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Information Systems and Decision Sciences

Gitanjali Ayesha Appadu

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Upper Division Honors Thesis

in

**Information Systems and Decision Sciences
College of Business Administration**

Dec 9, 2003

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Gitanjali A. Appadu
Clubs and Organizations System

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Proposal

The goal of this project is create a system to enable Clubs and Organizations of the College of Business Administration to enter information to the website <http://www.bus.lsu.edu/students/organizations.html>.

Thus, this honors project will analyze and recognize discrepancies of the current website. A back end normalized database will be created to organize and store information on the organizations, and will then be integrated into the current existing database of the College of Business Administration. Authorized users will be able to enter their information into the database via user friendly ASP pages. The database will be linked to the current website, and changes made to it will be immediately updated online. Each club or organization will be provided with a Logon Identification that will enable them to access the ASP pages.

The project will involve a Requirement Analysis, design of database, design of forms, coding of forms, testing, and implementation.

This system will allow information to be entered by the clubs and organizations themselves, and will reflect changes to the website immediately. The normalized database eliminates all redundant data input.

If this project is successfully implemented as proposed, it will be defended for approval at the end of December 2003.

Executive Summary

LSU's College of Business Administration provides the opportunity for students to meet other students with interests and goals similar to their own through numerous clubs and organization. The College currently holds a page within their website (<http://www.bus.lsu.edu/students/organizations.html>) to describe the missions and goals of all the clubs and organizations.

The Director of the College of Business Administration, Ms. Wendy Luedtke would like an efficient system where information is entered in a concise manner and by the organizations themselves. Currently, the information about the organizations is emailed to Ms. Luedtke, and is currently entered using HTML. The same information sometimes has to be entered repeatedly, and updates or changes have to be done in several places on the website.

The new system will allow for a back end normalized database, which will organize and store information on the organizations. Authorized users will be able to enter their information into the database via user friendly ASP pages. The database will be linked to the current website, and changes made to it will be immediately updated online. Each club or organization will be provided with a Logon Identification that will enable them to access the ASP pages.

The initial step would be to design and create the normalized database to store information about the organizations. The forms would then created, and once approved, the database will be linked to ASP pages which organizations will use to enter or update information. After implementation and testing, the database will then be integrated into the current database held by the College of Business. The final step will then be to provide Logon Identification information to the organizations. Access to make any changes to the website will thus be monitored.

This system will allow information to be entered by the clubs and organizations themselves, and will reflect changes to the website immediately. The normalized database eliminates all redundant data input.

Requirements Analysis

Introduction

Problem Statement

Ms. Wendy Luedtke, director of the College Of Business Administration would like to reconstruct the website ([http:// www.bus.lsu.edu/ students/ organizations.html](http://www.bus.lsu.edu/students/organizations.html)). Currently, the information about the organizations is emailed to Ms. Luedtke, and is then compiled. It is then entered using HTML. The same information sometimes has to be entered repeatedly, and updates or changes have to be done in several places on the website. The process is time consuming and inefficient.

Project Scope/Objectives:

The objective of this project is to design and implement a system where organizations can enter their own information. The information will be entered to a normalized database which will eliminate typing in information several times. Also it will be updated immediately online.

Project Deliverables:

- 1) Requirements Analysis, ER Diagram, Preliminary DB Design
- 2) Baseline Project Plan, Preliminary Form/Report Design, Final DB Design
- 3) Final Form/Report Design, Coding Plan
- 4) Final Test Plans, User Manual Draft
- 5) User Manual, Installation Plan, DFDs
- 6) Final DFD, Completed Test Plans, Corrected User Manual
- 7) Evaluation of system

System Description

Identification and Analysis of Stakeholders

a. Client and the business:

The client is Wendy Luedtke who expects a system that will allow organizations to enter information that will be updated online. The system will be integrated and implemented into the existing College of Business Administration database, and on the ISDS server, which uses a Windows 2000 platform.

b. Users of the system:

The clubs and organizations will be given a Logon ID that will allow them to access the forms on the ASP pages. The users are not

expected to be technically knowledgeable. A user manual will be provided to help them understand how to use the system.

c. Development team:

- **Joya Appadu**

- Technical Capabilities:
 - Programming: VB6.0, HTML, JavaScript
 - Database: Access, E-R diagram
- Resource Capabilities:
 - Home Computer
- Information resources and advisors
 - Andrea Houston (Professor)
 - Wendy Luedtke (Director of College of Business Administration)
 - Technical student team at the College of Business Administration

Description of project requirements from Analysis:

- The system must allow keep track of organization information (add, modify, delete): Name, Type, Description, President Name, Advisor(s) Officers, Website, National Website,.
- The system must allow only authorized users to have access to database: Logon ID, Organization name, Password, Contact Person

Model of current system

Problem and work system

The following is a more in depth look at how the website is maintained.

Gathering information from the Organizations

All information is emailed to Ms. Wendy Luedtke, who then compiles the data using the maximum information available.

Alternative:

Setup a form to be mailed out to organizations that will keep track of desired information (mission, contact information, etc.)

Entering information to the website

The compiled information is currently entered using HTML. The same information sometimes has to be entered repeatedly.

Alternative:

Enter information into a database that will be coded to link the webpage, and therefore information will be entered only once.

Maintaining the website

Changes are done to the website by identifying where the changes are to be made and consequently changing the HTML code. Updates or changes have to be done in several places on the website.

Alternative:

Allow the organizations to change their information via access to the normalized database.

Possible directions for improvement

- The customer wants an integrated system that will increase the efficiency in the input and maintenance of the website.
- Creating a normalized database with access to the organizations will improve the process. Time spent compiling and entering information will be considerably reduced.
- The current business process fits the participants (organizations), and they will have access to the system, as compared to not having access in the previous system.
- Having more concise information would eliminate compiling, and will also make updating significantly less time consuming.
- Better technology would also improve the results of the system. It would eliminate redundant data entering and would provide updated information to viewers of the website.
- Some foreseeable risks that might require work system changes are: the server being down and whether there will be problems maintaining the system.
- In order to correct these problems, this system will allow information to be entered by the clubs and organizations themselves, and will reflect changes to the website immediately. The normalized database eliminates all redundant data input.

Statement of Work

Project Name: Clubs and Organizations' Website Project

Project Manager: Appadu, Gitanjali Ayesha

Customer: Wendy Luedtke, Director of College of Business Administration

Project Start/End: 1/21/03 —12/15/03

Project Description

Goal

This project will implement a Database that will be linked to ASP pages which can be accessed by the Clubs and Organizations of the College of Business Administration.

Objectives

- Provide access for organizations to enter information
- Update information online immediately
- Eliminate repetitive data input

Phase of Work

The following tasks and deliverables reflect the current understanding of the project:

- In Analysis
Analyze system requirement, document system services, and draw database ER diagram.
- In Design
Design system database, design forms, code ASP pages, user manual, online help documents, and installation plan.
- In Implementation
Create the database, create web pages and link to database, allow Logon Identification to users, test the final system.

Systems Description

Alternative Solutions

Alternative 1 – Allow users to have access to HTML pages

This solution will allow users to have access to the HTML pages on the server. The users can edit the pages using tools such as MS FrontPage, if they are not proficient in HTML.

ADVANTAGES

- Software is cheap and affordable because it is a component of Microsoft Office
- Users can see the format in which the data is being typed
- MS Frontpage is easy to install (installation wizard automatically pops up when CD is inserted)

DISADVANTAGES

- There will still be redundant data input to update changes
- There is no access security to data, and organizations can modify all information, even regarding other organizations
- No control to the data being edited, and no validation
- Users will have to be trained on how to use MS Frontpage

Alternative 2 – ASP-driven web forms

This solution will use a back-end database to keep all information about the organizations. The organizations can access the database via secured ASP-driven forms available on the Internet.

- Uses the following software: Internet Browser such as Internet Explorer
- With the use of tables and forms, a central database manages information and eliminates repetitive input
- Users can easily enter data through on-line forms

ADVANTAGES

- Controlled access to data
- Data is validated before input
- A user-friendly interface eases the usability of the system
- Cost is minimal
- Database stores all information captured through forms
- No redundant input

DISADVANTAGES

- Logon information has to be updated to control access
- Users have limited control over the information that can be entered
- Developers will have to have a knowledge of ASP and MS Access

Alternative 3 – JAVA-driven web forms

This solution is identical to Alternative 2, only JAVA is used to develop the forms, instead on ASP. This solution will use a back-end database to keep all information about the organizations. The organizations can access the database via secured JAVA-driven forms available on the Internet.

