Environmental Monitoring System

Requirements Specification

by

SaintSoft
Welcome

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&

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SaintSoft Team Organization

- Daniel Schuldt - Team Leader
- David Moore - Systems Administrator
- Christian Damberg – Webmaster
- Hannah Palmer – Librarian
- Lioubov Mikhailova - Design Consultant
- Tina Ting - Software Developer
Agenda

- **Introduction** - Daniel Schuldt
- **Functional Requirements** - Hannah Palmer
- **Prototypes** - Tina Ting
- **Data Flow Diagrams** - Lioubov Mikhailova
- **Conclusion** - Daniel Schuldt
Functional Requirements

Hannah Palmer
Functional Requirements

Remote Client

- Provide an online page for login purposes.
- Provide an online page that displays information from the sensors.
Functional Requirements

Monitored Client

• Provide an online page for login purposes.
• Provide an online page that displays information from the sensors.
• Provide an online page that will allow for user profile changes.
• Provide an online page that will allow for changes to sensor preferences.
Functional Requirements cont’d.

Administrator

- Provide an online page to login.
- Provide an online page to access logged data related to users.
- Provide an online page to access logged data related to attached devices.
Prototypes

Tina Ting
User Login Screen

Welcome to Environmental Monitoring System

NEWS

New Microphone Sensor developed. Click here for more details

More than 5,000 customers now have the Environmental Monitoring System.

more...

User Name: 
Password: 

Forget password? Click here to recover
Don’t have a User Name? Click here to register.
monitored computer only
NOTICE: Do not register the device unless this computer will be the computer with sensors attached to it!!

Contact Information:

First Name: 

Last Name: 

Address Information:

Street: 

City: State: Zip: 

Phone: ext:
Preferences cont’d.

**Account Information:**

E-mail:  

Password:  
Retype Password:  

Security Question:  

? Answer:  

Monitoring Location:  

**Notification Information:**

E-mail Address:  

Same as above

Cell Phone:  

Default:  
Cell Phone  
E-mail

[Submit]  [Cancel]
Welcome Mr. Ken Swarner

you are located at: Home

IP: 192.168.0.1

You currently have no sensors registered. Click here to register a sensor.
Registrant Sensor Screen

Registrant Sensor Screen:

Owner of Sensor:

Location:

IP Address:

Operating System:

Sensor Type: Water

Submit  Cancel
Monitored User Screen

Welcome Mr. Ken Swarner
you are located at: Home IP: 192.168.0.1

Sensors:

Temperature Sensor Office Status: ACTIVE
Current Temperature: 55°F

Motion Sensor Home Status: ACTIVE

Water Sensor Home Status: DISABLED
ERROR – Device is not responding

Refresh Devices

Click here to register/delete a sensor.
Remote User Screen

Welcome Mr. Ken Swarner
you are located at: Remote IP: 66.125.8.10

Sensors:

Temperature Sensor Office Status: ACTIVE
Current Temperature: 55°F

Motion Sensor Home Status: ACTIVE

Water Sensor Home Status: DISABLED
ERROR- Device is not responding

Refresh Devices

Click here to register/delete a sensor.
Data Flow
Diagrams
Lioubov Mikhailova
Context Diagram
Level 0

Client
- Login-ID-and-Password
- Account-Information

Website Administrator
- System-Request
- Administrative-Log

Sensored Client
- Login-and-Request
- Sensored-Client-Verification
- Sensor-Info-and-IP-Address

Manage User Request
- Client-Verification
- Retrieve-Stat

Maintain-Info
- System-Data

Obtain Monitoring Data
- Profile-Request
- Sensor-Data

Client Info and Sensor-Data
Level 1

1.1 Verify Login ID and Password

1.2 Retrieve Sensor Information

Client Info and Sensor-Data
Level 3

![Diagram of Level 3 process](image-url)
Conclusion
Daniel Schuldt
### Development Schedule

#### Task List:

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#### Gantt Chart:

*Dates in the chart represent start and end dates for each task.*

1. **Formation of Group** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
2. **Initial Team Meeting** (September 28, October 4, October 11, October 18, October 25).
3. **Weekly Team Meetings** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
4. **Initial Client Meeting** (September 28, October 4, October 11, October 18, October 25).
5. **Weekly Client Meetings** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
6. **Definition/Project Plan Development** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
7. **Definition/Project Plan Presentation** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
8. **Debriefing on Presentation** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
9. **Requirements Specifications Development** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
10. **Requirements Specifications Presentation** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
11. **Debriefing on Presentation** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
12. **Preliminary Design Development** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
13. **Preliminary Design Presentation** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).
14. **Debriefing on Presentation** (September 28, October 4, October 11, October 18, October 25, October 2, October 9, October 16, October 23, October 30).

**Project: SaintSoft**

**Date: Sun 10/23/05**

**Task Progress**

- **Bar** indicates the progress of the task.
- **Milestone** indicates key milestones in the project.
Project Plan

Software Plan

Analysis

Preliminary Design

Detailed Design

Development And Testing

Acceptance Test

Fall 2005

Spring 2006

- Completed
- In Progress
- Incomplete
Thank You!

Any Questions?