Project Design

for

DSS Database Suite

Version 1.0 Draft

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Revision History

Name	Date	Reason For Changes	Version
A. Krutsinger	12/7/2008	Created Document	1.0 - Draft
A. Krutsinger	12/9/2008	Added UML diagram	1.1 - Draft

1. Overview

The DSS Database Suite will provide electronic bookkeeping for past and future students to the Disability Support Services department of SIUC. There will be two types of users for the application: Admin and DSS Employees. Admin users will have full control of the database and be able to read and write information to the database. DSS Employees encapsulates the other group of DSS workers namely the student workers. These users will have strictly read access to the student information from the database.

2. Environment

The project will require the following hardware and software to function properly and efficiently.

- Hardware:
    - <u>Client</u>: Employee's Workstation
    - <u>Server</u>: Department Server
- Operating System:
    - <u>Client</u>: Windows XP/Vista with .NET Framework and MySQL extension
    - <u>Server</u>: Windows Server 2000/2003/2008 with .NET Framework and MySQL database
- Network Connection: Local Area Network currently setup in DSS building
- Code Standard
    - <u>Database</u>: MySQL
    - <u>Client</u>: C# using Microsoft Visual Studio 2005
    - <u>Database Communication</u>: Taken care of within the Client program
    - <u>Performance</u>: The system should save and load the records in the appropriate table of the DSS Database 100% of the time

3. User Interface

The following outlines the different options provided by the user interface

- Menu
- Data Field Area
- Status Bar

3.1. Menu

The menu located at the top of the main window provides easy access to key features of the program. The main menu is broken down as follows:

- Database
  - o Connect
  - o Disconnect
  - o ----------------
  - o Save
  - o Load
- Student
  - o Search
  - o ---------------
  - o Clear Fields
- Settings
- Help
  - o About

3.1.1 Menu Descriptions

Database -> Connect – connect to the database specified in the settings

Database -> Disconnect – disconnect from the database currently connected to

Database -> Save – save the current database

Database -> Load – load a database for viewing

Student -> Search – search for a student based on different criteria explicitly entered

Student -> Clear Fields – clears all data fields in the data field area

Settings – brings up a settings dialog with details about operations of the program

Help -> About – displays an about box that briefly describes the project and who worked on it

3.2 Data Field Area

This field contains all the data fields that correspond to the students as well as a

logo that signifies Disability Support Services and SIUC.

3.2.1 Data Fields

The following data fields are the information that DSS stores about their students.

- Dawg Tag – Text field
- Social Security Number – Text field
- First Name – Text field
- Middle Initial – Text field
- Last Name – Text field
- Birthdate – Text field
- Sex – Combo box
- Ethnicity – Combo box
- Status – Combo box
- Marital Status – Combo box
- Class – Combo Box
- Major – Text field
- Local and Home Address – Text fields
- Local and Home City – Text fields
- Local and Home State – Text fields
- Local and Home Zipcode – Text fields
- Local and Home Phone Numbers – Text fields
- Cell Phone Number – Text field

- Email Address – Text field
- Text Conversion Service – Combo box
- Wheelchair? – Combo box
- War – Combo box
- Military Branch – Combo box
- DHS Affiliation – Combo box
- Primary Code for Disability – Combo box
- Primary Disability – Text box
- Secondary Disability – Text box
- Semester Receiving Services – Radio buttons
- Equipment Rental – List view

3.2.2 DSS Logo

This logo also acts as a link to the DSS website

3.3 Status Bar

The status bar provides information to the user of the action performed and/or being performed by the application. This is a convenient way to see what is happening internally with the program.

3.4 Screenshot

Graphic of what the user interface looks like.

4. Database Structure

The database is uses the MySQL language and provides a container to store all of the information for each student into a region specific to that student. All of the data fields listed in 3.2.1 will be stored in the database using the students Dawg Tag as the index.

5. Unified Modeling Language Diagram

This is a diagram that shows how the inner workings of the program interact with each other.