- Uses the following software: Internet Browser such as Internet Explorer
- With the use of tables and forms, a central database manages information and eliminates repetitive input
- Users can easily enter data through on-line forms

ADVANTAGES

- Controlled access to data
- Data is validated before input
- A user-friendly interface eases the usability of the system
- Cost is minimal
- Database stores all information captured through forms
- No redundant input

DISADVANTAGES

- Logon information has to be updated to control access
- Users have limited control over the information that can be entered
- Developers will have to have a knowledge of JAVA and MS Access

Feasibility Criteria	Alternative 1 (Allowing access to HTML pages)	Alternative 2 (ASP driven forms)	Alternative 3 (JAVA driven forms)
Economic Feasibility 20%	<p><i>Tangible Benefits:</i></p> <ul style="list-style-type: none"> • Allows users to view information being changed • Increased speed of activity, instead of having to depend on College of Business webmaster <p><i>One-time Costs:</i></p> <ul style="list-style-type: none"> • System cost: none (already have access to computer) • Software cost: approximately \$159.00 for academic institutions – Microsoft Office Standard edition <p><i>Recurring Costs:</i></p> <ul style="list-style-type: none"> • Maintenance - high • Update to information – repetitive input • Upgrade to design of website – Each page has to be updated <p>Rating=3 Score=60</p>	<p><i>Tangible Benefits:</i></p> <ul style="list-style-type: none"> • Increased speed of activity, instead of having to depend on College of Business webmaster • No redundant data input <p><i>One-time Costs:</i></p> <ul style="list-style-type: none"> • System cost: none (already have access to computer) • Software cost: approximately \$159.00 for academic institutions – Microsoft Office Standard edition <p><i>Recurring Costs:</i></p> <ul style="list-style-type: none"> • Maintenance - low • Updates to information – immediate changes reflected online • Upgrade to design of website – only website template needs change, while all information in the database remains intact <p>Rating=5 Score=100</p>	<p><i>Tangible Benefits:</i></p> <ul style="list-style-type: none"> • Increased speed of activity, instead of having to depend on College of Business webmaster • No redundant data input <p><i>One-time Costs:</i></p> <ul style="list-style-type: none"> • System cost: none (already have access to computer) • Software cost: approximately \$159.00 for academic institutions – Microsoft Office Standard edition <p><i>Recurring Costs:</i></p> <ul style="list-style-type: none"> • Maintenance - low • Updates to information – immediate changes reflected online • Upgrade to design of website – only website template needs change, while all information in the database remains intact <p>Rating=5 Score=100</p>

Feasibility Criteria	Alternative 1 (Excel)	Alternative 2 (Visual Basics/Access)	Alternative 3 (SAP)
Operational Feasibility 30%	<p>This alternative provides for less interaction with the webmaster, and offers immediate change to input. However, security and access is minimal. Also, there is no control over the data being updated.</p> <p>Rating=1 Score=30</p>	<p>This solution provides for timely update to the information, as well as secure access to the information. Validation is present, which provides a certain amount of control to the data being updated. There is also no redundant input.</p> <p>Rating=5 Score=150</p>	<p>This solution is identical to the Alternative 2 in its operational feasibility. It provides for timely update to the information, as well as secure access to the information. Validation is present, which provides a certain amount of control to the data being updated. There is also no redundant input.</p> <p>Rating=5 Score=150</p>
Technical Feasibility 30%	<p>HTML editors are easily acquired because most of LSU's computer labs come equipped with Microsoft FrontPage or DreamWeaver. Users will however have to learn how to use these programs so as to be able to update the pages correctly.</p> <p>Rating=3 Score=90</p>	<p>Training for the users is not extensive because the application's user interface is user-friendly, which makes it easier on the user. The developer has to be proficient in ASP, which has a quick developing time and high performance.</p> <p>Rating=5 Score=150</p>	<p>Training for the users is not extensive because the application's user interface is user-friendly, which makes it easier on the user. However, a developer with no programming background will find it difficult to begin working with servlets, because of the complexity of the language as well as the complicated JSP system design.</p> <p>Rating=4 Score=120</p>

Feasibility Criteria	Alternative 1 (Excel)	Alternative 2 (Visual Basics/Access)	Alternative 3 (SAP)
Legal Feasibility 5%	The purchase of the software would cause no legal binding. System applications and software comes with its own copyrights, and there will be no illegal use of it. Rating=5 Score=25	The purchase of the software would cause no legal binding. System applications and software comes with its own copyrights, and there will be no illegal use of it. Rating=5 Score=25	The purchase of the software would cause no legal binding. System applications and software comes with its own copyrights, and there will be no illegal use of it. Rating=5 Score=25
Political Feasibility 5%	No major political issue is involved. Rating=5 Score=25	No major political issue is involved. Rating=5 Score=25	No major political issue is involved. Rating=5 Score=25
Schedule Feasibility 10%	Time is not a concern here. Users simply need to be given access to the server. Rating=5 Score=50	Alternative includes more tasks and may take more time than alternative one. But generally speaking, alternative 2 would not require extensive implementation, so schedule/time would not be much of a problem. Rating=4 Score=40	Alternative three might take longer than alternative 3 due to the complexity of the language. Rating=3 Score=30
Total	Score = 280	Score = 490	Score = 450

Risks

After careful analysis, it has been decided in the interest of the client that the best alternative would be to implement the database using ASP. Below are some potential risks that may arise and a contingency plan for each risk.

Risk Factor	Description of Risk	Contingency Plan for Risk
Hackers into the system	There are numerous hackers/invaders that may break into the system.	Username and passwords should be updated regularly. Firewalls should also be installed for unauthorized access to be minimized.
Failure of system due to server problems	Organizations might not be able to access the database due to the server being down.	Alternate ways to updated the database should still be available, such as the availability of a webmaster to update the website until server is working again.
If team encounters technical difficulty with software/applications	Through the development cycle, if the developer has difficulty working with certain software/applications then it will take up time and may cause the delivery of the final system to be delayed.	Developer should use standard development tools and hardware environment to prevent this from happening. Also, because developers are more comfortable with software/hardware they know how to use, it will increase the development process.
Lack of time	Developer can not be sure of exact time measures to execute project.	Tasks should be planned out in advance with estimate duration in order to meet deadline. Developer should be willing to put in extra hours to complete tasks.
Project scope defined by client is beyond our capabilities	Developer is not able to deliver product as specified by client due to lack of technical skills and resources.	Meet with client to reach an agreement to specify what can be delivered up to that point.
Inability to update system if developer is not available	The system might not be updated with the correct methodology should the developer not be available.	Detailed documentation of the design should be kept.

Resource Requirements

Client/User Resource Requirements

Operating System	Windows 2000 – part of ISDS server, with access to the Internet
Software	Internet Browser, such as Internet Explorer
Accessories	Keyboard, mouse
Knowledge of	How to navigate through internet pages
Workload/Tasks	<ul style="list-style-type: none">- Handle the Admission Process for the Masters Program- Maintain the system- Keep track and monitor Student Projects

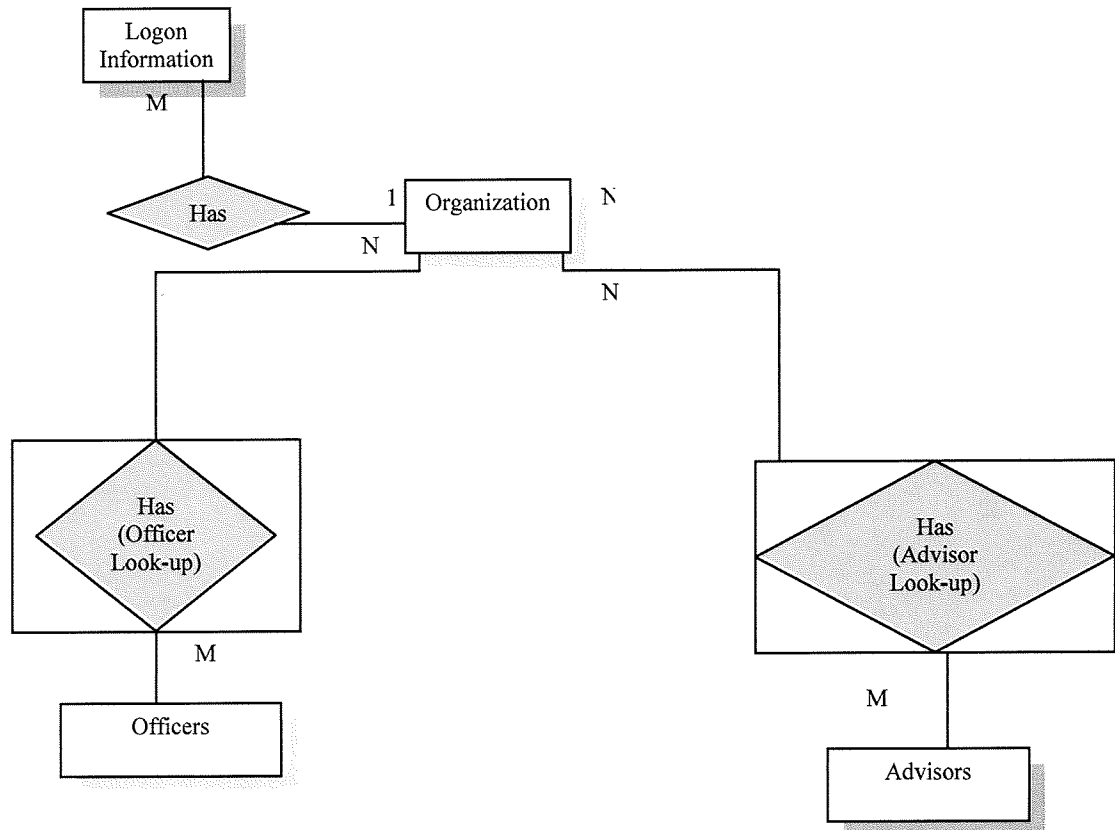
Development Team Resource Requirements

Operating System	Any Windows platform
Software	Microsoft Access, Microsoft FrontPage, Microsoft Visual Basic, JavaScript, HTML, ASP
Accessories	Keyboard, mouse
Workload/Tasks (According to skills of members)	<p>Joya Appadu</p> <ul style="list-style-type: none">— Managing the Project— Database Activities— Documentation— Coding

