

Overview of MSDS Management System:

This System is created to manage different aspects of Hazard Materials. This include MSDS and Hazmat.

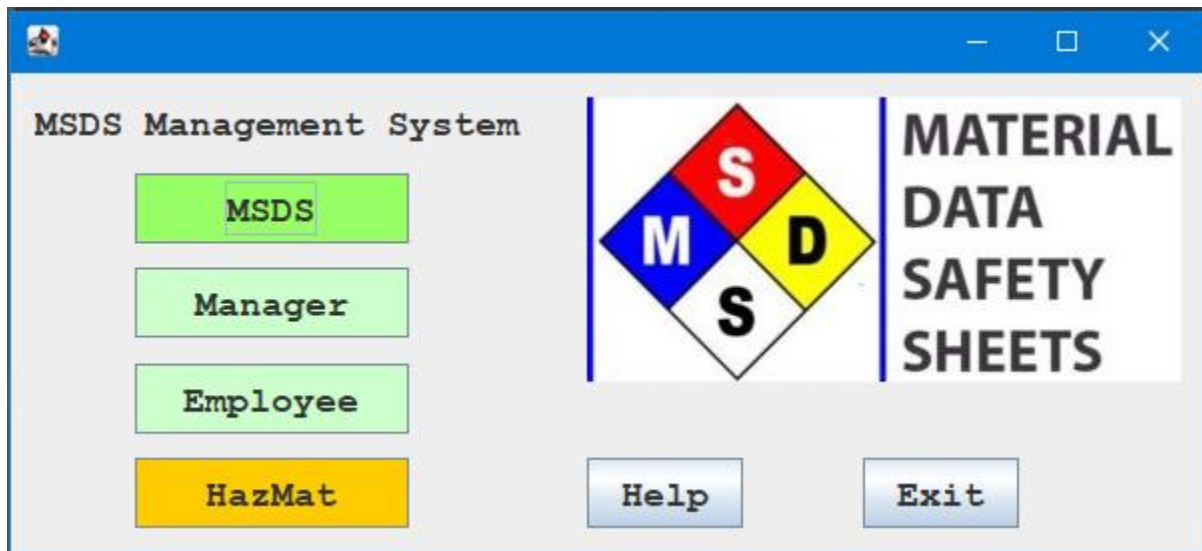


Figure 1

Overview of MSDS:

Material Safety Data Sheets are documents used to inform users about hazards such as flammability or reactivity and how to use the product safely. They are standardized record system for government, professional or industrial work environment where serious events can happen quickly and being able to reference them quickly to reduce further damage.

MSDS Entry:

Our Java program uses Swing for the application side. The MSDS functions show a display of a sample workplace's items, and in tabular form shows the various parts of an MSDS sheet. In this, the sample .csv is displayed.

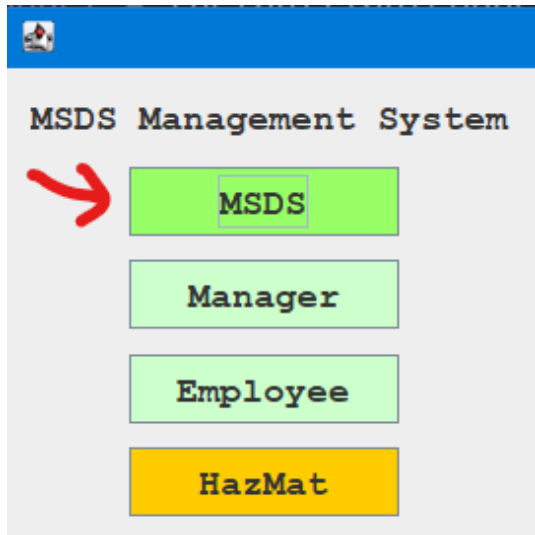


Figure 2 MSDS can be accessed by clicking the MSDS button on the main application form after executing.

Figure 2

The MSDS Table shown in *Figure 3* can Load Entries from the CSV file as well as Create New Entries, Remove Entries, and Save the changes back to the original CSV file. Depending on the current log in only the Manager or Issuer can Create/Remove and save Entries.

