MICHIGAN STATE
U N I V E R S I T Y

Project Plan
iSupport Center

The Capstone Experience

Team Sparrow

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Spring 2011

From Students…
      …to Professionals

Project Overview

- Increase efficiency of Sparrow's IT Help Desk
  - Application search
  - Incident notification
    - On-Call Notification
    - Ticket log
  - Hardware status mapping
  - Monitor and reflect Altiris database

Functional Specifications

- Application Search
  - Problem
    - Information overload
  - Solution
    - Simple user interface
    - jQuery auto complete
    - Extended search
    - Alternate search suggestions

Functional Specifications (cont.)

- Incident Notification
  - Problem
    - Keep Sparrow's help desk up-to-date on the broad overview of the hospital
    - Keep technical support up-to-date on what their most urgent tasks are
  - Solution
    - Different views
    - Color coding
    - On-Call algorithm

Functional Specifications (cont.)

- On-Call Algorithm
  - Problem
    - Spending time in a critical situation determining who is on-call by looking it up on a long Microsoft Excel spreadsheet
  - Solution
    - Allow people to input their own schedules and automatically detect who is on-call
    - The help desk attendee only has to hit the Notify button and pick a ticket to notify about
- Ticket Log
  - Problem
    - No accountability of who worked on what or fixed what
  - Solution
    - Implement change log

Functional Specifications (cont.)

- Hardware status mapping
  - Problem
    - Inability to locate and automatically monitor status of hardware
  - Solution
    - Provide a detailed mapping of hardware located throughout a selected building
    - Implement color coding system to reflect hardware availability

Functional Specifications (cont.)

- Monitor and reflect Altiris database
  - Problem
    - Lack of a comprehensively summarized state of the Incident system
  - Solution
    - Provide the ability to create comprehensive report on varies reports
    - Alert user when a level 1 ticket amount threshold is met
    - Update from the data base through different formatted queries

Design Specifications

- Dashboard
  - iGoogle design
  - Incident display on most prominent location
  - Management Links tab
  - Application search bar
  - Floor map displaying current locations of known printers, fax machines, and copiers
- Drill-down
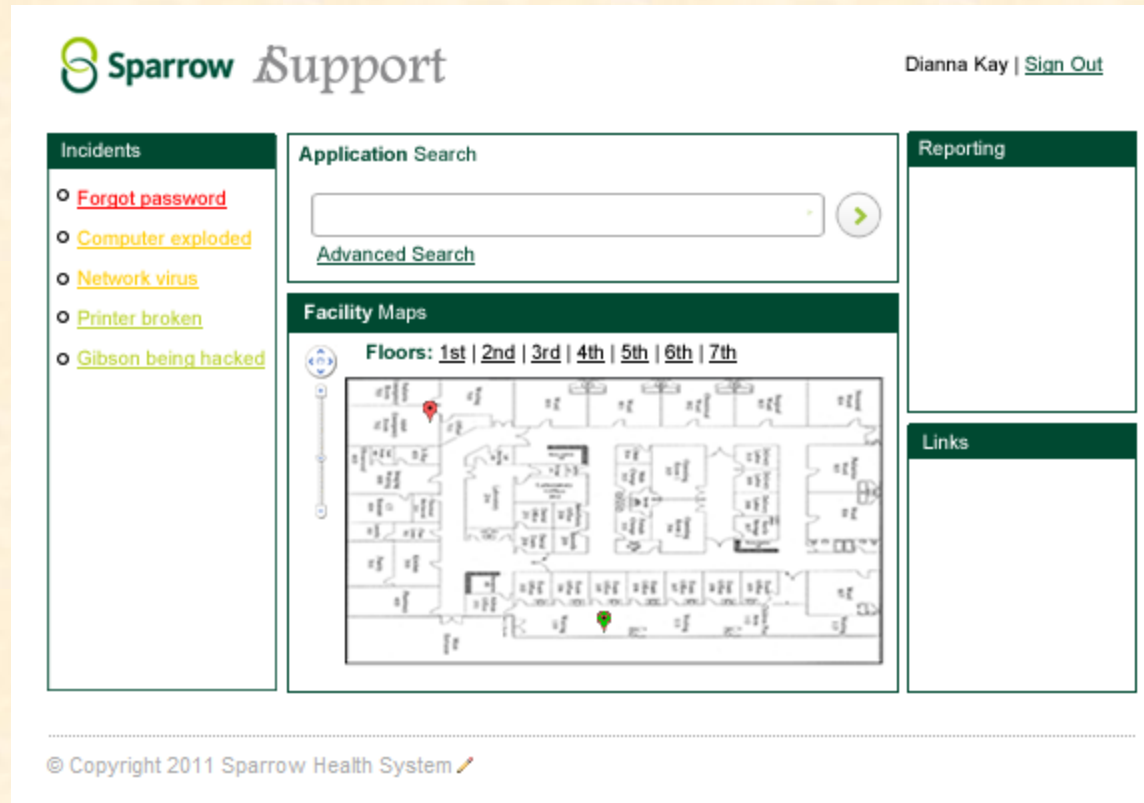 - Applications, Incidents, Employees