Database Design

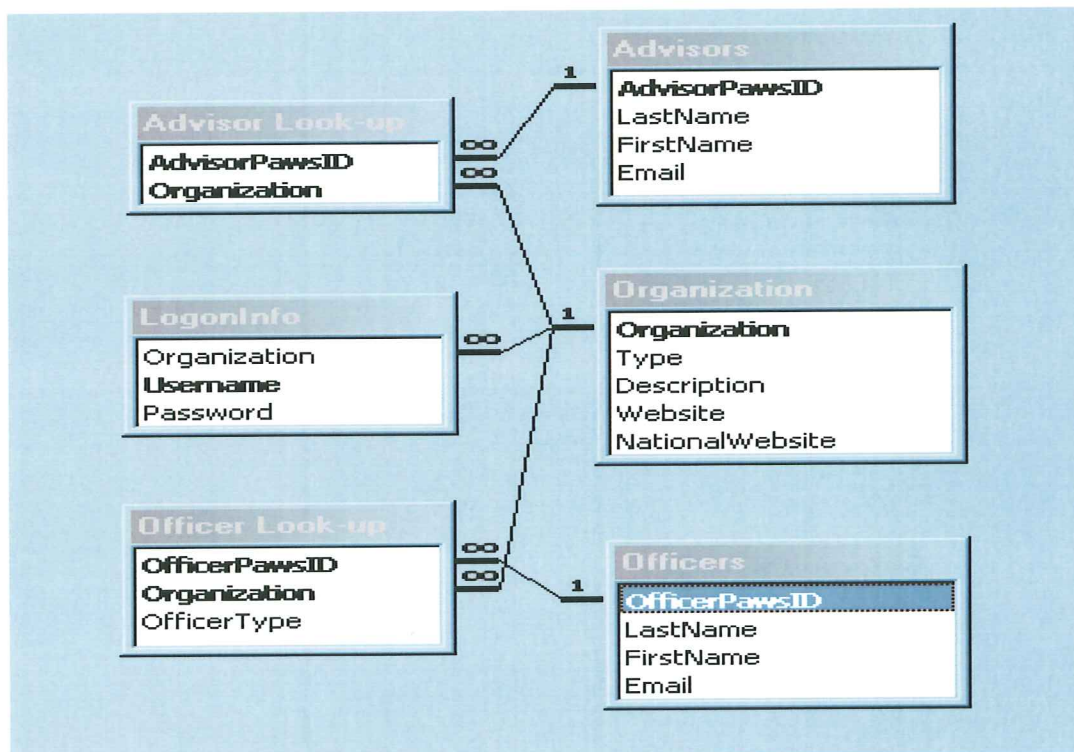
Conceptual Data Model

Conceptual Data Model (E-R Diagram)



<u>Entity Types</u>	<u>Attributes</u>
Organization	<u>Organization</u> , Type, Description, Website, National Website,
Logon Information	<u>Logon ID</u> , Organization, Password
Advisors	<u>Advisor Paws ID</u> , Last Name, First Name, Email
Officers	<u>Officer Paws ID</u> , Last name, First Name, Email
Advisor Look-up	<u>Advisor Paws Id</u> , <u>Organization</u>
Officers Look-up	<u>Officer Paws Id</u> , <u>Organization</u> , Officer Type

Access Table relationship report



Estimate of total records/table rows needed

There are currently 6 tables in the database. The following is a breakdown of the number of fields in each table, and an estimate of the number of rows in each table.

Table Name	Number of fields	Number of records
Organization	5	25
Logon Information	3	25
Advisors	5	50
Officers	5	100
Advisors Look-up	2	50
Officers Look-up	3	100

De-normalization and optimization considerations

The Organization table has a many-to-many relationship with the Advisors and Officers tables. Thus Look-up tables were created to join these tables, as shown in the Table relationship report.

Thus, all tables are normalized. Consideration was given on whether or not to de-normalize some of them, but it was preferable to keep them normalized for optimization reasons.

Business rules

To preserve the logical data integrity, the following are some of the business rules that must be followed:

- 1) All advisors and officers should be LSU students, faculty members or staff members.
The advisors and officers are identified by the Paws ID, which shows proof of the person being enrolled in LSU as a student, faculty member or staff member.
- 2) The advisor should be a faculty member or staff member.
The access to the database will be given to a designated person of the committee, usually the advisor or an officer in charge. The input of that information will be controlled by that person. Should there be misuse of the access privileges, the login ID and password can be changed to deny access to the database.

Referential Integrity

ORGANIZATION (Organization, Type, Description ...)

- The Organization information will be initially entered by the College of Business. The ASP pages will give access to all other information

about the organization, except for the Organization name. While adding an organization, no multiple record of one organization can be entered, as they are identified by their Organization name.

- An Organization record cannot be deleted without deleting the respective Logon Information, as well as the corresponding entries in the Advisors and Events Look-up Tables. This can only be done by the College of Business.

LOGON INFORMATION (Logon ID, Organization, Password)

- While adding a Logon ID, no duplicate logon can be used. Also, the organization name has to be found in the Organization table before its Logon can be entered. An Organization can have more than one logon ID.
- Deleting an entry does not require any prior action or regulation, and will not affect any other table.

ADVISORS (Advisor Paws ID, Last Name, First Name ...)

- Since advisors are identified by their Paws ID, no multiple record of one advisor can be entered. Even if an advisor belongs to more than one Organization, only one entry is entered.
- An advisor cannot be deleted without deleting the corresponding entry in the Advisor Look-up entry.
- No changes can be made to the Paws ID of an advisor. The ASP pages will only allow for a removal of an advisor from the organization. Thus, should there be change to the Paws ID of an advisor, the advisor will have to be removed, and then added back with the changed name.

OFFICERS (Officer Paws ID, Last name, First Name...)

- Since officers are identified by their Paws ID, no multiple record of one officer can be entered. Since the Officer Type is identified in the Officer Look up table, a student can be the officer in multiple organizations. Even if a student is an officer for more than one Organization, only one entry is entered.
- An officer cannot be deleted without deleting the corresponding entries in the Officer Look-up entry.
- No changes can be made to the Paws ID of an officer. The ASP pages will only allow for a removal of an officer from the organization. Thus, should there be change to the Paws ID of an officer, the officer will have to be removed, and then added back with the changed name.

ADVISOR LOOK-UP (Advisor Paws Id, Organization)

- Both the advisor and organization have to be entered while adding an entry. Both the advisor and Organization have to exist in their respective tables. If a person is an advisor for more than one Organization, the corresponding multiple entries have to be entered.
- Deleting an entry from the advisor look-up does not require any prior action or regulation, and will not affect any other table in the database.

However, the ASP pages will delete both the Advisor Look-up information, as well as the corresponding Advisor information, if the advisor is not an advisor for another committee.

OFFICERS LOOK-UP (Officer Paws Id, Organization, Officer Type)

- Both the officer and organization have to be entered while adding an entry. Both the Officer and Organization have to exist in their respective tables. If a person is an officer for more than one Organization, the corresponding multiple entries have to be entered. Furthermore, the officer type has to be specified for each entry.
- Deleting an entry does not require any prior action or regulation, and will not affect any other table in the database. However, the ASP pages will delete both the Officer Look-up information, as well as the corresponding Officer information, if the officer is not an officer for another committee.

Data Dictionary

Please refer to attached file: [Database Dictionary](#)

Form Design

Forms

Login Form

(a) Narrative Overview

Form:	Login
Users:	Clubs and Organization's users
Task:	To log into the Clubs and Organization System

(b) Sample Design

CLUBS AND ORGANIZATIONS LOGIN

A sample design of the login form. It features a blue header bar with the text "REGISTERED USER LOGIN". Below this, there are two input fields: "Logon ID:" and "Password:". At the bottom, there is a blue "Login" button.

(a) Narrative Overview

Form:	LoginError
Users:	Users attempting to enter the Clubs and Organization System
Task:	To inform users that their login is invalid and to allow them to log into the system again

(b) Sample Design

CLUBS AND ORGANIZATIONS LOGIN

The sample design shows a login form titled "CLUBS AND ORGANIZATIONS LOGIN". Inside the form, there is a blue header bar with the text "REGISTERED USER LOGIN". Below this, a red error message reads "INVALID LOGIN ID AND PASSWORD". Under the error message, there are two input fields: "Logon ID:" and "Password:". Below the "Password:" field is a blue "Login" button.

(a) Narrative Overview

Form: Index
Users: Authorized users to the Clubs and Organization System
Task: To allow users to access the Organization page to edit information about the organization, the Advisors page to edit information about the advisors, the Officers page to edit information about the officers, and to logout of the system

(b) Sample Design

Welcome to the Clubs and Organization Database. Please choose from the options below:

Edit information about the organization

Organization

Edit information about the Advisors of the organization.

Advisors

Edit information about the Officers of the organization.

Officers

Logout of Clubs and Organization Database.

Logout

(a) Narrative Overview

Form: Organization
Users: Authorized users to the Clubs and Organization System
Task: To allow users to update information about the organization, such as Description, Website and National Website

(b) Sample Design

[Logout](#)

[Home](#)[Organization](#)[Advisors](#)[Officer](#)

ORGANIZATION INFORMATION

To edit of your organization, please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Upon filling out these details, the changes should be reflected on the Clubs and Organization Website. Required information is marked with a *.

Organization Information

Description:

Website:

National Website:

Update

(a) Narrative Overview

Form: Updated
Users: Authorized users to the Clubs and Organization System
Task: To inform users that the Organization Information has been successfully updated

(b) Sample Design

UPDATE SUCCESSFUL

This information has successfully been updated to the Ourso College of Business database.

[Clubs and Organizations Home](#)

(a) Narrative Overview

Form: Advisor
Users: Authorized users to the Clubs and Organization System
Task: To allow users to view the complete list of the Organization's advisor, to allow users to choose the name of the advisor to be edited, and to allow users to access the page to add a new advisor to their organization

(b) Sample Design

[Logout](#)

[Home](#)[Organization](#)[Advisors](#)[Officer](#)

ADVISORS

This is the main control page for maintaining updated information about the organization's advisors. This page allows you to add, delete or edit relevant information. If you want to add information on a new advisor, use the ADD button. If you want to edit existing information, then select the ID of the Advisor you want to edit from the text box, and click EDIT.

After updating the information, you can view a list of the advisors' information by clicking VIEW COMPLETE INFORMATION OF ALL ADVISORS.

View complete information of all advisors

Edit Advisor's Information

Edit/RemoveAdd

(a) Narrative Overview

Form: AdvisorsAll
Users: Authorized users to the Clubs and Organization System
Task: To allow users to view the complete list of the Organization's advisors.

(b) Sample Design

Complete list of Advisors

AdvisorPawsID	LastName	FirstName	Email
test	test	test	test
test1	test1	test	test1

[Back to Advisors Page](#)

(a) Narrative Overview

Form: AdvisorAdd
Users: Authorized users to the Clubs and Organization System
Task: To allow users to an advisor to their organization

(b) Sample Design

ADD AN ADVISOR

To add a new advisor , please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *.

