

# CSC 4330

Project Documentation

11/30/2009

## Group Members:

Andy Bursavich

Justin Farr

Will Folse

Chris Miceli

Michael Miceli

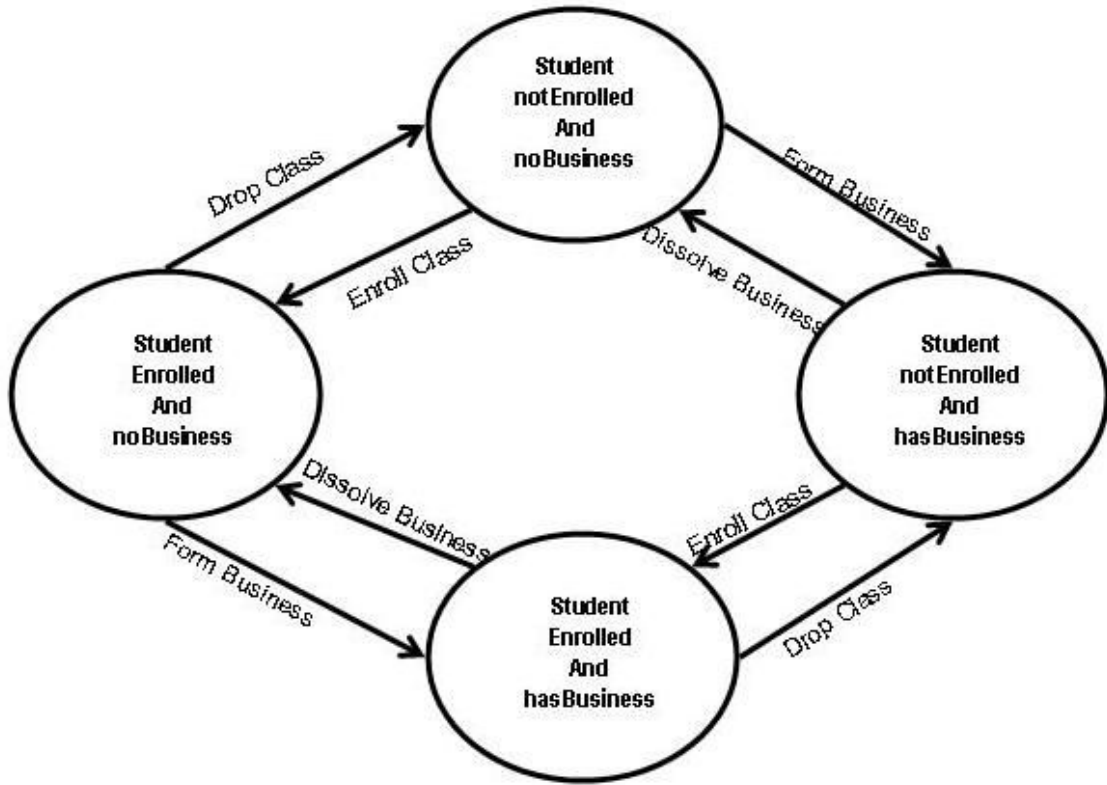
## Group Answers

- I. The Title – UREC Client Tracking System
- II. The project – The Urban Restoration Enhancement Corporation (UREC) helps people establish their own small business. Our project is designed to track and produce data on this service that may be used to substantiate funding, measure program outcomes, create a listing of participants, create reports, and initiate state and government support.
- III. The problem – Currently, there are no mechanisms in place at UREC to produce documentation about outcomes, measurements, or feasibility of UREC's services in an effective manner. Looking through the binders does not allow UREC to easily see trends or patterns that could be useful in enhancing their service.
- IV. The impact – The software will provide a system that can be utilized by all non profits agencies to track client services and outcomes, thus providing sound documentation that justifies state, local, and private funding. This funding will support programs that enhance the social condition locally and possibly globally.
- V. The motivation/inspiration– Our group all agreed that this project will improve UREC's ability to provide a great service to the community. If UREC's services are successful, then there will be a positive impact on the local and global economy. The potential of the project to be used by many non profit agencies brings in many more opportunities to have a lasting effect of society.

