

Changes since last Milestone:

- This milestone was approached differently than previous milestones pertaining to the milestone updates. Milestone 4's updates will be postponed until later milestones. By doing this the group will be able to concentrate more on the PO system and less on documentation. The scope of the project remains unchanged since milestone one. Milestone 4 comes during a time of rapid iteration and thus the deliverables, even for this milestone, are only a snapshot of a single iteration.

1.0 Introduction

1.1 Overview

The purchase order system we will deploy will reduce human error in and streamline the process of issuing, finding, and receiving purchase orders for the Upper Allen Fire Department. By using agile methods, we will seek to deploy a series of systems, all building on one another in a series of releases, each adding features and functionality. The project will, however, be divided into six milestones to track progress as detailed below. The system will be of no cost to the UAFD as the necessary software and hardware infrastructure is already in place.

1.2 Deliverables

Major deliverables to UAFD include:

- 1.2.1 Documentation of the process (ER Model, SRS, etc.)
- 1.2.2 A series of releases of a functional database/program
- 1.2.3 A manager and user manual

2.0 Project Organization

2.1 Process Model

During the course of the project we will be using a combination of various process models to direct the effort of the team and insure proper risk management. We will combine the use of the waterfall method with a series of six milestones to act as waypoints during the process. We will also be incorporating agile methods concerned with prototyping and a series of rapid iterations to manage risk.

2.2 Major Risks

- 2.2.1 Lack of technical knowledge of users
 - 2.2.1.1 Means to manage – we will focus our efforts on creating a system that will be user friendly and intuitive. By using agile methods and prototyping, we hope to end with a system that matches user tasks in the most intuitive manor possible.
- 2.2.2 Schedule

2.2.2.1 Means to manage – planning will be the key to success in this area. Meetings, deadlines, deliverables, and documents will have to be viewed in terms of schedule considerations so that we make the best use of our time. By using prototypes, we will ensure that implementation is within time constraints.

2.2.3 Management of files and revision histories

2.2.3.1 Means to manage – an online drive accessible to all group members has been set up. This will serve as the repository for our project documents and files. By using a devised system similar to a library, we ensure no data overwrites or simultaneous independent revision or addition to documents and software.

2.3 Increments

	Purchase Order	Vendor	Inventory
Increment 1	Purchase orders will be issued and stored in the database. Basic functions will be in place for an operational system.	Implemented as separate table with minimal links to P.O. Implemented for data typing only.	-
Increment 2	Functionality will be integrated with Vendor tables to ensure data integrity and non-repetitive data.	Integrated with P.O. module to allow for lookups and auto fill-ins for P.O. fields.	-
Increment 3	User friendly UI with streamlining features to improve speed and accuracy.	Fully implemented.	Functional inventory modules to further reduce redundant data in the database and to allow for inventory management.
Increment 4...	Functional beyond the scope of the semester and yet to be determined.	Functional beyond the scope of the semester and yet to be determined.	Functional beyond the scope of the semester and yet to be determined.

2.4 Project Responsibilities

Person	Responsibilities
Matt DeWitt	Academic Liason Quality assurance
Chris Blanchard	File and version manager Quality assurance Prototyping
Jason Fetherman	Scheduling Quality assurance
Brian Barnes	Technical contact Webmaster Liaison Quality assurance

3.0 Managerial Process

3.1 Objectives

- 3.1.1 Don Roseth (point of contact) wants a fully functional purchase order system by the end of the semester with value added features such as analytical reporting capabilities. This includes:
 - 3.1.1.1 Reducing the number of improperly completed purchase orders to nearly zero by using forms of validation.
 - 3.1.1.2 Be intuitive and user friendly in design.
 - 3.1.1.3 Reduce the amount of time spent on PO issuance and receiving functions.
 - 3.1.1.4 Provide analytical reporting functionality.
 - 3.1.1.5 Be secure and stable

