LA-SiGMA
Louisiana Alliance for Simulation-Guided Materials Applications

Agile Development with IMS

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Introduction

IMS is a web application, workflow management system designed for a company called Chemura to keep track of the flow of ISO containers coming in and out of there two locations. One location being in the Southern United States and the other being in the United Kingdom.

Specifications and Requirements

• User authentication
• Administrative operations on ISO Containers and Staff modules
• Assignment of task and priorities
• Visualize the status and report of ISO maintenance work order.

Agile Development

For this project we decided to use the Agile Software development methodology to emulate a real world development environment. The agile way of developing software is similar to that of the Waterfall method. It differs from it the following:
• Quick Iterations
• Bigger focus on testing
  • Test Driven Development
• Faster Delivery Dates
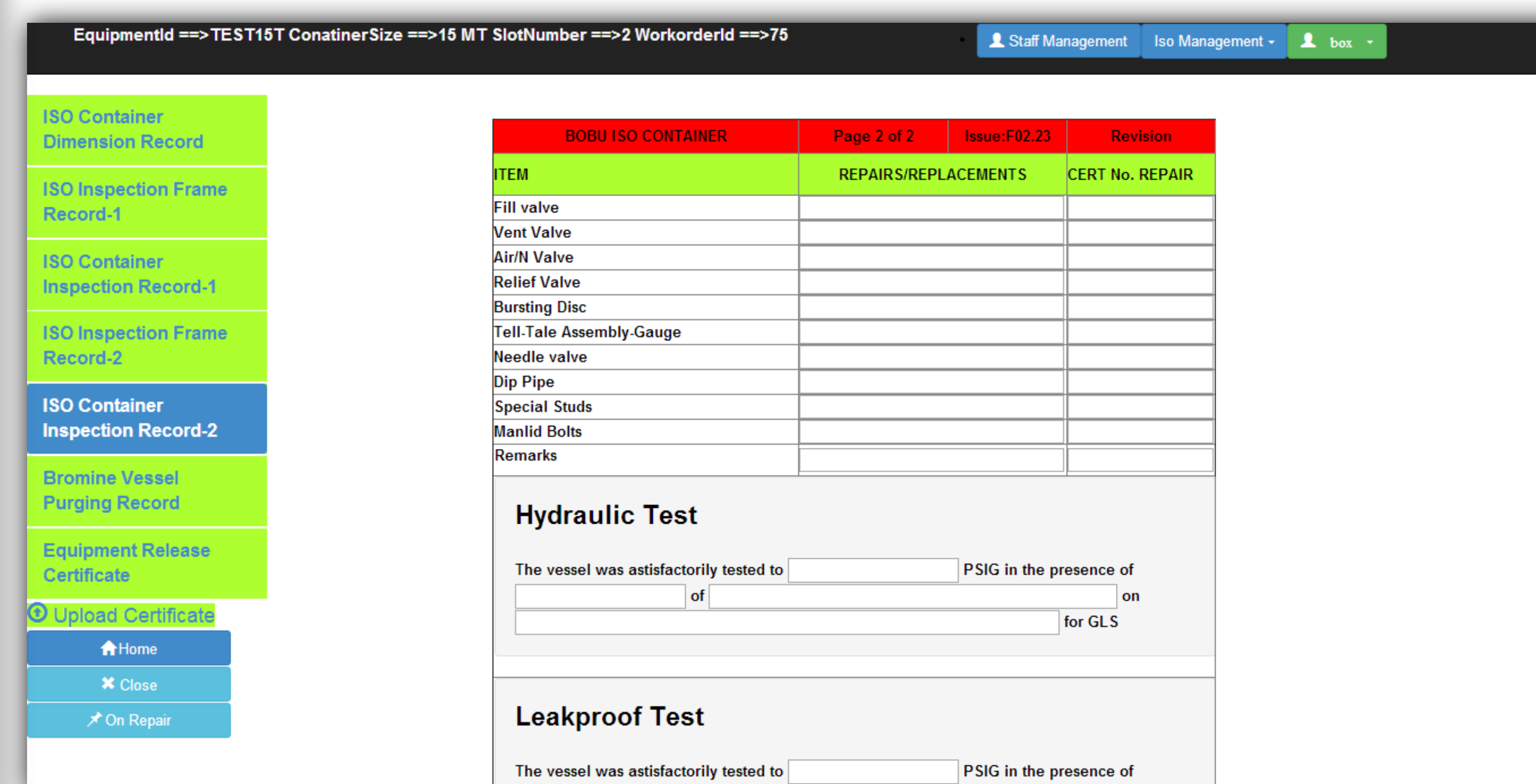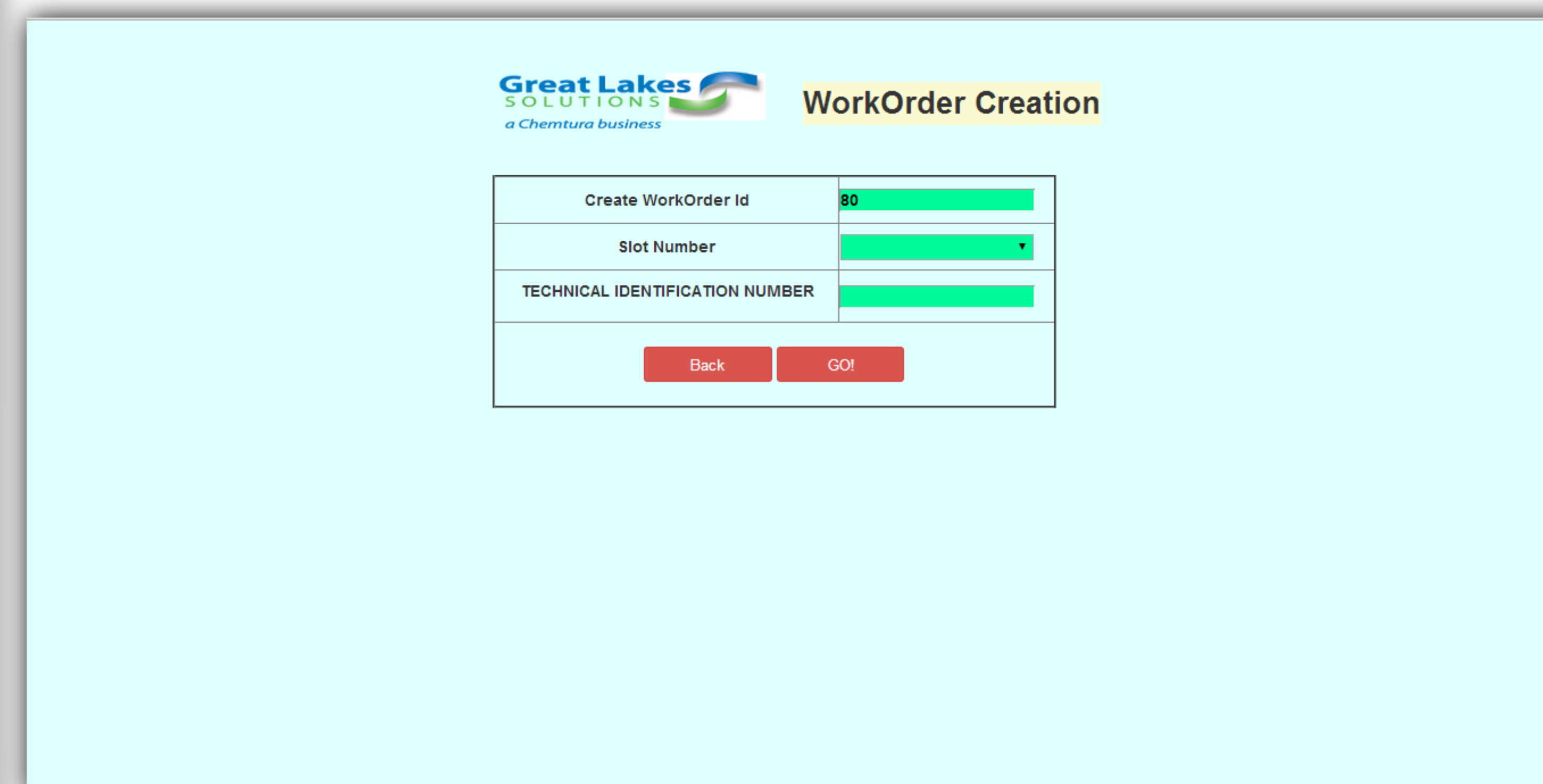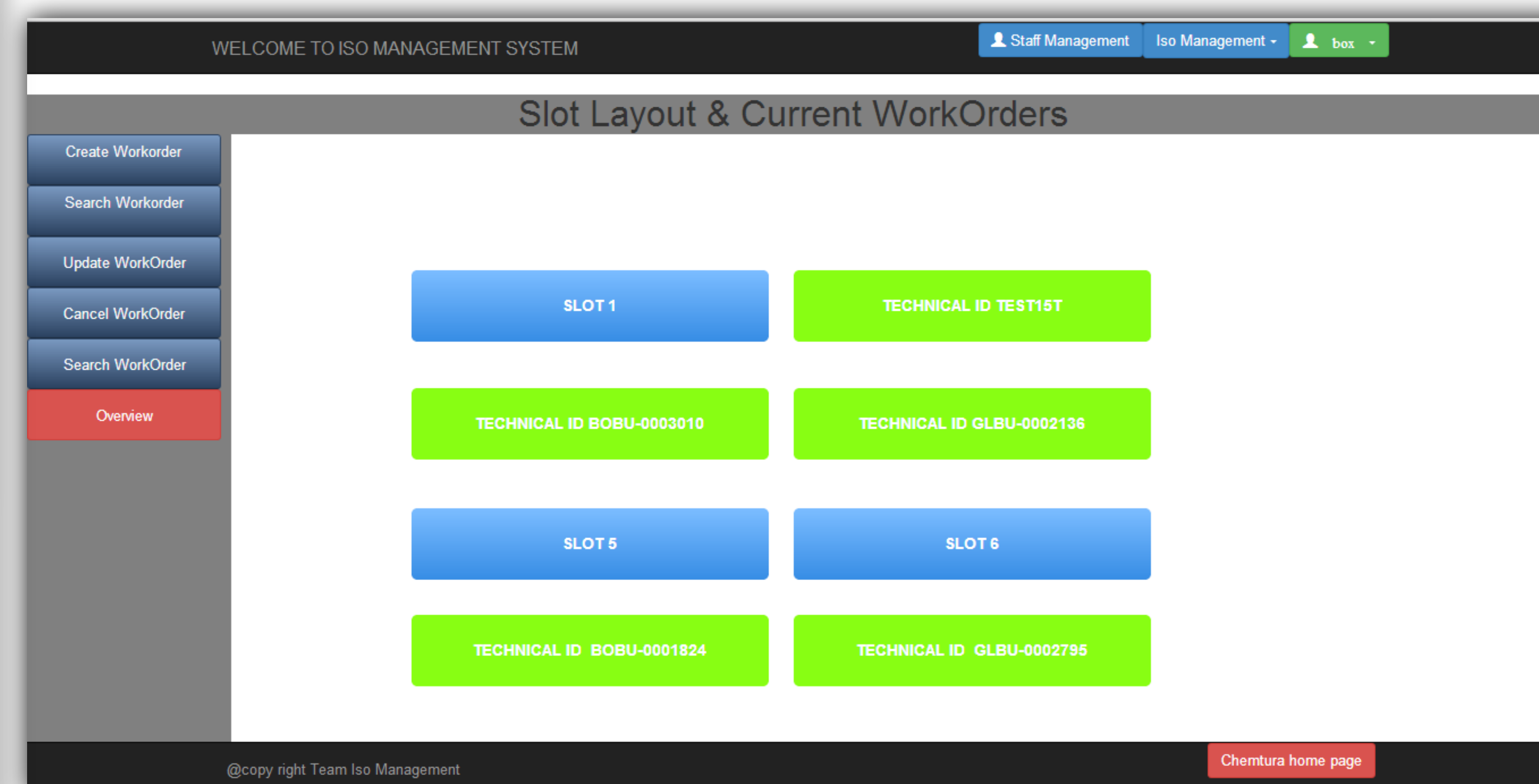
Current Work

The current status of the ISO Management System is that it is nearly finished. Most of the administrative task can be done by the user so far. Along with recording and retrieving data from our database.

The front end design of this project is done in HTML, and CSS using the Bootstrap framework for button design, animations, and page design. We chose Bootstrap as the CSS framework due to large and helpful documentation and, due to its ease of use for making a beautiful web page.

The back end of the project is using MYSQL for the database and PHP with the CodeIgnitor framework to handle all server side task. The choice of languages in the backend side of the project is due mostly because of their open source nature and large support.

Future Work

The work scheduled for later dates are to complete a number PHP forms to handle the creating dynamic pages so users can input information about a given ISO container and to send that data to a database. After this process has been completed then, the testing stage can begin. The testing will be done based off a previously written testing plan that includes important aspects of this project that are necessary for the project to function correctly. Lastly, once testing is completed, it will be the beginning of deployment and training of users of this project.

Acknowledgements