information of each faculty member will be separated into different quadrants meaning that the information on one card will not overlap onto a separate card.

# 4| Link to Cost & Time Estimate

https://docs.google.com/document/d/1jXEWPwhFZ4HCghn2kRzbZYGDzrsmoCJior0OUDW518U/edit?usp=sharing