Advisors Information

First Name*:

Last Name*:

Paws ID*:

Email:

Add

Reset

Cancel

(a) Narrative Overview

Form: AdvisorEdit
Users: Authorized users to the Clubs and Organization System
Task: To allow users to edit information about an advisor, such as First Name, Last Name and Email, and to allow users to remove the advisor from the organization's records

(b) Sample Design

EDIT ADVISOR INFORMATION

To edit information about an advisor , please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *

Advisors Information

First Name*:

Last Name*:

Email:

Edit

Remove

(a) Narrative Overview

Form: UpdatedAdvisor
Users: Authorized users to the Clubs and Organization System
Task: To inform users that the changes to the advisor information of the organization has been successfully updated, and to allow them to go back to the Advisors page

(b) Sample Design

Your changes have been successfully recorded.

To return to the Advisor Homepage, please click on the button below.

Advisors Home

(a) Narrative Overview

Form: AdvisorExists
Users: Authorized users to the Clubs and Organization System
Task: To inform users that the advisor already exists in the organization's records, and to allow users to go back to the Advisors page

(b) Sample Design

ERROR

The Paws ID of the Advisor already exists.
To return to the Advisor Homepage, please click on the button below.

Advisors Home

(a) Narrative Overview

Form: Officers
Users: Authorized users to the Clubs and Organization System
Task: To allow users to view the complete list of the Organization's officer, to allow users to choose the name of the officer to be edited, and to allow users to access the page to add a new officer to their organization

(b) Sample Design

The sample design shows a web interface for managing officers. At the top, there is a navigation bar with a 'Logout' button on the left and a menu with 'Home', 'Organization', 'Advisors', and 'Officer' on the right. Below the navigation bar, the title 'OFFICERS' is displayed. A paragraph of text explains the page's function: 'This is the main control page for maintaining updated information about the organization's officers. This page allows you to add, delete or edit relevant information. If you want to add information on a new officer, use the ADD button. If you want to edit existing information, then select the ID of the Officer you want to edit from the text box, and click EDIT.' Below this text, there is a button labeled 'View complete information on all officers'. At the bottom, there is a form area with a label 'Edit Officer's Information' on the left. To the right of the label is a large text input box. Below the input box are two buttons: 'Edit/Remove' and 'Add'.

Logout Home Organization Advisors Officer

OFFICERS

This is the main control page for maintaining updated information about the organization's officers. This page allows you to add, delete or edit relevant information. If you want to add information on a new officer, use the ADD button. If you want to edit existing information, then select the ID of the Officer you want to edit from the text box, and click EDIT.

After updating the information, you can view a list of the officers' information by clicking VIEW COMPLETE INFORMATION ON ALL OFFICERS.

View complete information on all officers

Edit Officer's Information

Edit/Remove Add

(a) Narrative Overview

Form: OfficerAdd
Users: Authorized users to the Clubs and Organization System
Task: To allow users to an officer to their organization

(b) Sample Design

ADD A NEW OFFICER

To add a new officer, please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *.

Officer Information

First Name*:

Last Name*:

Paws ID*:

Type*: (President, Vice President, Treasurer)

Email:

Add

Clear

Cancel

(a) Narrative Overview

Form: OfficerEdit
Users: Authorized users to the Clubs and Organization System
Task: To allow users to edit information about an officer, such as First Name, Last Name, Type and Email, and to allow users to remove the officer from the organization's records

(b) Sample Design

EDIT OFFICER INFORMATION

To edit information about an officer , please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *.

Officer Information

First Name*:

Last Name*:

Type*:

Email:

Update

Remove

(a) Narrative Overview

Form: OfficersAll
Users: Authorized users to the Clubs and Organization System
Task: To allow users to view the complete list of the Organization's officers.

(b) Sample Design

Complete list of Officers

OfficerPawsID	OfficerType	LastName	FirstName	Email
test	test	test	test	test@lsu.edu

Back to Officers Page

(a) Narrative Overview

Form:	UpdatedOfficer
Users:	Authorized users to the Clubs and Organization System
Task:	To inform users that the changes to the officer information of the organization has been successfully updated, and to allow them to go back to the Officers page

(b) Sample Design

Your changes have been successfully recorded.

To return to the Officer Homepage, please click on the button below.

Officers Home

(a) Narrative Overview

Form: OfficerExists
Users: Authorized users to the Clubs and Organization System
Task: To inform users that the officer already exists in the organization's records, and to allow users to go back to the Officers page

(b) Sample Design

ERROR

The Paws ID of the Officer already exists.
To return to the Officer Homepage, please click on the button below.

Officers Home

(a) Narrative Overview

Form:	Expire
Users:	Authorized users to the Clubs and Organization System
Task:	To inform users that their session has expired, and to redirect them to the Login page

(b) Sample Design

YOUR SESSION HAS EXPIRED!

Due to security issues, the system logs you out automatically after some idle time.

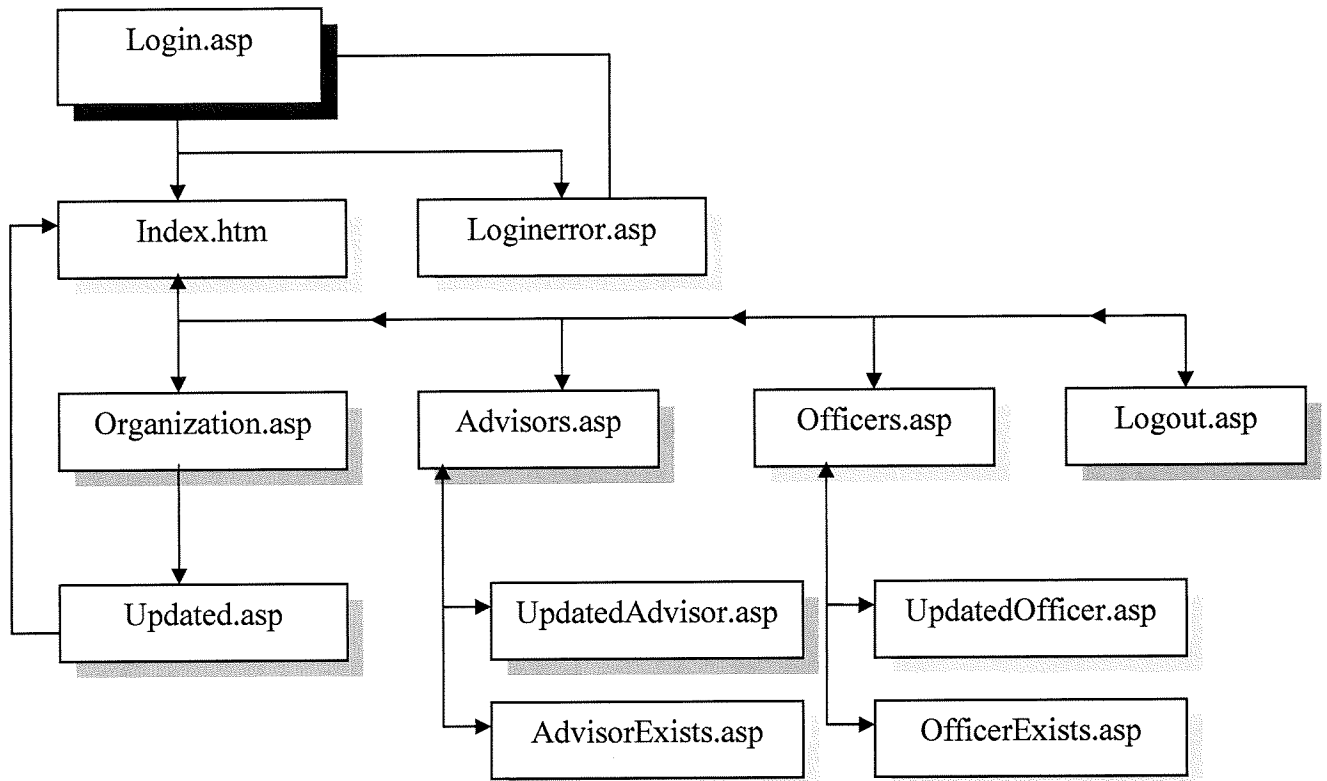
[Click here](#) to login in again.

Upper Division Honors Thesis
Gitanjali A. Appadu
Clubs and Organizations System

Toe Charts

Please refer to [TOE Charts.xls](#)

Navigation map



Test Plans

Form Test Plans

Test Case Number: 1

Date: 11/24/03

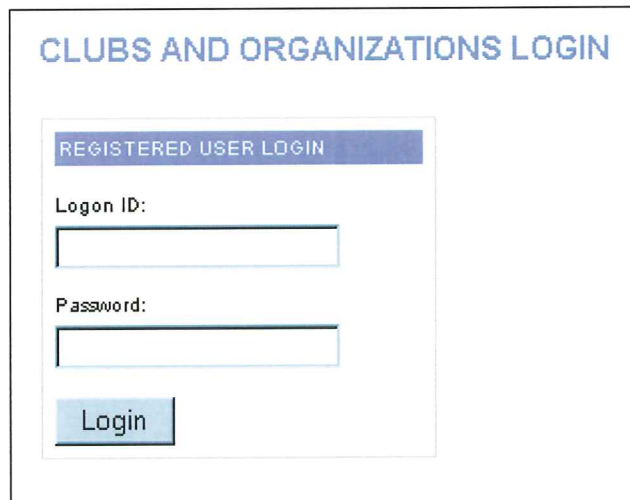
Test Case Description:

Test the form titled: Login

This form allows user to enter the correct username and password in order to log onto the system.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu



The screenshot shows a web form titled "CLUBS AND ORGANIZATIONS LOGIN" in blue text. Below the title is a blue header bar with the text "REGISTERED USER LOGIN" in white. The form contains two text input fields: "Logon ID:" and "Password:". Below the "Password:" field is a blue "Login" button.

Text Boxes:

User Name: User must enter a username that was previously assigned in order to log onto system.

