

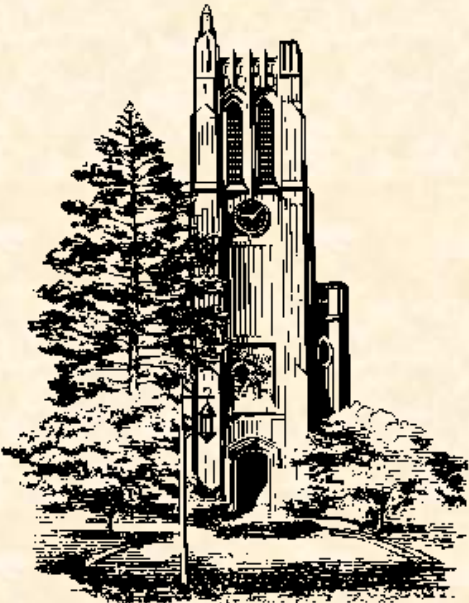
# Technical Specification / Schedule Ford Sensor Showroom

Team 3: Team Ford  
CSE 498, Collaborative Design

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# Project Overview

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- Deploy a wireless sensor network to gather information about cars in a showroom
- Filter useful information into a database
- Graphically display, via the Internet, the gathered information
- Allow comparisons between cars, regions, seasons, etc.



# Functional Specifications



- Use a wireless network to document shoppers' interest in a vehicle
- Identify vehicle “hot-spots” (areas of increased interest)
- Present the above information graphically
- Provide a method of comparing different vehicles



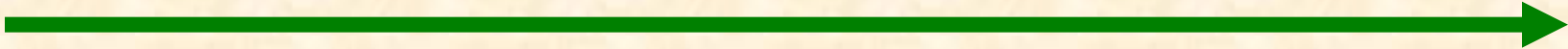
# System Components



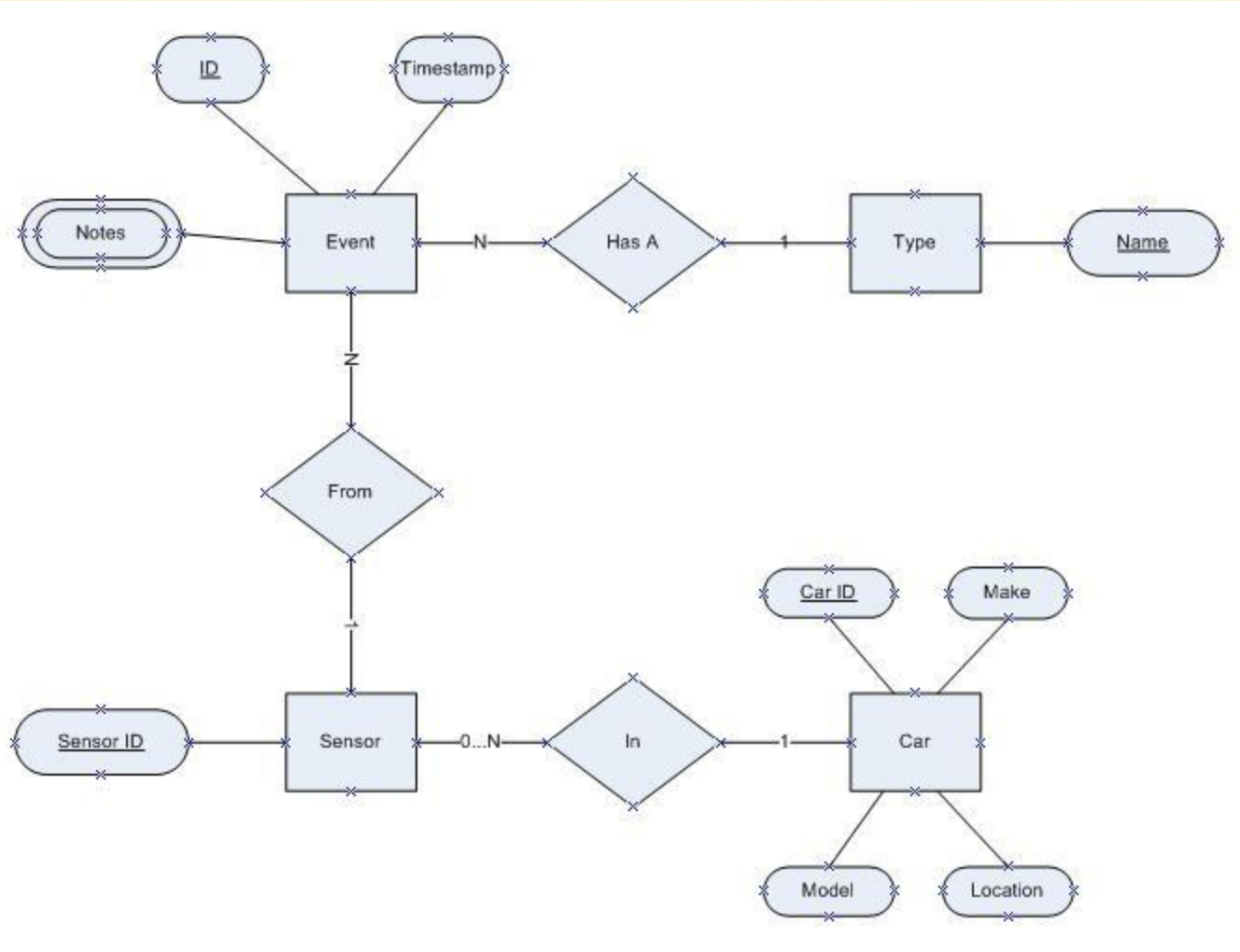
- Hardware Platforms
  - iMote2 wireless sensors / receiver
  - Web/Database server
  
- Software Platforms / Technologies
  - .Net Micro / C#
  - MySQL database
  - Apache web server



# Architecture Illustrated



Team 3: Team Ford





# Risks

- Scalability
  - The system must allow for a various number of sensors of several different types
  - Keep design as general and modular as possible
- Hardware familiarity
  - We must learn the Crossbow libraries
  - Dedicate a team member to learn them
- Hardware limitations
  - We have access to limited amounts / types of sensors
  - Simulate extra sensor functions with other methods (E.G. switches)



# Project Schedule

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## 1. Architecture

- a) Goal: Finalize and deploy systems to be utilized
- b) Date: 1/29/2008

## 2. Sensor Communication

- a) Goal: Allow sensors to communicate with one another
- b) Date: 2/1/2008

## 3. Data Transmission

- a) Goal: Have sensors transmit sensed data through network
- b) Date: 2/8/2008

## 4. Database Configuration

- a) Goal: Implement database to store valuable information
- b) Date: 2/8/2008





# Project Schedule

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## 5. Interpret Data

- a) Goal: Infer meaningful information from sensor data
- b) Date: 2/15/08

## 6. Store Data

- a) Goal: Propagate sensor information into the database
- b) Date: 2/15/08

## 7. Display Data

- a) Goal: Graphically display information from the database
- b) Date: 2/22/08

## 8. Prototype

- a) Goal: Have a functioning prototype for demonstration
- b) Date: 3/10/08





# Project Schedule

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## 9. Code Complete

- a) Goal: Finalize the display of content, finish coding
- b) Date: 3/25/08

## 10. Testing

- a) Goal: Complete all testing and documentation
- b) Date: 4/15/08

## 11. Video

- a) Goal: Complete a video demonstration of the project
- b) Date: 4/21/08