# ErgoRisk

# User Manual ErgoRisk User System

April 14, 2016

#### Preface

#### Purpose of Document

The purpose of this document is to direct new users on the correct path of usage, and to clear up any misconceptions on the extent of the capabilities that the System is capable of performing. This document will also step you through how to install the program, how to use the program in a typical day-to-day basis, how to uninstall the System, and provide references when needed.

#### **Documentation Standards**

- Things to note, user input will be shown in *italics*,
- System output will be shown in **bold italics**.
- System variables will be shown as **bold**
- There will be a font standard that the document will follow, the documentation standard is yet to be decided, however, and it will be decided later.
- Anything else important will be added here later whenever it comes up.

# System Overview

#### System Purpose

The ErgoRisk Client system is used to easily handle and organize ErgoRisk's assessment and Clientele System. By changing the System into a centralized database, CRUD functions are able to be performed at any time. On top of that, the insertion of Companies, Locations, and Clients is another section of possibilities that the System is capable of reaching.

#### Clients

The Client is going to be ErgoRisk, whose goal is: "To reduce musculoskeletal injuries through effective injury avoidance and management processes developed in partnership with (their) clients."

#### **End-Users**

The end-users are the people that are going to be using the System on a daily basis- So the Employees of ErgoRisk who will be going out onto the field and performing assessments on their clients, and critically assessing any health concerns with them, and then inserting these critically assessed reports into the system to be safely stored.

The system's divided up into two tiers, administrators and average users. The administrators will be capable of managing users; that being creating new users, editing users, and deleting users, but being incapable of deleting themselves. The administrator will also be able to do everything that an average user will be able to do.

Average users will only be able to handle CRUD functions on Companies, Clients, and Locations.

#### Main Functions of the System

#### Logging in to the system

The user is capable of logging into the system under a **username** and **password**. These credentials are to be kept secure.

#### Logging in as an Administrator

Logging in as an administrator will instead load a different page from an average user. This page allows for the administrator to manage users. Such as creating a new normal user, editing a current user, and deleting any current user.

#### Adding a new End-User to the System.

Upon logging into the system as an administrator, the web page will load with something similar to figure so and so below. The administrator will have the capabilities to add a new user to the database upon adding values to the text fields **Username**, **Password**, **First Name**, **Last Name**, **Email**, and **Phone Number**.

#### Adding an Assessment to the System

Upon logging into the system and selecting a client the user is capable of inserting values into the multitude of assessment fields. From the user is capable of saving this assessment to the Database.

#### Adding a Company to the System

Upon logging into the System, going to the proper page and inputting a value to the **Company Name** text field. From there, input a value into the **Address field**, submit the values to the database.

#### Adding a Location to the System

Adds a new Location to the System, the Location will have a

User must be logged in. By going to the proper page and selecting a company from the **Company Name** dropdown. Input an address into the **address** text field. Submit the values to the database.

#### Logging Out of the System securely

Logs the user out of the session securely without compromising the security of the System.

While logged in, click the **log out** link in the upper right-hand corner, this will take you to the login page with the message **logged out successfully.** 

#### Installation Procedures

You must install these procedures if you wish to run the program on a locally hosted machine such as one that is displayed in the demonstration.

#### Part 1

This Installation section is from "Week 01 Lab 1.docx" from D2L by Aaron Warsylewicz

- 1) Java 8, 64-bit. May need to remove old versions of Java.
  - o <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html</a>
  - o Download and install: Windows x64 186.16 MB jdk-8u60-windows-x64.exe
- 2) NetBeans
  - o https://netbeans.org/downloads/index.html
  - o Download and Install: Java EE NetBeans IDE Download Bundle 8.0.2
- 3) MySQL
  - o http://dev.mysql.com/downloads/mysql/
  - o Download and install: Windows (x86, 32-bit), MSI Installer
  - During Installation, use the following selections:
    - Developer default
    - Ignore check requirements and confirm
    - Execute!
    - MySQL Root Password: password
- 4) Install SQLyog
  - o https://code.google.com/p/sqlyog/wiki/Downloads
  - o Download and install: SQLyog Community Edition 12.09 (64-Bit)
- 5) To Use a JDBC connection in Glassfish, copy MySQL JDBC driver (mysql-connector-java-5.1.36-bin.jar) from C:\Program Files (x86)\MySQL\Connector.J 5.1 to C:\Program Files\glassfish-4.1\glassfish\lib
- 6) More info: <a href="https://computingat40s.wordpress.com/how-to-setup-a-jdbc-connection-in-glassfish/">https://computingat40s.wordpress.com/how-to-setup-a-jdbc-connection-in-glassfish/</a>