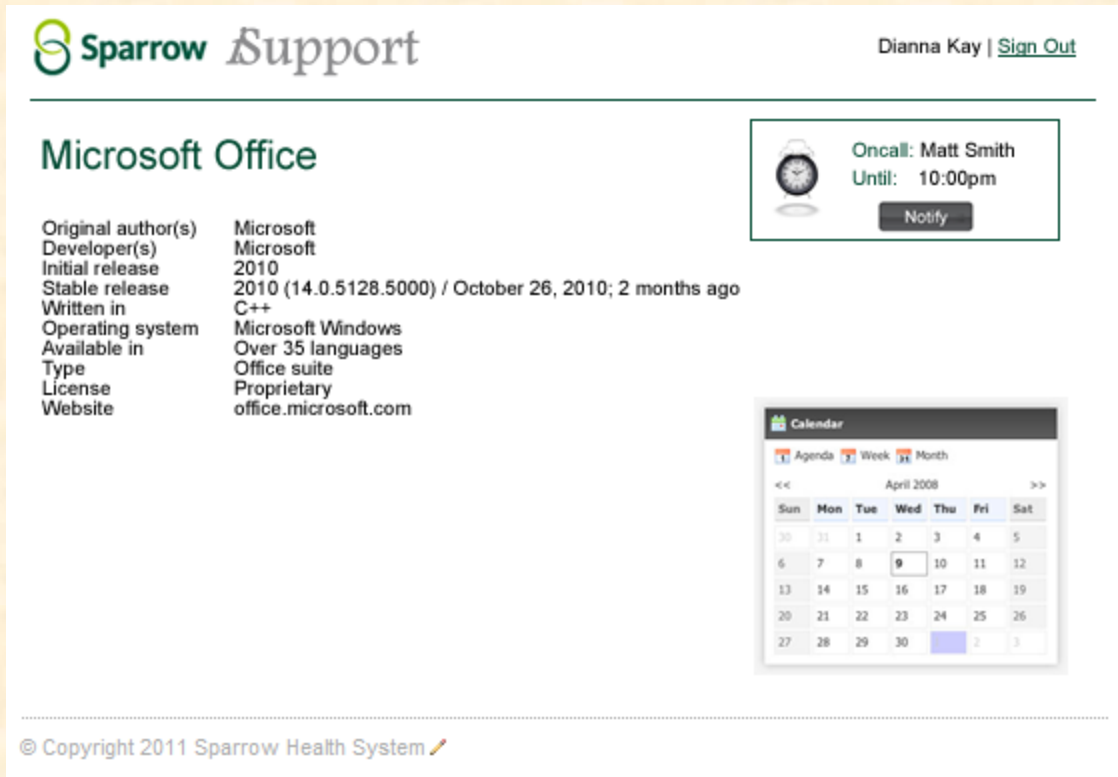# Screen Mockups

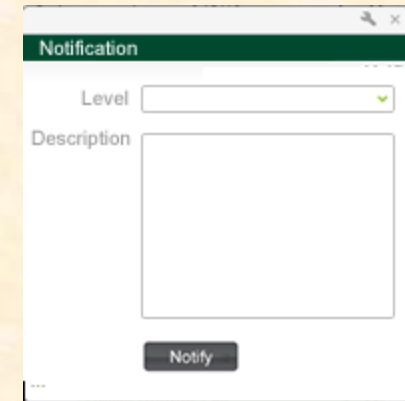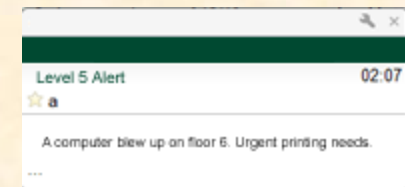Figure 1.1