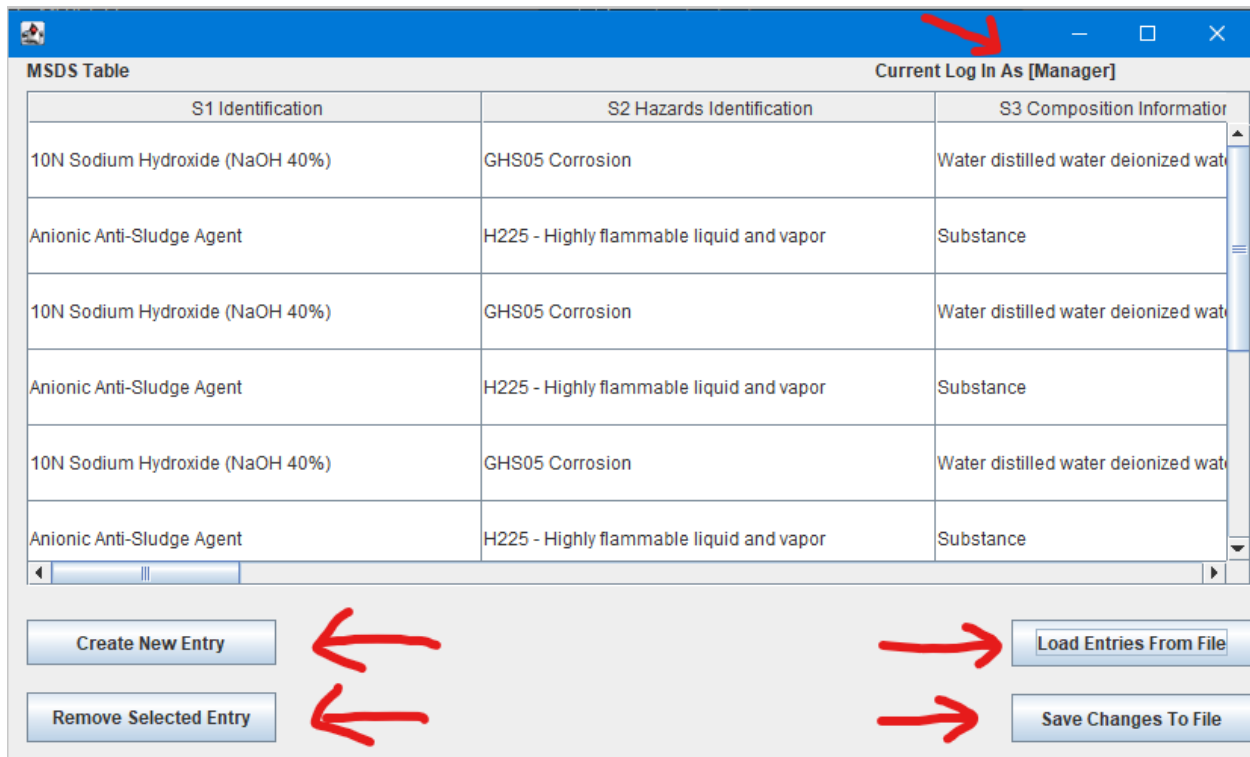


Figure 3

HazMat Materials Management:

Hazardous Materials Management, commonly shortened to "HazMat" in industry, is the second aspect of our program. HazMat involves tracking elements that are currently in the workplace, how much, where it is located, and the category it falls under (Toxic, etc).

The purpose of such an application serves as a digital reference for employees to manage inventory and can be used to train employees and reduce ignorance of hazardous materials. Some compounds sound, smell, or look benign but may be very explosive or neurotoxic.

In an industry level application, more specific roles and permissions would be implemented such as employee, cleaners, managers, and such. Deletion permissions of events that happen should be tightly controlled for investigation reasons.

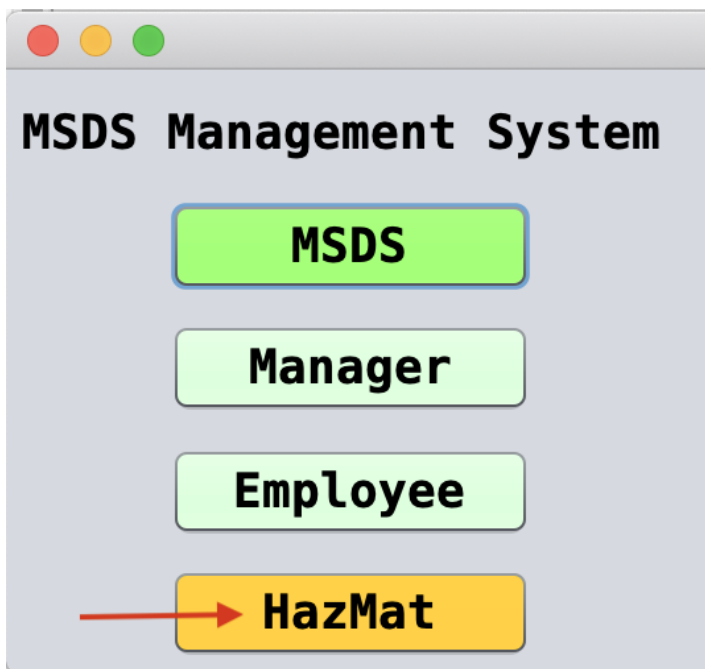


Figure 4 HazMat can be accessed by clicking the HazMat button on the main application form after executing

