

Vision and Scope Document

for

DSS Database Suite

Version 1.1 - Draft

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October 10th, 2008

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Revision History

Name	Date	Reason For Changes	Version
I. Smith	9/24/2008	Created Document	1.0 - Draft
A. Krutsinger	10/10/08	Spell-checking and minor changes	1.1 - Draft

1. Business Requirements

The business requirements provide the foundation for what we are going to do, and why we are doing it.

1.1 Background

Before the last several years, Disability Support Services (DSS) ran entirely on paperwork. Within the last five years, they have begun moving to an electronic document format. In its current form, DSS electronic documentation is stored in a variety of formats including a Microsoft Access database, electronic text files, and still some paperwork.

The driving factor to the development of this software project is the fact that there is nothing quite like it on the market that can:

- Link all disparate documentation for a single person/student together and allow scheduling,
- For more than 2-3 persons at a time.

1.2 Business Opportunity

The objective of this project is to enhance DSS electronic documentation capability with a scalable database that brings together all student documentation into a single database linking to all disparate sources, and with an angle to marketing the software in the future to other institutions with similar database needs. The DSS Database Suite will be enhanced by:

- The ability swiftly and efficiently retrieve all student information from a single source.
- Automation of computer-determinable information fields in supplemental documentation.
- Better scalability and functionality by moving away from Microsoft Access programming environment.
- Improved interoperability with other programs to share data and enable automation of querying and re-enrollment.

1.3 Business Objectives and Success Criteria

We have received a great deal of information from the stakeholders of the DSS Database Suite program. Two underlying themes that emerge from this information, representing shortcomings of the current system are:

1. **Improve connectivity of disparate documentation.** In the current system, not all information has an electronic format, yet. The documentation that does is not all connected. The primary objective of the DSS Database Suite is to bring all this documentation together, electronically, and link it together in a centralized database. This database should then be controlled with an Access Control List restricting access based on student, staff, or administrator status.
2. **Allow for remote documentation access and submission.** In the current system all information must be filled in in the DSS main offices, either with or without a DSS representative. With the advent of electronic documentation, it would be desirable to allow the access of non-sensitive information and personal information documentation from home or public computer and allow submission of said information to the DSS Database Suite servers remotely. The same functionality would be desirable for alternate

format request forms.

1.4 Value Provided to Customers

The value of this project to DSS workers and students is threefold. Users can expect

- The improved formatting and connectivity of DSS documentation will improve productivity. Tasks currently done by hand will be partially automated. Tasks still requiring user input will be sped up with less downtime between separate documentation. Redundant data re-entry will be removed from the process.
- Improved usability compared to current application.
- Remote access.

1.5 Business Risks

All software development projects have risk. This project is no exception. The following is a list of items that threaten the success of the project, the source of the risk, and possible mitigation measures.

Risk	There are too many features to implement with current resources.
Source	The long-term vision of the software is very lofty.
Mitigation	Clearly define the scope of the project.
Risk	A software product is built that does not satisfy stakeholder needs.
Source	Lack of communication between developers and stakeholders.
Mitigation	Seek out active, frequent communication between developers and stakeholders.

2. Vision of the Solution

This section captures the long-term vision of the system that we intend to build. This vision will provide a context for making decisions. The vision statement and major features represent the goals for this project in a perfect world where resources are unlimited. It is important to capture this grand perspective so we don't lose sight of our goals. The next major section of this document, Scope and Limitations, will bring these ideas back to the reality of what we are going to build during this development cycle.

2.1 Vision Statement

The DSS Database Suite will be a centralized database of student information linking the information from multiple sources on each student. With this database suite, DSS workers will be able to perform all actions associated with their daily work load. The database should be scalable, but expect an initial size of 2500 to 3000 student entries.

The DSS Database Suite will also be designed as an extensible framework to which additional documentation linking and feature capabilities can be added beyond initial release.