Screen Mockups

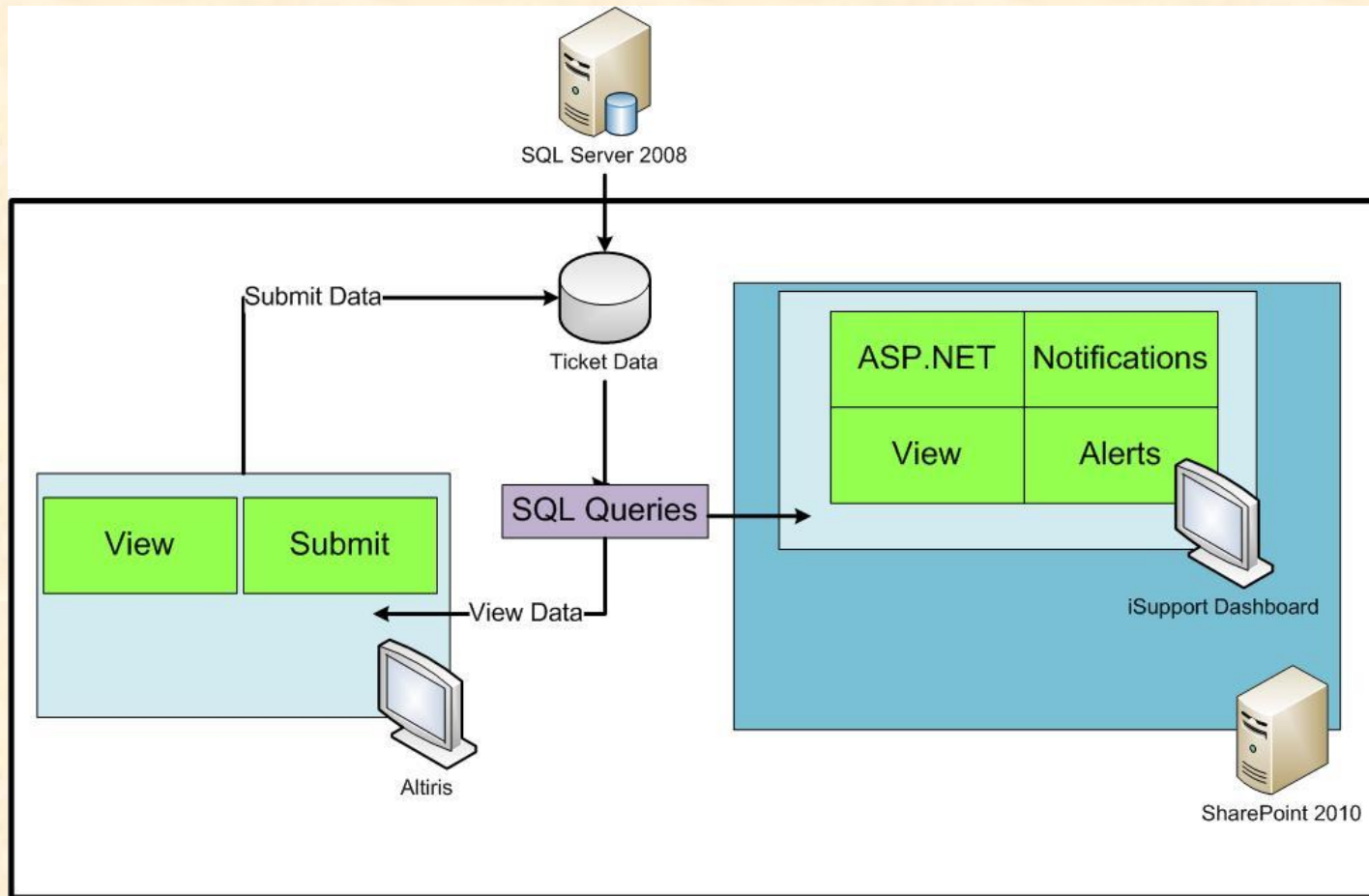
Figure 2.1

Figure 2.2

Figure 2.3

Technical Specifications

- SharePoint 2010
  - All individual windows are Web Parts
- Custom Web Parts
  - Developed with Visual Studios 2010
  - ASP.NET C#, jQuery
- Database
  - Managed with Microsoft SQL Server 2008
- Web Server
  - IIS 7.0

System Architecture

System Components

- Hardware Platforms
  - Email pagers
- Software Platforms / Technologies
  - Windows Server 2008 R2
  - SharePoint 2010
  - Microsoft SQL Server 2008
  - Tortoise SVN

Testing

- Using scrambled data provided by Sparrow
  - Dummy ticket information
  - Accurate reflection of Altiris database
- Notification simulation
  - Paging
  - On-call accuracy
- Live testing
  - Multiple user run-throughs on-site
  - ACID verification

Risks

- SharePoint 2010
  - No experience
- ASP.NET
  - Unfamiliar for majority
- Transitioning development to production site
  - Implementing correct schema