Figure 4



Figure 5 The menu showing the different options for HazMat Inventory items

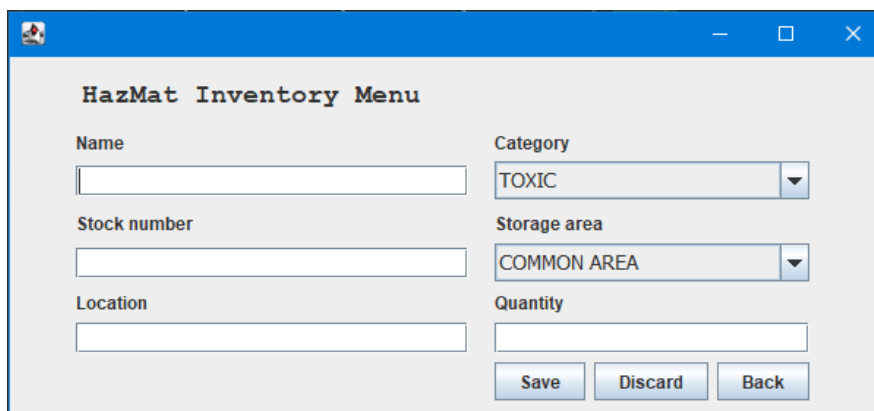


Figure 6 Add Item Menu allows for the entry of HazMat items

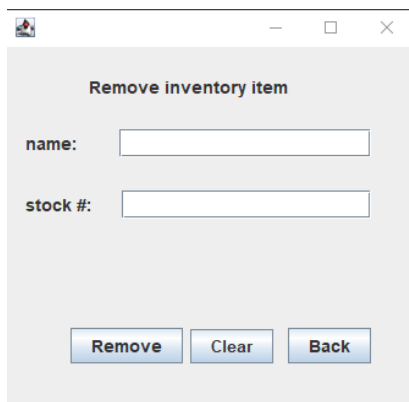
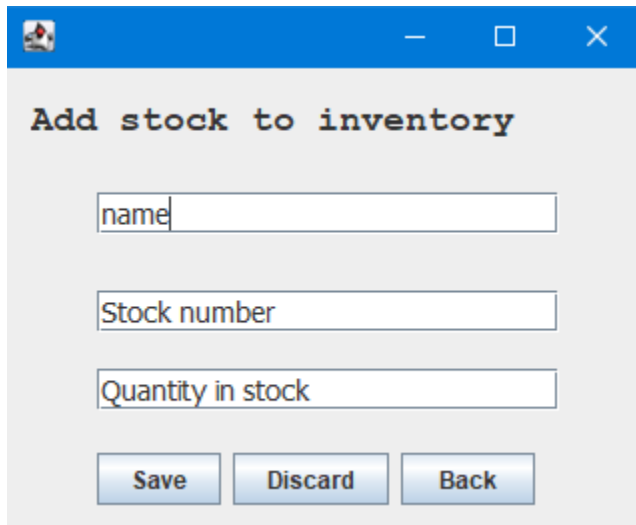


Figure 7 Remove inventory item allows for the searching and removal of items. If the item is not found a pop up will indicate item not found in inventory

Figure 7



The screenshot shows a Java Swing window with a blue title bar and standard window controls (minimize, maximize, close). The window's content area has a light gray background and is titled "Add stock to inventory" in a bold, black, monospaced font. Below the title, there are three text input fields stacked vertically. The first field is labeled "name" and contains the text "name". The second field is labeled "Stock number" and is empty. The third field is labeled "Quantity in stock" and is empty. At the bottom of the window, there are three buttons: "Save", "Discard", and "Back", each with a blue gradient and white text.

Figure 8 Add stock to inventory allows the user to enter new inventory to the stock

Figure 8

This program was created by Patrick Carroll, Aaron Fortner, and James Montis.