2.2 Major Features

This section presents a high level view of the *ultimate* feature set envisioned for the DSS Database Suite. The major features include:

1. The electronic formatting of the: Student Information Sheet, Supplemental Information Sheet, Medical Documentation Retrieval and Release Forms, Alternate Format Request Form, Text Conversion Services Agreement, Accommodations Agreement, Case Notes, and Test Scheduling.
2. Remote database server access by students and workers, through an Access Control List.
3. Querying functionality.
4. Support communication with other industry database formats.
5. Support for automated re-enrollment through Banner.
6. Automated completion of for fields where applicable.
7. Support for scripts to enable users to extend capabilities and automate routine tasks.

2.3 Assumptions and Dependencies

The following assumptions have been made during the development of this document.

- DSS pertinent documentation will not change significantly in development cycle.
- Key personnel will remain committed to developing these software tools.
- Other institutions in the commercial market will have similar or identical documentation needs as those at Disability Support Services at SIUC.

3. Scope and Limitations

Given the vision for the DSS Database Suite, it is obvious that all of the envisioned capabilities cannot be delivered at once. In the sections that follow, the scope of this project will be defined in terms of major features that will be implemented and those that will not.

The fundamental goal of this development cycle is to deliver those features that will satisfy our immediate needs while positioning the product so that it can be enhanced to meet our future needs.

3.1 Scope of Initial Release

The scope of the initial development cycle is characterized by the functionality list below. A detailed Software Requirements Specification (SRS) will be developed to capture the specific requirements for this project.

The major features that will be implemented in the DSS Database Suite Version 1 are:

1. Electronic implementation of the Student Information Sheet
2. Construction of database querying functionality

3.2 Scope of Subsequent Releases

The scope of subsequent development cycles are characterized below.

The major feature of the initial subsequent releases is the addition of additional DSS Forms. These forms are:

1. Supplemental Information Sheet
2. Medical Documentation Retrieval Form
3. Medical Documentation Release Form
4. Alternate Format Request Form
5. Text Conversion Services Agreement,
6. Accommodations Agreement,
7. Case Notes, and
8. Test Scheduling.

3.3 Limitations and Exclusions

It is impossible to list everything that will not be implemented in the DSS Database Suite Version 1 or 2, as the list is infinite. This section lists desirable features that are outside of the scope of this project, but are available for addition at a later time.

The DSS Database Suite will not have the following capabilities:

1. The implementation of Text Conversion Services Agreements and Accommodations Agreements.
2. The implementation of electronic Case Notes and Test Scheduling.
3. The implementation of Remote Access or the Access Control List that would allow such a feature.
4. Time management analysis for student testing and book conversions.
5. Database archiving.

4. Business Context

This section summarizes some of the business issues around the project, including profiles of major customer categories, assumptions that went into the project concept, and the management priorities for the project.

4.1 Stakeholder Profiles

<i>Stakeholder</i>	<i>Major Value</i>	<i>Attitudes</i>	<i>Major Interests</i>	<i>Constraints</i>
<i>DSS workers</i>	<i>increased productivity</i>	<i>highly receptive, but expect high usability</i>	<i>Easy to use; automatic field completion; data linking; time analysis; automation</i>	<i>Must run on low-end client work-stations.</i>

4.2 Project Priorities

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
<i>Schedule</i>	<i>release 1.0 to be available by mid-~March09, release 2.0 by ~May09</i>		
<i>Features</i>			<i>Initial querying and student information must be available in release 1.0</i>
<i>Quality</i>			<i>90-95% of user acceptance tests must pass for release 1.0, 95-98% for release 2.0</i>
<i>Staff</i>		<i>maximum team size is 2 developers + 2 testers (overlapping)</i>	
<i>Cost</i>			<i>Zero-tolerance for time overruns, without executive repercussions.</i>

4.3 Operating Environment

This section will describe the environment in which the system will be used and define the major availability, reliability, performance, and integrity requirements.

The important operating environment information is:

- Client computers will be primarily Windows OS. The server will be Linux, programmed in C# and interfacing with the MySQL database architecture.
- All users will be within the same time zone as the one in which the server is located.
- Primary access will be during business hours (Monday-Friday, 8am-4pm). Secondary access will be unnecessary until the implementation of remote access.
- The data will be generated by clients and stored server-side, linking and combining multiple documents and allowing querying. In initial release, these locations will be relatively close, in a LAN scenario. Subsequent releases could lead to wider communication ravel distances with the advent of Remote Access functionality.