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Inventory Management Software

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We would like to express our gratitude to our supervisor, Dr. Soon-Ok Park, whose knowledge, understanding and expertise has helped us through this fascinating journey. We would also like to thank the other Computer Science professors, Dr. Claire Tang, Dr. Kong-Cheng Wong, and Dr. Steven Shih for all their support, guidance, and assistance while we achieve our educational goal.
Inventory Management Software

Introduction

Purpose

Our planned project is to create an application with a database that will allow users to store all the necessary information for equipment. Technical managers will be able to select the location, type of equipment, scan tag number and add other necessary fields. This will allow users to update inventory much easier at the start and end of fiscal year. Users will be able to determine which staff members need an upgrade on their equipment without having to go over and over a spreadsheet.

Stakeholder

The main stakeholders for this software are companies that need to keep track of what is in their inventory. Managers that need to update their inventory sheets every month.

Benefits

The benefit keeping track of everything that comes in and out will be much easier. This can result in a better way of purchasing new equipment when it’s needed.

Overall Description

Scope of the Software enhancement

These changes will help improve how technical managers keep track of all inventory.

Available Resources

- This application will be web based, which will allow users to access via IP Address.
- It will work on Window 7 machines and up.
- Security will be consistent with the security already
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Functional Requirements

This software will utilize the following features:

1. Database

   a. Admin will be able to add users.

2. Input items into database

   a. Items include the following:

      i. Serial Numbers
      ii. Tag Numbers
      iii. Model
      iv. Username
      v. Location

   b. Ability to see entered data.

   c. Ability to delete any entry.
Interface Requirements

Add New User

The Supervisor will have the ability to add users through ASP.net Web Site Administration Tool.

Login Page

To keep this more secure users will be able to access the web site via IP Address with credentials given by supervisor.
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**Home Screen**

Once user has successfully logged in, they will be directed to the Home Screen. The home screen will have the option for users to choose what they would like to do. Such as add a new entry or search for an item by clicking on the appropriate button.

![Home Screen Image](image)

**New Entry Screen**

In the New Entry screen, Users will be able to select the location and equipment type via a dropdown list, enter user name, model, serial and asset tag numbers. The dropdown list for location will include all the school names. The equipment dropdown will be divided into four options cameras, projectors, computers, and printers. Users will also have the ability to add and delete a campus location.
Search Entry Screen

Users will be able to search for items by selecting location, username or type. To keep it simple the dropdown list will be the same as the ones in the new entry page. After the information is entered and executed the user will view the information on a grid view. The grid view will display the all the columns that pertain to the specific search enquire.
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Delete an Entry

In order to delete an entry user will be able to do this on the search screen. Under the grid view there is a tag number textbox that could not be null. This textbox is the one that will allow users to delete an entry completely from the database.

Data Management

All username, passwords and entries will be stored in a database. The data will be stored in the database until a user deletes it. Supervisors will be able to add or delete users as they please. Our primary key on all tables is the tag number since they will be all unique. The location name will be the foreign key on all and the primary key in our campus table.

Source code
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Non-Functional / Operational Requirements

Description of the non-functional requirements: do not state how these requirements will be satisfied.

Security, Availability, Reliability, Recoverability and Business Continuity

- Security - Security is provided by Visual Studio and users will only have access to site via IP Address and must be part of the Domain.
- Availability - Application will be available via IP address, users will have to be at one of the locations or using a VPN connection.
- Reliability - The system needs to be reliable for users to enter, search, edit, or delete items as they please.
- Recoverability - If the application fails there will be a backup stored in our backup server.

Technical Reviews, Audits, and Walk-Through

After each screen is complete, there will be a review of the screen by the developer’s peers. Once a function is complete it will be shown to the user and after the user acceptance testing, it will be completed.

<table>
<thead>
<tr>
<th>Target Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2/15</td>
<td>Complete Framework for Software requirements</td>
</tr>
<tr>
<td>2/9/15</td>
<td>Complete Framework and decided on GUI for software</td>
</tr>
</tbody>
</table>
### Inventory Management Software

<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2/15</td>
<td>Begin work on rest of the pages for Inventory Software.</td>
</tr>
<tr>
<td>3/9/15</td>
<td>Completion of home page, new entry page and search page.</td>
</tr>
<tr>
<td>3/23/15</td>
<td>Connecting all pages together. Finished Database.</td>
</tr>
<tr>
<td>3/30/15</td>
<td>Connection of database and Coding for scanner.</td>
</tr>
<tr>
<td>4/6/15</td>
<td>Update paperwork and continue with coding.</td>
</tr>
<tr>
<td>4/13/15</td>
<td>Made changes to Database.</td>
</tr>
<tr>
<td>4/20/15</td>
<td>Update code with updated database.</td>
</tr>
<tr>
<td>4/27/15</td>
<td>Create power point, Run website to make sure everything is working.</td>
</tr>
</tbody>
</table>

### Appendices

As needed and may include Document References, report references, etc.

### Requirement Engineering Methodology

We will be using an Agile Methodology to complete this project.

### Meeting Minutes

#### Meeting #1

Meeting Date: 2/2/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Discussed project topic for Inventory Management Software and started to talk about what the project would need.

Meeting #2
Meeting Date: 2/9/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Laid out basic framework for project.

Meeting #3
Meeting Date: 2/16/2016
Meeting Place: Tinley Park Public Library
Meeting Attendees: Kevin Kovach and Sofia Galarza

Meeting #4
Meeting Date: 2/23/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Completion of login page for Inventory Software.

Meeting #5
Meeting Date: 3/2/2015
Inventory Management Software
Meeting Place: Tinley Park Public Library
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Created framework of other pages for Inventory Software.

Meeting #6
Meeting Date: 3/9/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Worked on documentation. Proceeded with designing layout.

Meeting #7
Meeting Date: 3/16/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Created the database for the application. Reworked with the application to get the setup we wanted for it. Updated Documentation.

Meeting #8
Meeting Date: 3/23/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Began coding the links in the pages to let the application run smoothly between links.

Meeting #9
Meeting Date: 3/30/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Worked on the coding for the database to recognize entries for New Entry page and Search page. Ensured that they are working correctly.

Meeting #10
Meeting Date: 4/6/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Updated flowchart to recognize the changes we have created so far.

Meeting #11
Meeting Date: 4/13/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Made changes to Database in SQL Server

Meeting #12
Meeting date: 4/20/2015
Meeting Place: GSU
Meeting Attendees: Kevin Kovach and Sofia Galarza
Meeting Minutes: Completed the Search Page and ensured it worked.
Inventory Management Software

Meeting Date: 4/27/2015

Meeting Place: GSU

Meeting Attendees: Kevin Kovach and Sofia Galarza

Meeting Minutes: Went over project to ensure that it is working properly. Created the PowerPoint for final presentation. Ensured that everyone had the correct software and all software on respective computers worked properly.