3.2 Relative functionality

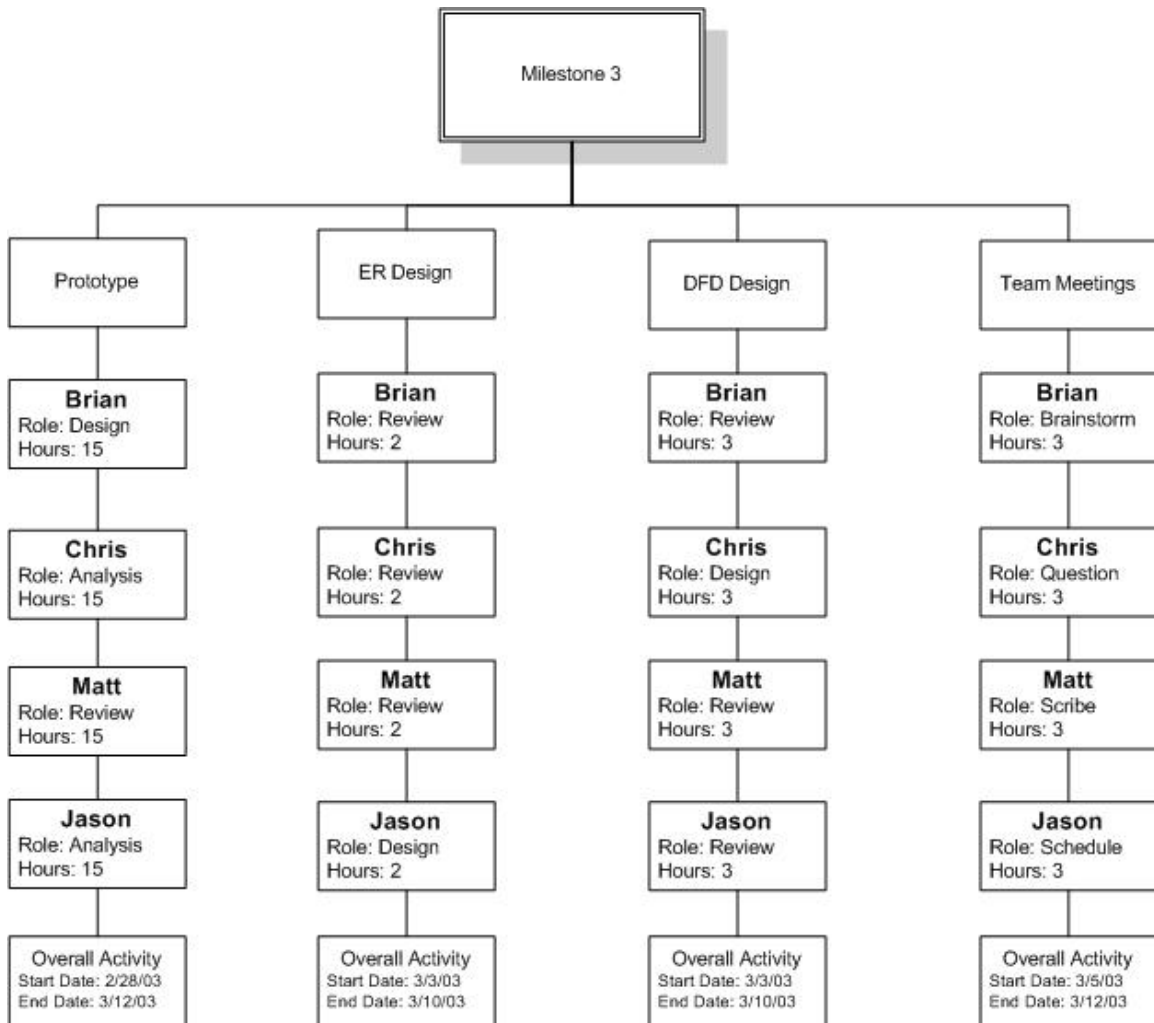
- 3.2.1 Because we are constrained by functionality versus schedule concerns, trade offs must be made initially to prevent scope creep and late term project failure. We think that using agile methods to continually prototype, we will be able to separate features into releasable versions that will continually add functionality. We hope to present three versions to our sponsor with plans and requirements in place to add more robust versions in the future should this project see continuation beyond the course of the semester.

