Project Plan
iSupport Device Management System

The Capstone Experience

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Problem: Sparrow Hospital has thousands of devices (printers, copiers, fax machines) and it is difficult to know where all the devices are.

Solution: Application that helps IT Staff locate devices and better service the hospital staff with finding alternate devices.
Functional Specifications

- Choose Building and Floor
- Add New Asset to Map
- Query Asset Location
- Change Asset Location
- Change Asset Status
- Create Altiris Ticket
Design Specifications

• Landing page to enter asset number, or enter building then floor, this brings you to map page
• Map pages allow for drag and drop of new devices
• Ability to click and change device status
• Can also create new device types
Screen Mockups

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Technical Specifications

- Data is pulled from the Altiris database via SQL queries
- The placement of device icons is generated based on locations pulled from database
- Writes to the database with new locations
- Uses SOAP requests to generate Altiris tickets
- Custom web application built with ASP.NET with MVC framework C#, JavaScript and jQuery
System Architecture
System Architecture - Use Case

[Diagram showing interactions between IT Staff Member, Hospital Staff Member, ISupport Device Management System, Web Server, and Aliris, with nodes for calls to IT Helpdesk, reporting a printer error, giving alternative printing options, searching for printer by asset tag, sending asset tag query, displaying floor map with asset and other nearby assets, returning asset location information, setting asset status to unavailable, creating new helpdesk ticket for servicing printer.]
System Components

• Hardware Platforms
  ▪ Runs internally on hospital computers with FireFox and Internet Explorer (web application)

• Software Platforms / Technologies
  ▪ ASP.NET/C# MVC using Visual Studio
  ▪ JavaScript and jQuery
  ▪ SQL Server 2008
  ▪ SOAP requests to connect to Altiris
Testing

• Getting database test data from client to verify use cases
• Regression testing throughout the project
• Verify compatibility with different browsers
Risks

• Difficulty with imitating production environment
• Quality of certain maps with zooming in and out
• Sparrow has no technologies to automatically update device locations but wants this added eventually