Password: User must enter a valid password in order to log onto system. Passwords must match the correct users for security purposes.

Buttons:

OK: Allows user to enter the system with a successful logon.

Expected results:

User should be able to logon to the system if the correct username and password are entered. If an unrecognized username and password are entered, then a Error Login page should be displayed and inform the user that an invalid entry has been entered.

Test Case Number: 2

Date: 11/24/03

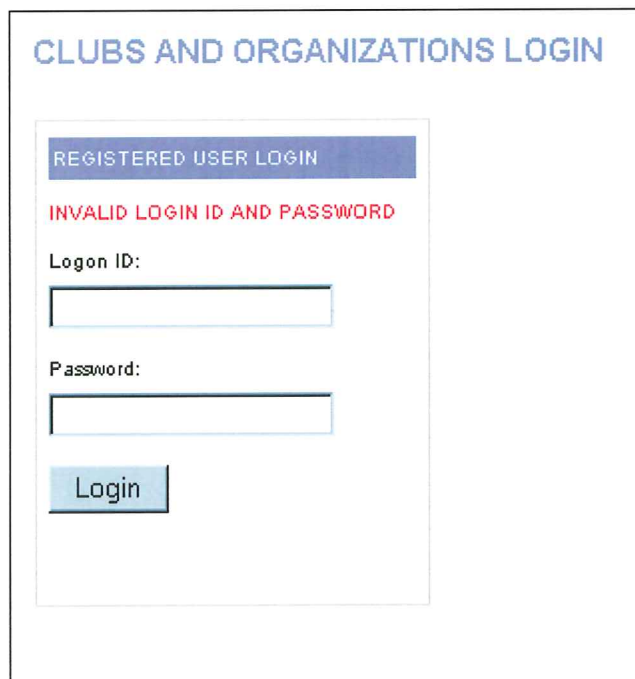
Test Case Description:

Test the form titled: LoginError.asp

This form allows user to enter the correct username and password in order to log onto the system.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu



The screenshot shows a web form titled "CLUBS AND ORGANIZATIONS LOGIN". Inside the form, there is a sub-section titled "REGISTERED USER LOGIN". Below this title, a red error message reads "INVALID LOGIN ID AND PASSWORD". There are two input fields: "Lagon ID:" and "Password:". Below the password field is a blue "Login" button.

Text Boxes:

User Name: User must enter a username that was previously assigned in order to log onto system.

Password: User must enter a valid password in order to log onto system. Passwords must match the correct users for security purposes.

Buttons:

OK: Allows user to enter the system with a successful login.

Expected results:

User should be able to logon to the system if the correct username and password are entered. If an unrecognized username and password are entered, then a Error Login page

should be displayed and inform the user that an invalid entry has been entered.

Test Case Number: 3

Date: 11/24/03

Test Case Description:

Test the form titled: Index.htm

This form allows users to access pages to add/update/delete information about the Organization, its Advisors, its Officers, and to logout of the system.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

Welcome to the Clubs and Organization Database. Please choose from the options below:

Edit information about the organization	Organization
Edit information about the Advisors of the organization.	Advisors
Edit information about the Officers of the organization.	Officers
Logout of Clubs and Organization Database.	Logout

Buttons:

Organization: Takes user to the Organization page where information about the organization can be updated.

Advisors: Takes user to the Advisors page where information about existing advisor can be updated and new advisors can be added.

Officers: Takes user to the Officers page where information about existing officers can be updated and new officers can be added.

Logout: Allows user to exit the system completely.

Expected Results:

Users should have very few difficulties with this form because each button's description is clearly visible on the form. If the wrong form has been clicked, users can easily use the Back button to go back to the Index form. The command buttons are coded so that each form pops up as user clicks on the button. Takes user to the Organization page where information about the organization can be updated.

Test Case Number: 4

Date: 11/24/03

Test Case Description:

Test the form titled: Organization form

This form allows update information about the organization's, description, website and nation website.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

The screenshot shows a web application interface for updating organization information. At the top, there is a navigation bar with links: Home, Organization (selected), Advisors, and Officer. Below the navigation bar, the page title is "ORGANIZATION INFORMATION". A message states: "To edit of your organization, please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Upon filling out these details, the changes should be reflected on the Clubs and Organization Website. Required information is marked with a *." The form itself is titled "Organization Information" and contains three text input fields: "Description:" (a large text area), "Website:" (a single-line text box), and "National Website:" (a single-line text box). At the bottom of the form is an "Update" button.

Text Boxes/List Boxes:

Description: User must enter description of the organization. This field is not required to add information, and there are no other constraints to the field.

Website: User can update the website of the organization. User is limited to enter 100 characters. This field is not required.

Last Name: User can update the national website of the organization.
User is limited to enter upto 100 characters. This field is not required.

Buttons:

Update: Allow users to update the current information.

Expected Results: The user should be able to update information on the organization. Only the type of the organization is required. Once the Update button is clicked, the data should be updated, and a message informing the user that the data has been successfully updated should be displayed.

Test Case Number: 5

Date: 11/24/03

Test Case Description:

Test the form titled: Advisors

This form allows users to view the complete list of the Organization's advisor, to allow users to choose the name of an existing advisor to be edited, and to allow users to access the page to add a new advisor to their organization

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

Test | Logout

Home Organization Advisors Officer

ADVISORS

This is the main control page for maintaining updated information about the organization's advisors. This page allows you to add, delete or edit relevant information. If you want to add information on a new advisor, use the ADD button. If you want to edit existing information, then select the ID of the Advisor you want to edit from the text box, and click EDIT.

After updating the information, you can view a list of the advisors' information by clicking VIEW COMPLETE INFORMATION OF ALL ADVISORS.

View complete information of all advisors

Edit Advisor's Information

John Doe

Edit/Remove Add

Select box

Advisors first Name and Last Name

This box lists the names of all the Advisors of the organization. The user has to select the name to be modified before clicking the Edit/Remove button.

Menu at the top

Home: Takes the user to Index page

Organization: Takes user to the Organization page where information about the organization can be updated.

Advisors: Takes user to the Advisors page where information about existing advisor can be updated and new advisors can be added.

Officers: Takes user to the Officers page where information about existing officers can be updated and new officers can be added.

Logout: Allows user to exit the system completely.

Buttons:

View complete information on all Advisors:

This allows the user to view all the information (ID, First name, Last name and Email) of the advisors in the organization.

Edit/Remove: Allow users to update the current information based on the selected name. Should the user click the Edit/Remove button without selecting an advisor, and error message should pop up to prompt the user to select an advisor.

Add: Allows users to add the information by directing them to the AdvisorAdd form.

Expected Results: The user should be able to view the complete list of all the existing advisors in the organization by clicking on the "View complete list of all advisors" button. The user should also be able to access the record of the advisor selected in the select box, in order to allow for editing/removal. The user can also access the form to add new advisors to the organization by clicking on the Add button.

Test Case Number: 6

Date: 11/24/03

Test Case Description:

Test the form titled: AdvisorAdd

This form allows user to add an advisor to the organization. It allows the user to add the first name, last name, paws Id, email.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

ADD AN ADVISOR

To add a new advisor , please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *.

Advisors Information

First Name*:

Last Name*:

Paws ID*:

Email:

Add

Reset

Cancel

Text Boxes/List Boxes:

First Name: User must enter first name of the advisor. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Last Name: User must enter last name of the advisor. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Paws ID: User must enter the Paws Id of the advisor. This field is required to add information, and there are no other constraints besides the length of the field, which is 30 characters.

Email: User must enter the Email of the advisor. This field is not required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Buttons:

Add: Allows users to add the information.

Reset: Allows users to clear all fields.

Cancel: Allows users to cancel the command and to go back to the Advisors page.

Expected Results: Upon, clicking the Add button, the information entered in the text boxes should be sent to the database. The first name, last name and Paws Id of the advisor are required. If those fields are not entered, a message should pop up to prompt the user to enter them. If the advisor already exists in the organization, an error message should appear to inform the user that the advisor exists. Else, a message informing the user that the information has been successfully uploaded should be displayed.

Test Case Number: 7

Date: 11/24/03

Test Case Description:

Test the form titled: AdvisorEdit Form

This form allows user to edit or remove the information about the advisor selected in the previous form, namely the Advisors form.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

EDIT ADVISOR INFORMATION

To edit information about an advisor , please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *

Advisors Information

First Name*:

Last Name*:

Email:

Edit

Remove

Text Boxes/List Boxes:

First Name: User must enter first name of the advisor. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Last Name: User must enter last name of the advisor. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Email: User must enter the Email of the advisor. This field is not required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Buttons:

Edit: Allows users to upload edited information.

Remove: Allows users remove the record of the selected advisor..

Expected Results: Upon clicking the Edit button, the information in the text boxes should be sent to the database. The first name, last name and Paws Id of the organization are required. If those fields are not entered, a message should pop up to prompt the user to enter them. Upon clicking the Remove button, the advisor record currently displayed will be removed from the organization's records. A message informing the user that the information has been successfully uploaded or removed should be displayed.

Test Case Number:8

Date: 11/24/03

Test Case Description:

Test the form titled: Officers

This form allows users to view the complete list of the Organization's Officer, to allow users to choose the name of an existing officer to be edited, and to allow users to access the page to add a new officer to their organization

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

Test | Logout

Home Organization Advisor Officer

OFFICERS

This is the main control page for maintaining updated information about the organization's officers. This page allows you to add, delete or edit relevant information. If you want to add information on a new officer, use the ADD button. If you want to edit existing information, then select the ID of the Officer you want to edit from the text box, and click EDIT.

After updating the information, you can view a list of the officers' information by clicking VIEW COMPLETE INFORMATION ON ALL OFFICERS.

View complete information on all officers

Edit Officer's Information

John Doe

Edit/Remove Add

Select box

Officers' first name and last name

This box lists the names of all the Officers of the organization. The user has to select the name to be modified before clicking the Edit button.

Buttons:

View complete information on all Officers:

This allows the user to view all the information (ID, First name, Last name, Type and Email) of the Officers in the organization.