3.3 Operating environment

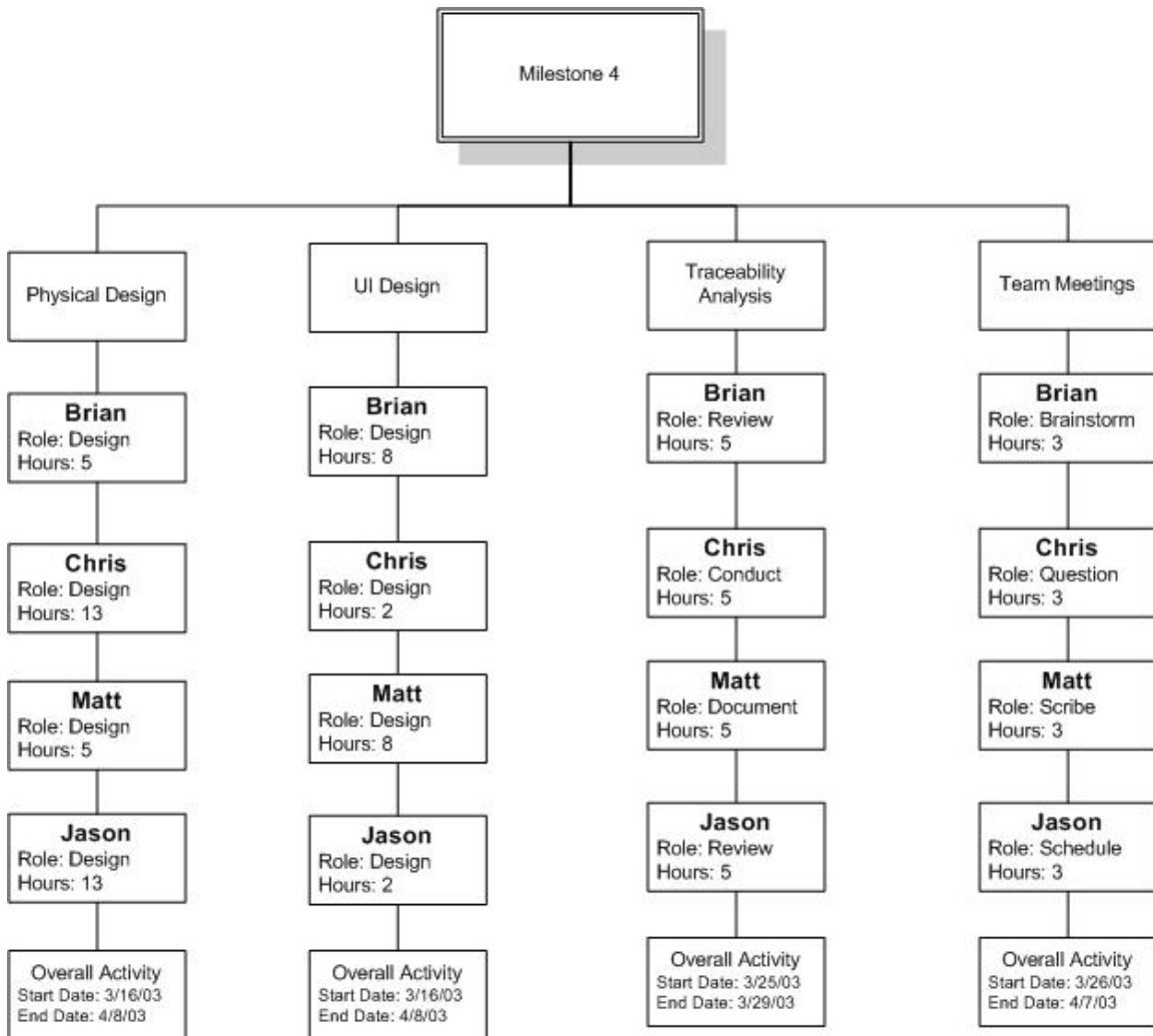
- 3.3.1 We will build the purchase order system on top of a Microsoft Access 2000/XP database using provided tools as well as Visual Basic to provide more advanced functionality if necessary. This application will run in a networked environment on a Windows 2000 server machine for security purposes only (RAID backups,

logon procedures). The application will not, however, require support for multiple simultaneous users.

