

Danfoss Enterprise Layered Process Auditing

Project Plan

Zach Carlson

Jamie Countryman

Mitch Valenta

Table of Contents

[Problem Statement](#)

[Deliverables](#)

[First Semester](#)

[Second Semester](#)

[Specifications](#)

[Mockups](#)

[User Interface Description](#)

[Functional Requirements](#)

[Resource Requirements](#)

[Project Schedule](#)

[Risks](#)

Problem Statement

In this project, our group will design and implement a web application to simplify and centralize Danfoss' auditing process. The current process lends itself to time-consuming or incomplete audits with too many possible points of failure. Simplifying this process will allow audits to be completed quicker with more flexibility, creating a safer workplace and higher-quality work output.

Deliverables

First Semester

- Documentation of auditing process flow
- UI prototype

Second Semester

- A working web app
- A database backend to support the web app.

UI Mockups

Danfoss Auditing

Username:

Password:

[Need help?](#)
[Forgot your password?](#)

Log in with the username and password you use to log in to a Windows computer

☰Logged in: tbrown [Not you?](#)

Shop Floor Audit Safety

1. Are Near Miss / Safety Alerts posted on the Safety Board? ?

Yes ▼

Additional Comments

Next

Where to look: Check the Safety Board for Near Miss or Safety Alerts



Audit Administration

[Auditing Schedule](#)

[Create/Modify Audits](#)

[View Auditing Results](#)

User Interface Description

Functional Requirements

- Ability to answer audit questions
- Automatic selection of auditors with defined rotation
 - Select from list with managers, directors, and guests in defined rotation
 - Guest can be inserted at random and does not change the rotation
- Automatic notification by e-mail to auditor of upcoming audit
- Automatic notification by e-mail if audit is not complete when due
- 'Base' audit for to use when starting audits in a cell/area
- List of questions for audit by category to select when changes to the audit are desired by a cell/area
- How and where defined for questions
 - How to determine answer to question
 - Where to look for information to answer question
- Dropdown list of responses to audit questions
 - Automatic tracking of individual audit questions
 - Automatic notification when audit question competency is reached
 - Automatic tracking of total audit score (chart)
- Number of 'no' responses is limited on each question
- Standard work to be audited displays the current standard work from Navigator
- Use stylecop

Non Functional Requirements

- Responsive design supports both desktop and tablet screen sizes
- Automatic picture based results

Resource Requirements

Resource	Source	Estimated cost
Visual Studio with Microsoft SQL Server	Provided by ISU through Dreamspark	N/A
StyleCop	Open Source	N/A
Development web server	Provided by ISU	N/A
Apple iPad	Provided by Danfoss	N/A

Project Schedule

Fall 2014	August 25th	Dec 12th
Task	Start	End
Requirements gathering	Sept 1st	Sept 12
Project Plan	Sept 22nd	Sept 29th
UI Designs	Sept 22nd	Oct 17th
-Main Design	Sept 22nd	Oct 17th
-Login Design	Sept 22nd	Oct 17th
-Admin Design	Sept 22nd	Oct 17th
-Tablet Interface	Oct 18th	Nov 10th
-Report design	Oct 18th	Nov 10th
Database setup	Nov 10th	Nov 17th

Spring 2015	Jan 12th	May 1st
Task	Start	End
Functional implementation		
-Questions Implementation		
-Email notifications		
-Admin Implementation		
Migrate program to Danfoss		
User testing(?)		
Non-functional implementation(?)		

Risks

Risk	Probability of occurrence	Criticality (1-100)	Risk factor (prob * criticality)	Mitigation strategies
Essential requirements are missed	.4	80	32	Re-identify requirements with client frequently
Program doesn't interface with customer hardware	.2	90	18	Ensure development environment matches production environment
Program will need changes post release	.9	10	9	Provide thorough documentation and match clients code style (stylecop)