#### Part 2

- 1. Open SQLyog
  - 1. Create a new connection

Address: localhost

Username: root

Password: password

- 2. Right-click on root@localhost and create a database called "ErgoDB"
- 2. Go to the admin console for Glassfish.
- 3. Under Resources -> JDBC -> JDBC Connection Pools, click on "New".

1. Pool name: ErgoPool

2. Resource Type: javax.sql.ConnectionPoolDataSource

3. Database Driver Vender: MySql

- 4. Next
- 5. Under "Additional Properties" edit the following name/value pairs. Leave the others as defaults
  - 1. User: root
  - 2. Password: password
  - 3. URL: jdbc:mysql://localhost:3306/ErgoDB
  - 4. Url: jdbc:mysql://localhost:3306/ErgoDB
- 6. Finish

#### Step 2b

In Glassfish admin console, add a JDBC Resource

- JNDI Name: jdbc/ErgoDB
- Pool: ErgoPool

In your connection class, you will use the JNDI name.

```
InitialContext ic = new InitialContext();
dataSource = (DataSource)ic.lookup("jdbc/ErgoDB");
```

#### Step 3

Add a database connection in NetBeans

- 1. Under the Services tab, right-click and choose "New Connection"
- 2. Choose "MySQL" Driver and click Next
- 3. Enter the following values:
  - Host: localhost Database: ergodb
  - Port: 3306
  - User Name: root
  - Password: password
  - Remember password: checked
- 4. Next
- 5. Next
- 6. Input connection name: ErgoDB
- 7. Finish

#### Initial Start-up

- 1) Start up NetBeans.
- 2) Open up the Ergo project.
- 3) In the **Ergo** Project that you will have, look in **Source Packages** and **ergo database**. Locate and right click on the **scriptFinal.sql** file, and select **run file**.
- 4) From the database connections, choose Ergo, and select OK.
- 5) Select run in the taskbar, and select run project (Ergo)

- 6) Login with the credentials:
  - a. **Username:** adam
  - b. Password: password
- 7) System is properly installed.

#### **Uninstall Procedure**

Essentially, uninstall anything that was installed during the installation procedure.

- 1) Open your control panel and uninstall any of the following that was installed with the server.
  - a. MySQL Connector C++ 1.1.7
  - b. MySQL Connector J
  - c. MySQL Connector Net 6.9.8
  - d. MySQL Connector/C.6.1
  - e. MySQL Documents 5.7
  - f. MySQL Examples and Samples 5.7
  - g. MySQL Installer Community
  - h. MySQL Notifier 1.1.6
  - i. MySQL Server 5.7
  - j. MySQL Workbench 6.3 CE
- 2) Uninstall SQLyog Community
- 3) Uninstall NetBeans 8.0.2

# Reference Material

#### Login Screen

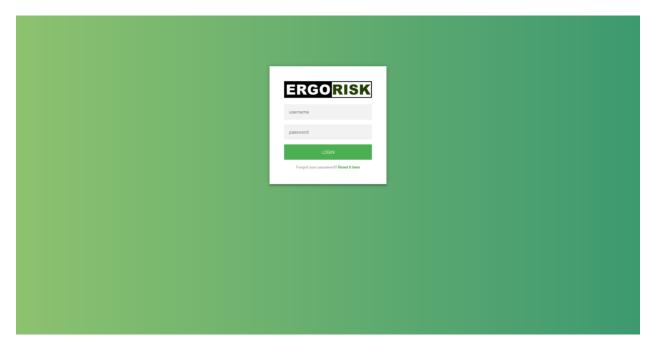


Figure 1: The login screen for the ErgoRisk Client System.

Contains the functionality to log into the program and access the rest of the program's capabilities. If a user is not logged in, and they attempt to access an unauthorized page in the program without logging in, the System will redirect them to this page.

In order to log in a user must have valid credentials that are found in the database. So the end-user must either be added in by an administrator, or use one of the accounts added by default.