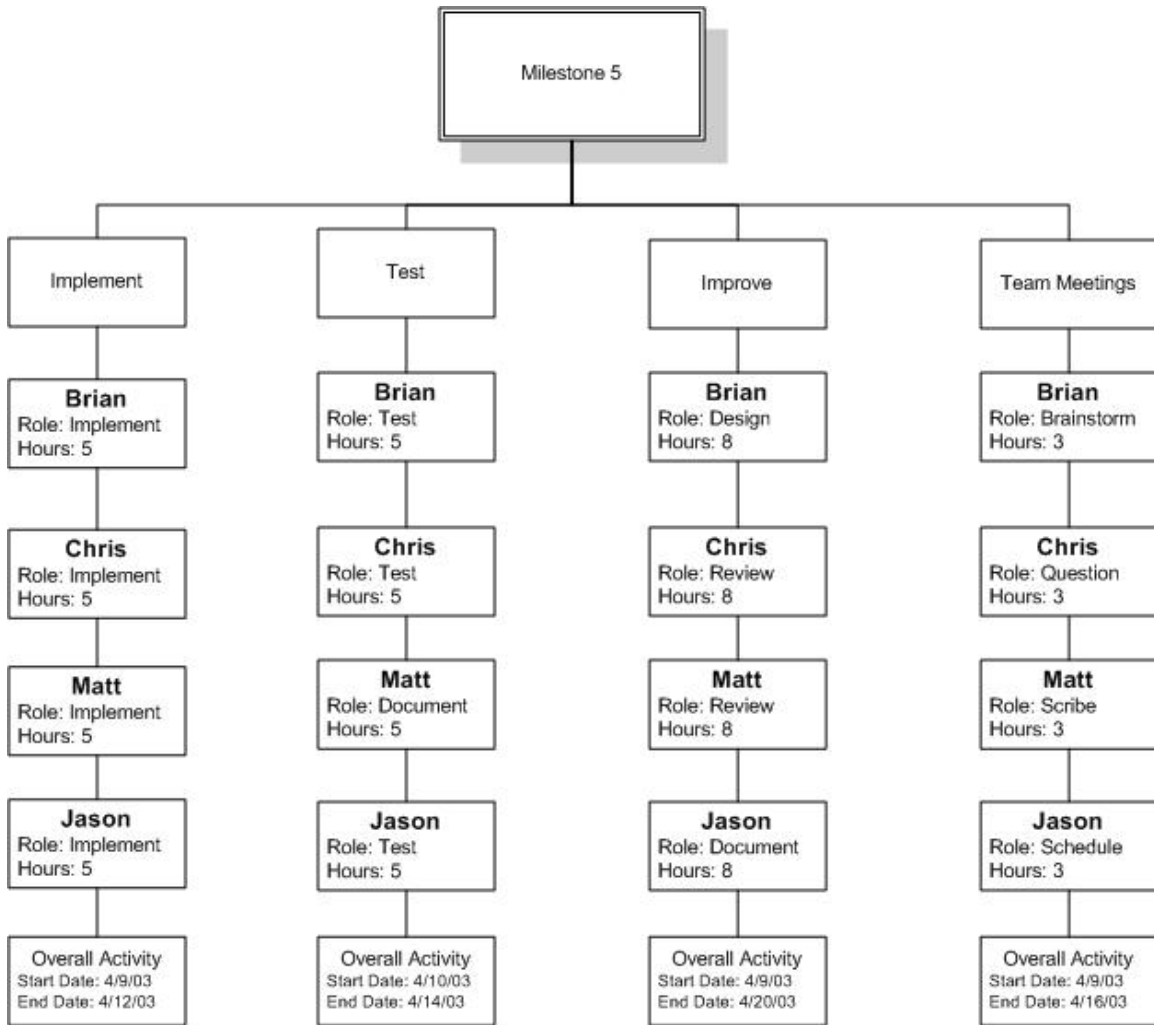
Milestone No.	Description of Milestone	Date Expected
Milestone 1	Interact with our project sponsor and determine the scope of the project. Submit a project proposal document to be reviewed and signed by our project sponsor. Prototyping begins. Present initial assumption to the class.	2-18-03
Milestone 2	Determine functional and non-functional requirements and present in a formal SRS document to be reviewed by our sponsor. Continue to prototype the application from an UI point of view.	2-27-03
Milestone 3	Develop data flow diagrams and ER data model for the database/application. Get feedback from organization on initial prototypes and continue to revise. Traceability between SRS and DFD's/ER model.	3-13-03
Milestone 4	Physically design the database and implement a beta version. User interface will be the primary focus as data design will be dependant on desired functionality. Continually perform traceability functions.	4-8-03
Milestone 5	Implementation of design as well as formal testing procedures. Testing in actual networked environment. Performance and functionality improvements as necessary and as time permits.	4-22-03
Milestone 6	Application turnover to sponsor organization. Included are manuals for both users and managers. Presentation of final lessons and thoughts to the class.	5-6-03