Edit/Remove: Allow users to update the current information based on the selected name. Should the user click the Edit button without selecting a name, and error message should pop up to prompt the user to select an officer.

Add: Allows users to add the information by directing them to the OfficerAdd form.

Menu at the top

- Home:* Takes the user to Index page
- Organization:* Takes user to the Organization page where information about the organization can be updated.
- Advisors:* Takes user to the Advisors page where information about existing advisor can be updated and new advisors can be added.
- Officers:* Takes user to the Officers page where information about existing officers can be updated and new officers can be added.
- Logout:* Allows user to exit the system completely.

Expected Results: The user should be able to view the complete list of all the existing Officers in the organization by clicking on the "View complete list of all Officers" button. The user should also be able to access the record of the Officer selected in the select box, in order to allow for editing/removal. The user can also access the form to add new Officers to the organization by clicking on the Add button.

Test Case Number: 9

Date: 11/24/03

Test Case Description:

Test the form titled: OfficerAdd

This form allows user to add an Officer to the organization. It allows the user to add the first name, last name, paws Id, type and email of the officer.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

ADD A NEW OFFICER

To add a new officer, please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *.

Officer Information

First Name*:

Last Name*:

Paws ID*:

Type* (President, Vice President, Treasurer)

Email:

Add

Clear

Cancel

Text Boxes/List Boxes:

First Name: User must enter first name of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Last Name: User must enter last name of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Paws ID: User must enter the Paws Id of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 30 characters.

Type: User must enter the Type of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 70 characters.

Email: User must enter the Email of the Officer. This field is not required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Buttons:

Add: Allows users to add the information.

Reset: Allows users to clear all fields.

Cancel: Allows users to cancel the command and to go back to the Officers page.

Expected Results: Upon, clicking the Add button, the information entered in the text boxes should be sent to the database. The first name, last name and Paws Id and type of the officer are required. If those fields are not entered, a message should pop up to prompt the user to enter them. If the officer already exists in the organization, an error message should appear to inform the user that the officer exists. Else, a message informing the user that the information has been successfully uploaded should be displayed.

Test Case Number: 10

Date: 11/24/03

Test Case Description:

Test the form titled: OfficerEdit Form

This form allows user to edit or remove the information about the officer selected in the previous form, namely the Officers form.

Test Case Prepared by: Joya Appadu

Test Administrator: Joya Appadu

EDIT ADVISOR INFORMATION

To edit information about an advisor , please fill out the details below. All the details are relevant and please ensure that they are complete and accurate in all respects. Required information is marked with a *

Advisors Information

First Name*:

Last Name*:

Email:

Edit

Remove

Text Boxes/List Boxes:

First Name: User must enter first name of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Last Name: User must enter last name of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Type: User must enter the Type of the Officer. This field is required to add information, and there are no other constraints besides the length of the field, which is 70 characters.

Email: User must enter the Email of the Officer. This field is not required to add information, and there are no other constraints besides the length of the field, which is 100 characters.

Buttons:

Edit: Allows users to upload edited information.

Remove: Allows users remove the record of the selected Officer.

Expected Results: Upon clicking the Edit button, the information in the text boxes should be sent to the database. The first name, last name and Paws Id and type of the officer are required. If those fields are not entered, a message should pop up to prompt the user to enter them. Upon clicking the Remove button, the Officer record currently displayed will be removed from the organization's records. A message informing the user that the information has been successfully uploaded or removed should be displayed.

Test Scenarios

Test Case 1

Scenario:

- User needs to update information about the organization.
- Existing data has to be retrieved to the database, and edited information needs to be sent back.

System Procedure:

- User logs onto the system with the assigned username and password
- Once verification takes place, user is logged onto the system and ready to edit information.
- The Index form pops up and the user selects the Organization button.
- The user can then proceed to edit all the information about the description, type, website and national website of the organization.
- Once all information has been correctly entered, user can then click the **Update** command button at the bottom of the page.
- Next user can choose to edit information about the Advsors or Officers, or to log out of the system.

Test Case 2

Scenario:

- User wants to add a new advisor to the organization.
- User is on the Index form.

System Procedures

- From the **Index Form**, user will click the command button labeled **Advisors** in order to go to the Advisors main page.
- On the Advisors form, the user can view all the existing information of the advisors by clicking on the View complete information about the Advisors button.
- The user can click on the **Add** button to be directed to the Advisors Add form to add information.
- Once on the Advisors Add form, the user can enter information about the advisor.
- Only if the first name, last name and Paws Id are filled out that the form will be processed. If the advisor already exists in the organization's records, an error message will be displayed.

- Else, the user is directed to the Advisors page upon successful addition of an Advisor.

Test Case 3

Scenario:

- User wants to edit information about an advisor, or remove the advisor from the organization's records.
- User is on the Index form.

System Procedure:

- From the **Index Form**, user will click the command button labeled **Advisors** in order to go to the Advisors main page.
- On the Advisors form, the user can view all the existing information of the advisors by clicking on the View complete information about the Advisors button.
- The user can select the ID of the advisor whose record needs to be updated/removed.
- The user can then click on the **Edit/Remove** button to be directed to the Advisors Edit form to edit the information.
- Once on the Advisor Edit form, the user can edit the information about the advisor. Only if the first name, last name and Paws Id are filled out that the form will be processed by clicking on the **Edit** button. If the advisor already exists in the organization's records, an error message will be displayed.
- Else, the user can click on the **Remove** button to remove the advisor's information from the organization's records.
- The user is directed to the Advisors page upon successful addition of an Advisor.

Test Case 4

Scenario:

- User wants to add a new officer to the organization.
- User is on the Index form.

System Procedures

- From the **Index Form**, user will click the command button labeled **Officers** in order to go to the Officers main page.
- On the Officers form, the user can view all the existing information of the Officers by clicking on the View complete information about the Officers button.

- The user can click on the **Add** button to be directed to the Officers Add form to add information.
- Once on the Officers Add form, the user can enter information about the officer.
- Only if the first name, last name, type and Paws Id are filled out that the form will be processed. If the officer already exists in the organization's records, an error message will be displayed.
- Else, the user is directed to the Officers page upon successful addition of an Officer.

Test Case 5

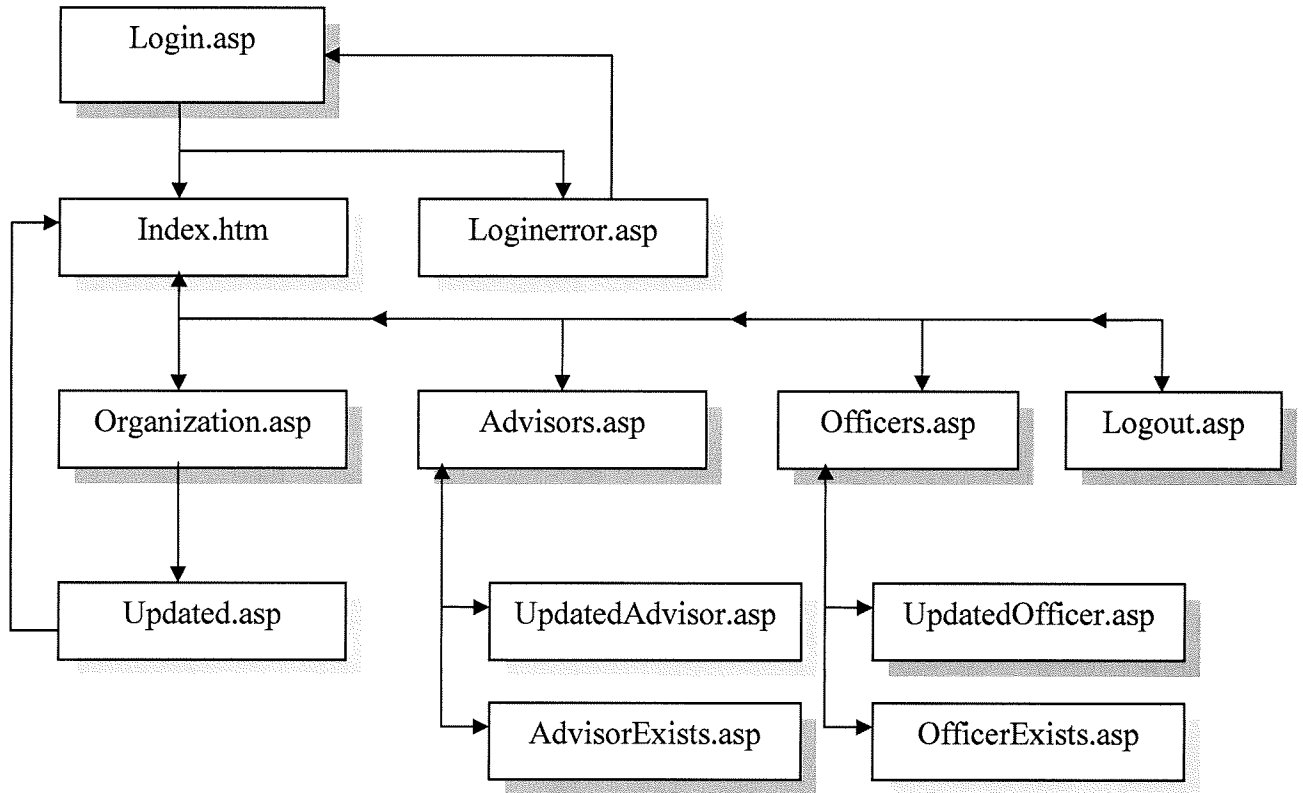
Scenario:

- User wants to edit information about an officer, or remove the officer from the organization's records.
- User is on the Index form.