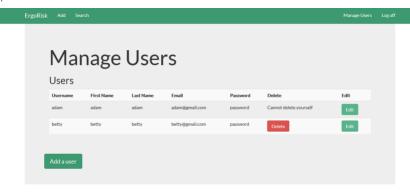


Figure 2: Manage Users Page

Logging in as an administrator causes the Manage users page to load. The page that only administrator users will be allowed to access that gives them the access to edit, add, and delete users that are other than themselves.

Pressing the edit button will yield a panel below the **Manage Users** panel. Every field can be editing except for the **Username** field.

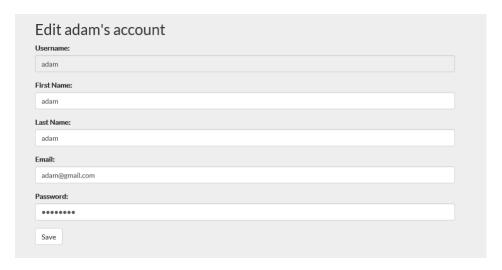


Figure 3: Panel that appears when editing a user's account

Upon pressing the **Add a user** button, a frame will come down over the field. Allowing for the Insertion of a new User, with the fields **Username**, **First name**, **Last name**, **Password**, **and Email**.

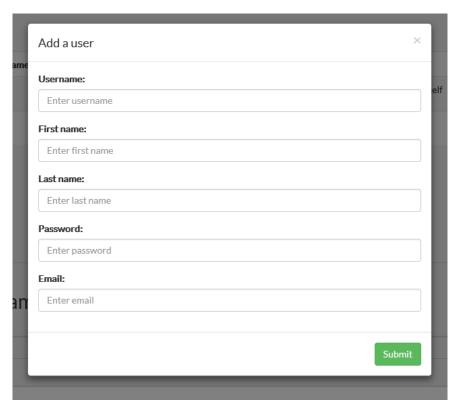
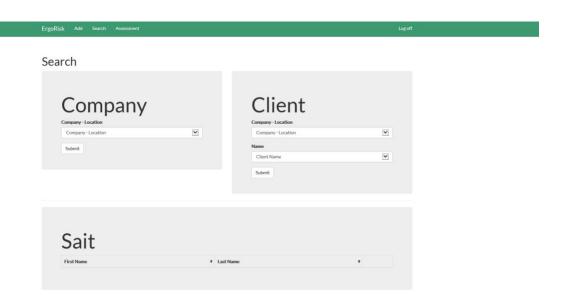


Figure 4: Add a user Panel

# Search Page



This page contains the functionality to Search for a company and location in the database. If the Company and Location exists and is currently in the database, then it will appear in the drop down menu under the title **Company – Location**. The page simply appended the address to the Company name so that it is identifiable in a singular drop-down menu.

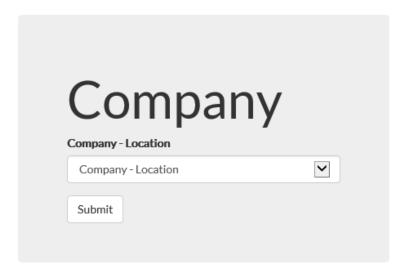


Figure 6: The Search Company Panel

There is also a Client Panel that exists on the search panel as well, this panel will allow for the searching of Clients in the database in **Company – Location**. As soon as a company and a corresponding location is selected, the **Name** list will populate itself.

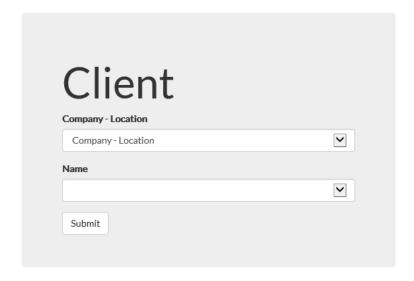


Figure 7: Client Search Panel

In the event that the Submit button is pressed when a value is selected on either panels, a panel will appear below the **Search** panel with the name of the company as the title, listing off the Clients of the company underneath.

If the end-user is not logged into the system, then it will then redirect them to the login page without loading anything from this webpage.