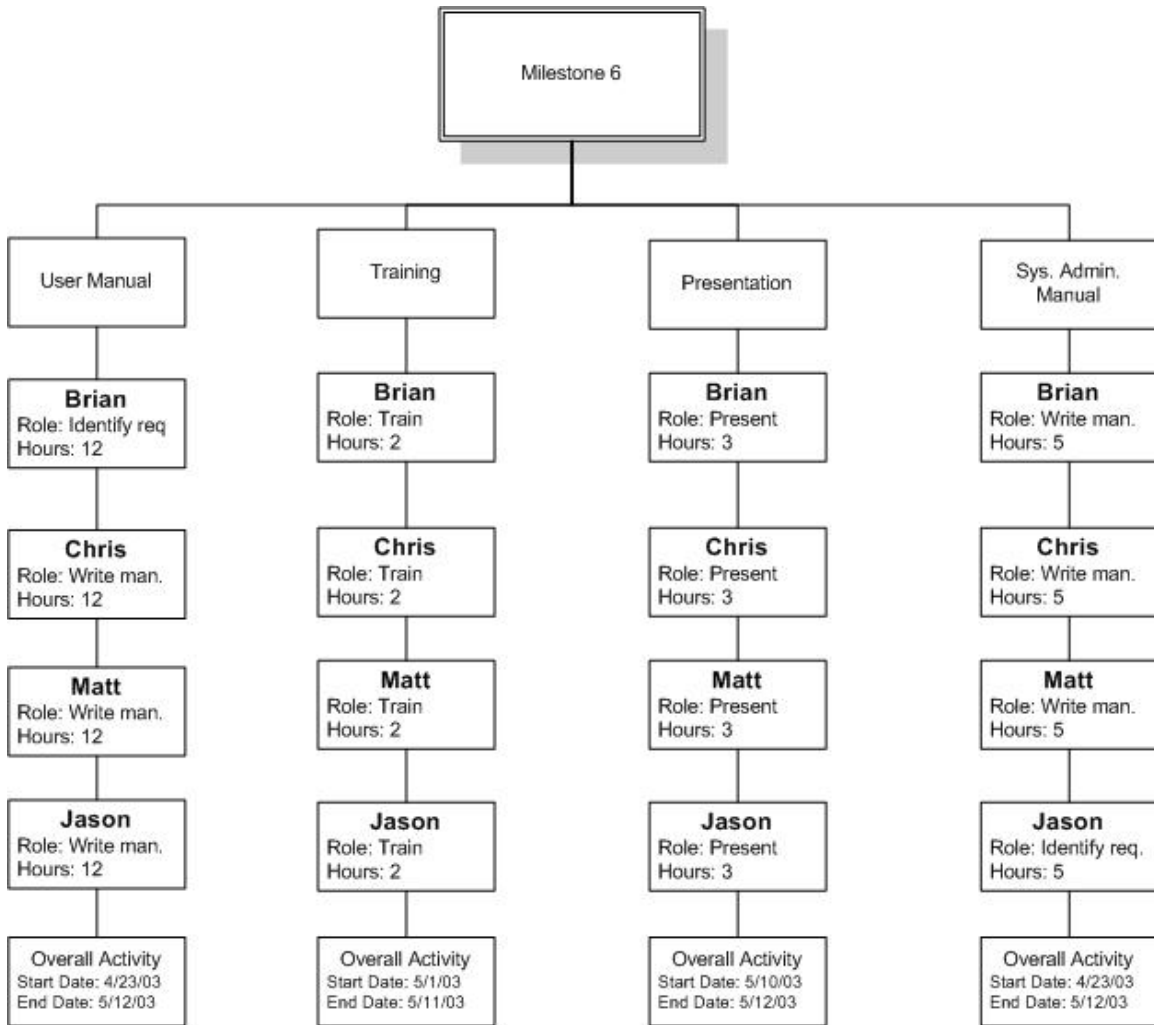
Overall Milestone
 Brian hours spent: 23 hours
 Chris hours spent: 23 hours
 Matt hours spent: 23 hours
 Jason hours spent: 23 hours
 Start Date: 2/28/03
 End Date: 3/12/03



Overall Milestone
 Brian hours spent: 21 hours
 Chris hours spent: 23 hours
 Matt hours spent: 21 hours
 Jason hours spent: 23 hours
 Start Date: 3/16/03
 End Date: 4/8/03



Overall Milestone
 Brian hours spent: 21 hours
 Chris hours spent: 21 hours
 Matt hours spent: 21 hours
 Jason hours spent: 21 hours
 Start Date: 4/9/03
 End Date: 4/22/03



Overall Milestone
 Brian hours spent: 22
 Chris hours spent: 22
 Matt hours spent: 22
 Jason hours spent: 22
 Start Date: 4/23/03
 End Date: 5/12/03