System Procedure:

- From the **Index Form**, user will click the command button labeled **Officers** in order to go to the Officers main page.
- On the Officers form, the user can view all the existing information of the officers by clicking on the View complete information about the Officers button.
- The user can select the ID of the officer whose record needs to be updated/removed.
- The user can then click on the **Edit/Remove** button to be directed to the Officers Edit form to edit the information.
- Once on the Officer Edit form, the user can edit the information about the officer. Only if the first name, last name, type and Paws Id are filled out that the form will be processed by clicking on the **Edit** button. If the officer already exists in the organization's records, an error message will be displayed.
- Else, the user can click on the **Remove** button to remove the officer's information from the organization's records.
- The user is directed to the Officers page upon successful addition of an Officer.

Navigation Test Plan



Testing Checklist – Navigation

Description: Verifies that user can navigate through system from one form to another and have access to each form. Includes section to comment/note if any errors or unexpected results occur.

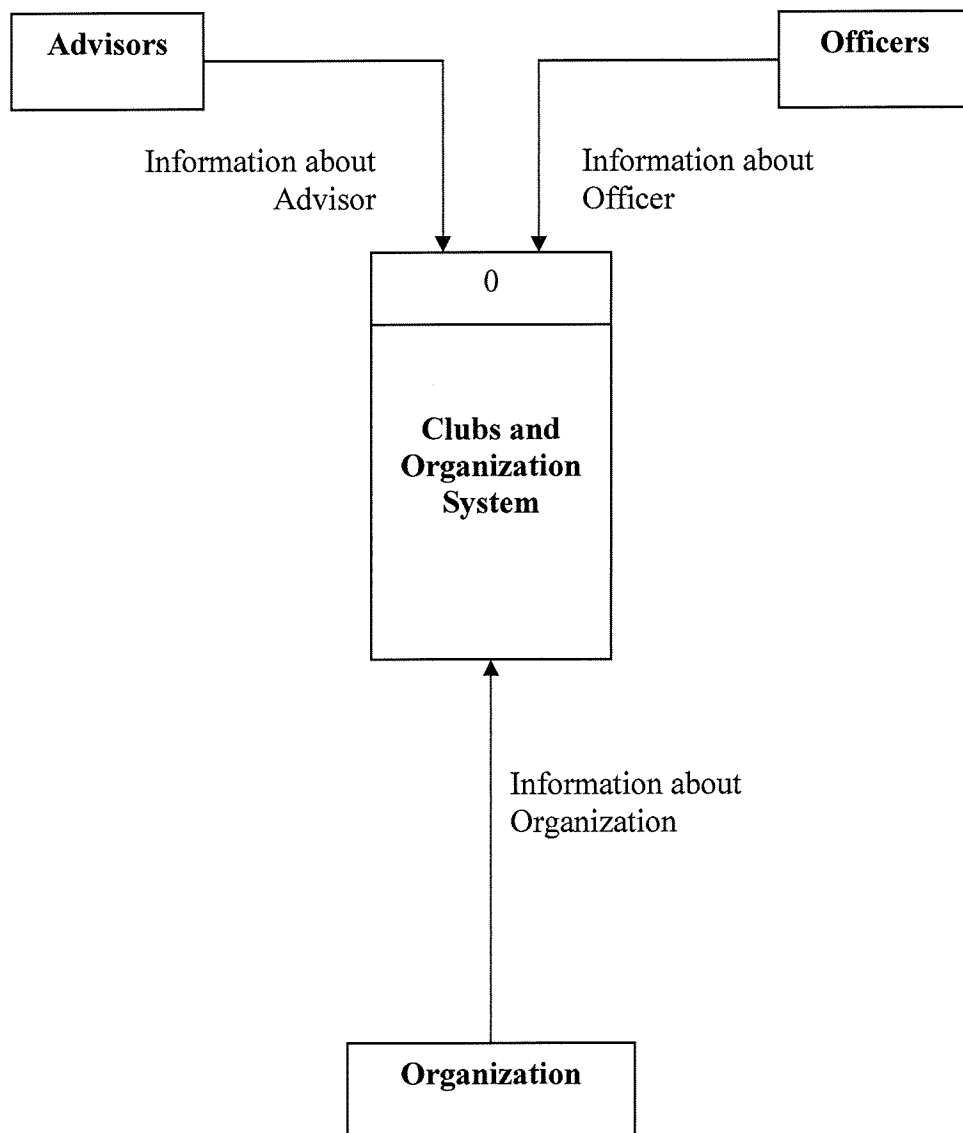
- The Login Form prompts the user to enter logon username and password
- Upon successful login, the Login Form will then direct user to the Index Form
 - The Main Form offers four options for user to choose from
 - Organization – edit information about the organization
 - Advisors– add/edit/delete existing records
 - Officer – add/edit/delete existing records
 - Logout - exit the system/log off
- User may choose to start with Organization
 - By clicking the command button *Organization*, user is then directed to the Organization form
 - The Organization Form allows user to update information.
 - The user is then directed to the Updated Form.
 - From the Updated Form, the user is then directed to the Index form.
- If user decides to add/remove/edit information about an advisor, user will choose the Advisors button
 - The Advisors form will then appear prompting the user to either add, remove or edit an advisor.
 - If the user decides to add an advisor, the user must click on the Add button. The user is then directed to the Add Advisor page. If the user enters information about an advisor that already exists, the user will be directed to the Advisor Exists page. Else, upon successful adding of the information, the user will be directed to the Updated Advisors page.
 - From there, the user can be directed to the Advisors page.
 - If the user decides to edit or remove an advisor, the user must click on the Edit/Remove button. The user is then directed to the Edit Advisor page. Upon successful editing/removal of the information, the user will be directed to the Updated Advisors page.
 - From there, the user can be directed to the Advisors page.
- If user decides to add/remove/edit information about an officer, user will choose the Officers button
 - The Officers form will then appear prompting the user to either add or edit an officer.
 - If the user decides to add an officer, the user must click on the Add button. The user is then directed to the Add Officer page. If the user enters information about an officer that already exists,

the user will be directed to the Officer Exists page. Else, upon successful adding of the information, the user will be directed to the Updated Officers page.

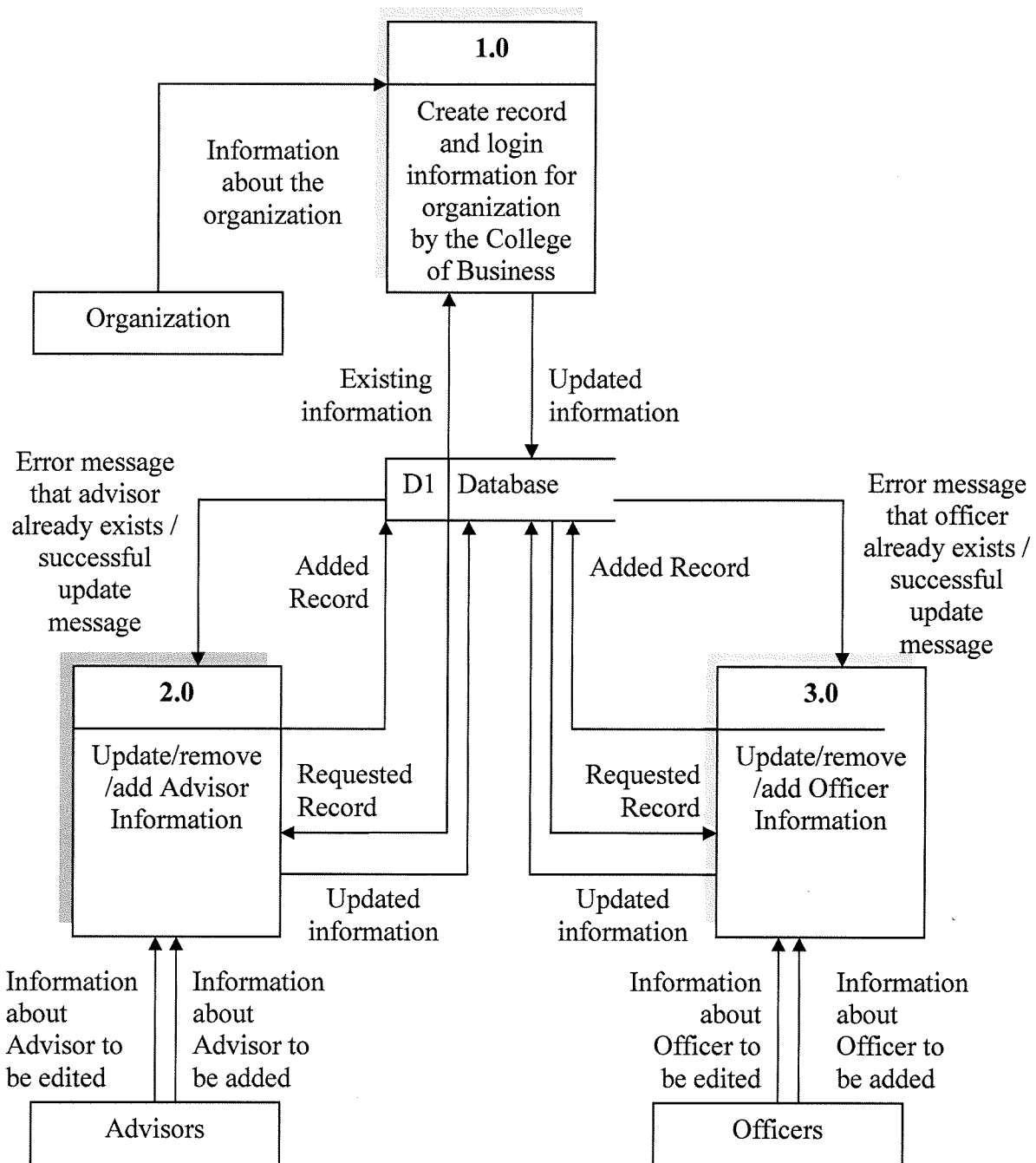
- From there, the user can be directed to the Officers page.
 - If the user decides to edit or remove an officer, the user must click on the Edit/Remove button. The user is then directed to the Edit Officer page. Upon successful editing/removal of the information, the user will be directed to the Updated Officers page.
 - From there, the user can be directed to the Advisors page.
- If the user decides to logout of the system, the user can click on the Logout button on the Index form.