# Add Page

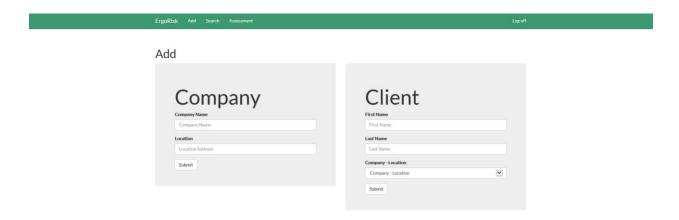


Figure 8: The Add Page for the Company and Client

The functionality to add a new Company and Client to the system exists in this webpage.

In the event that the end-user wishes to insert a new Company, they must enter a name into the **Company Name** text field, as well as a location into the **Location** text field, and submit it to the System.

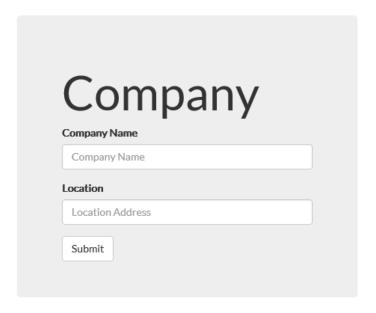


Figure 9: Add Company Panel

With adding a client to the system, all values in the adding Client panel must be filled, otherwise it won't work. Add a first name to the **First Name** text field, as well as a last name to the **Last Name** text field. Select a Company and Location from the **Company – Location** drop-down. Save the information to the database by pressing **Submit**.

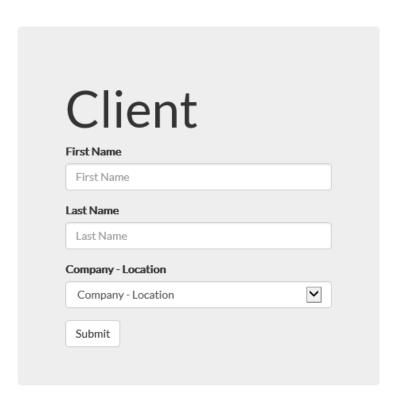


Figure 10: Add Client Panel

If the end-user is not logged into the system, then it will then redirect them to the login page without loading anything from this webpage.

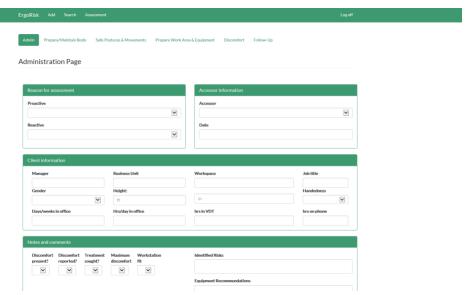


Figure 11: The Main Add Assessment Page

The webpage that handles adding a new assessment into the System. Separate multiple tabs exist within the system and take in the input within the system. The tabs handle the input the same way and input it to the database the same way. There are text boxes on each page that either takes text or numbers, as well as drop-downs that have predetermined selectors already loaded.

In order to save all the entered values, there is a **submit** button on the bottom of each page that must be pressed.

If the end-user is not logged into the system, then it will then redirect them to the login page without loading anything from this webpage.

#### **Logout Functionality**



Figure 12: System Header

The capability to log out is visible on every webpage that loads within the system post-login. It is found within the header that has the ErgoRisk title. By simply clicking the **Log off** link, the System will follow the procedures of logging out the end-user and take the user to the login page with the message *logged out* 



Figure 13: Logged Out Message post Log Out

#### Tutorial

- 1) Log into the system
  - a. Username: adam
  - b. Password: password
- 2) Go to the Add page, and add a new Company
  - a. Company Name: ErgoRisk b. Location: Address 1234
  - c. Press the **Submit** button.
- 3) Add a **Client** on the same page.
  - a. First Name: John
  - b. Last Name: Doe
  - c. Company Location: ErgoRisk Address 1234
  - d. Press the **Submit** button.
- 4) Go to the **Search** page, and find the newly added client.
  - a. Under **Client**, find the correct **Company Location** in the drop-down.
  - b. Find the **John Doe** in the **Name** drop down.
  - c. Press the Submit button.
- 5) Below the Assessments Panel, select **Spot Check** in the drop-down box.
- 6) Select Add Assessment
- 7) Insert any values that is supposed to be from an assessment to here.
- 8) Press Submit

# Index

CRUD – Create, Read, Update, and Delete functionality with all of the objects in the database.

System – The ErgoRisk Client System that is referred to several times over throughout the document.