Data Flow Diagrams

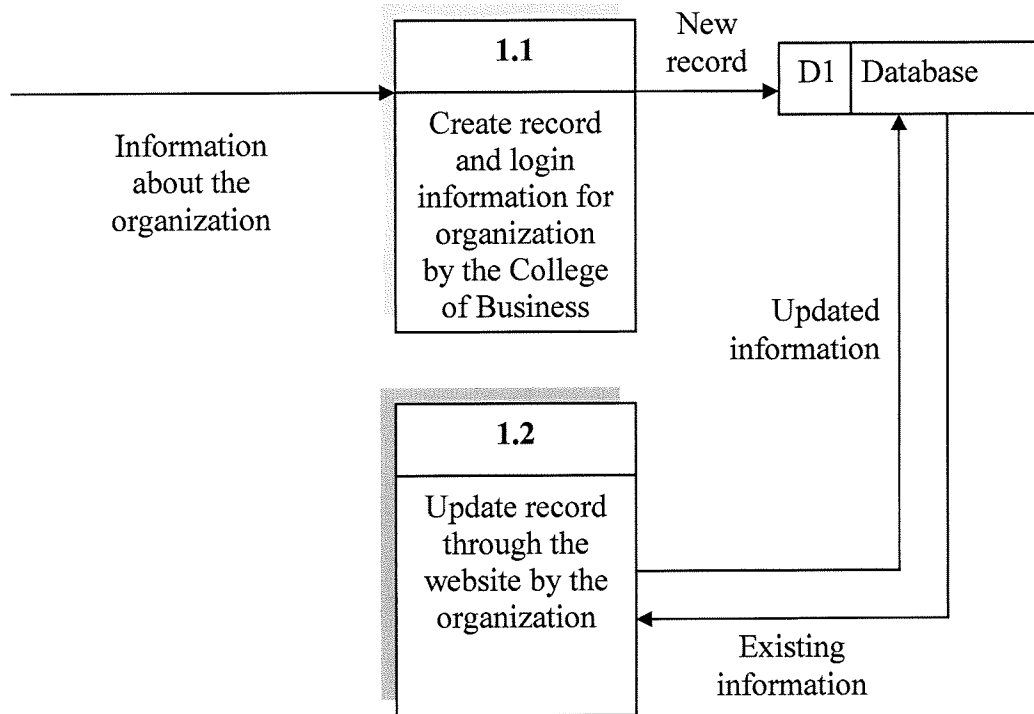
Context Level Diagram



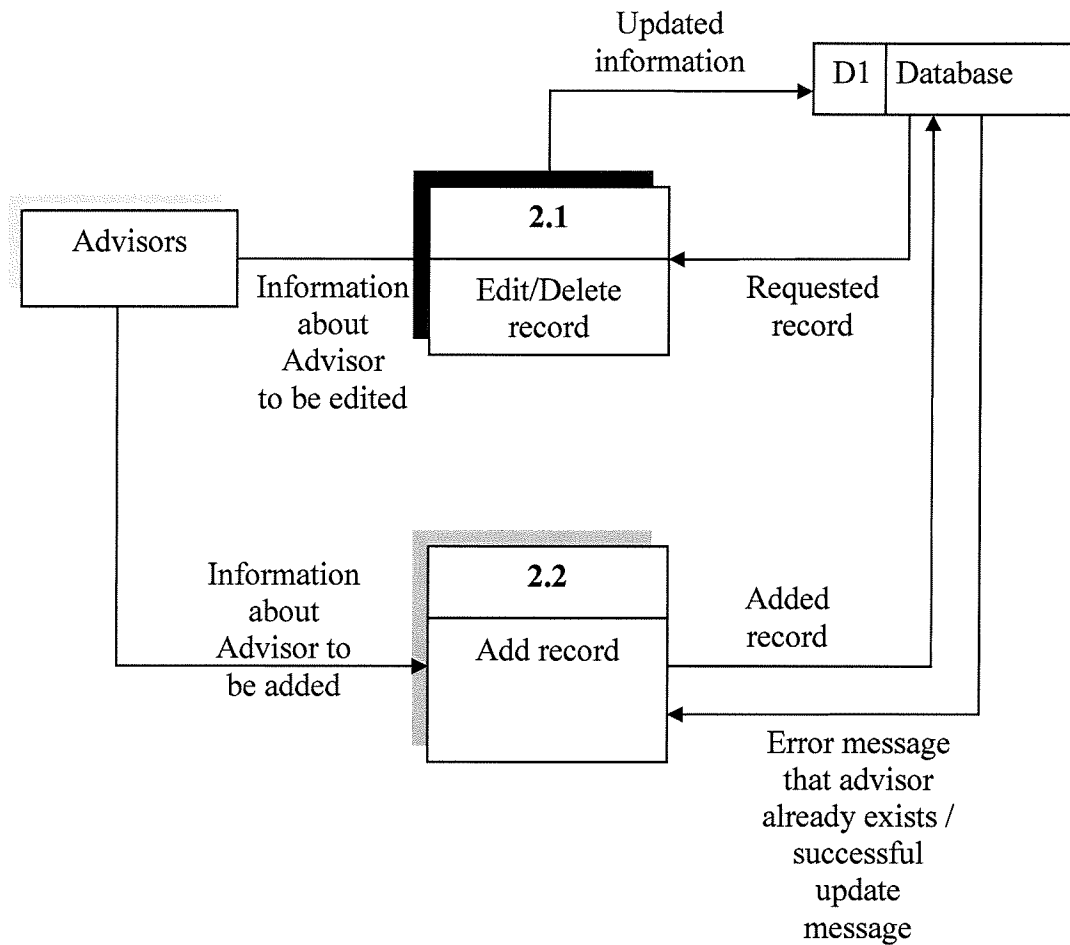
Level 0 Diagram



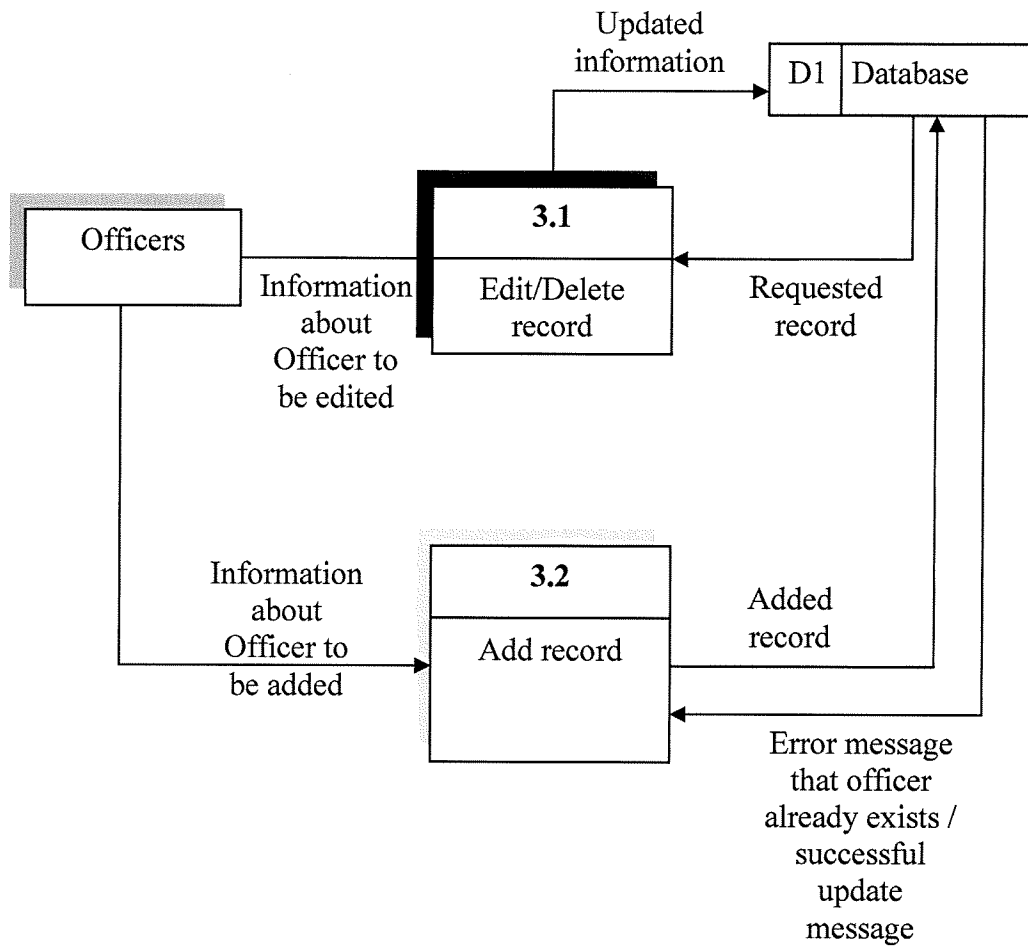
Process 1.0: Updating Organization records
Level 1 diagram



Process 2.0: Advisor records
Level 1 diagram



Process 3.0: Officer records
Level 1 diagram



Logical Process Models

Process 1.0: Organization Records

INPUT Information about Organization

CREATE Record for Organization by College of Business

IDENTIFY Organization through Logon information

UPDATE description, type, website and national website of Organization

EXIT system

Process 2.0: Advisor Records

INPUT Information about Advisor

IF Advisor already exists

 SEND error message

ELSE

 CREATE Record for Advisor

END IF

SELECT Id of Advisor to be edited/removed

IDENTIFY student

IF Advisor Exist

 SEND record to be edited/deleted

 EDIT/DELETE record

ELSE

 SEND error message

END IF

Process 3.0: Officer Records

INPUT Information about Officer

IF Officer already exists

 SEND error message

ELSE

 CREATE Record for Officer

END IF

SELECT Id of Officer to be edited/removed

IDENTIFY student

IF Officer Exist

 SEND record to be edited/deleted

 EDIT/DELETE record

ELSE

 SEND error message

END IF