## Major Functions

Function	Description	Input	Output
Registering Client's Courses	This function will allow the client to register a client for a course in their program.	Name, Address, SSN, General Demographic information, Courses taking, Salary, # of Children	Adds Record to Database
Client Search	This function will allow the client to search for a client already in the database and either update their registration information or enter additional tracking information.	Name, SSN, or City	Clients matching the input information.
Tracking Client's Businesses	This function will allow the client to enter additional tracking information after the client is finished with the courses. This is important to track how their business plans work out.	3 Month Follow-up, 6 Month Follow-up, 12 Month Follow-up, Revenue, Expenses, Further Assistance Required Flag, Notes	Adds Record to Database
Reporting	This function will allow the client to produce custom or canned reports that can be provided to the state or private organizations for funding and grants.	Any database field or fields	Graphic
Graphing	This is an extension of the reporting function. It allows the client to create graphs and or plots.	Any database field or fields	Graphic

# Finite State Model of a Student in CTS



## **Auxiliary Software**

### To View Program

An Internet Browser is required

Internet Explorer

Firefox

Chrome

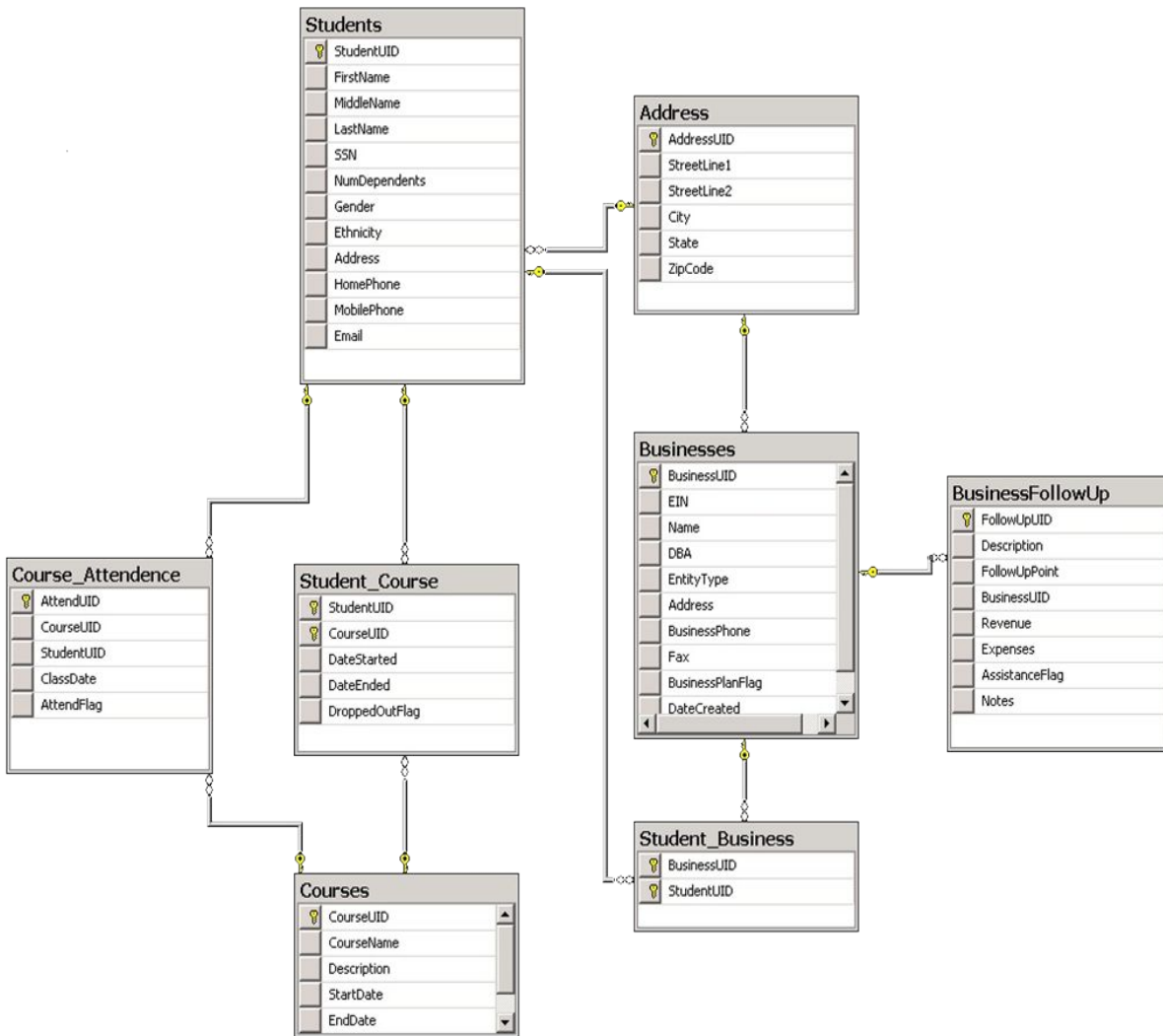
### To Host Program

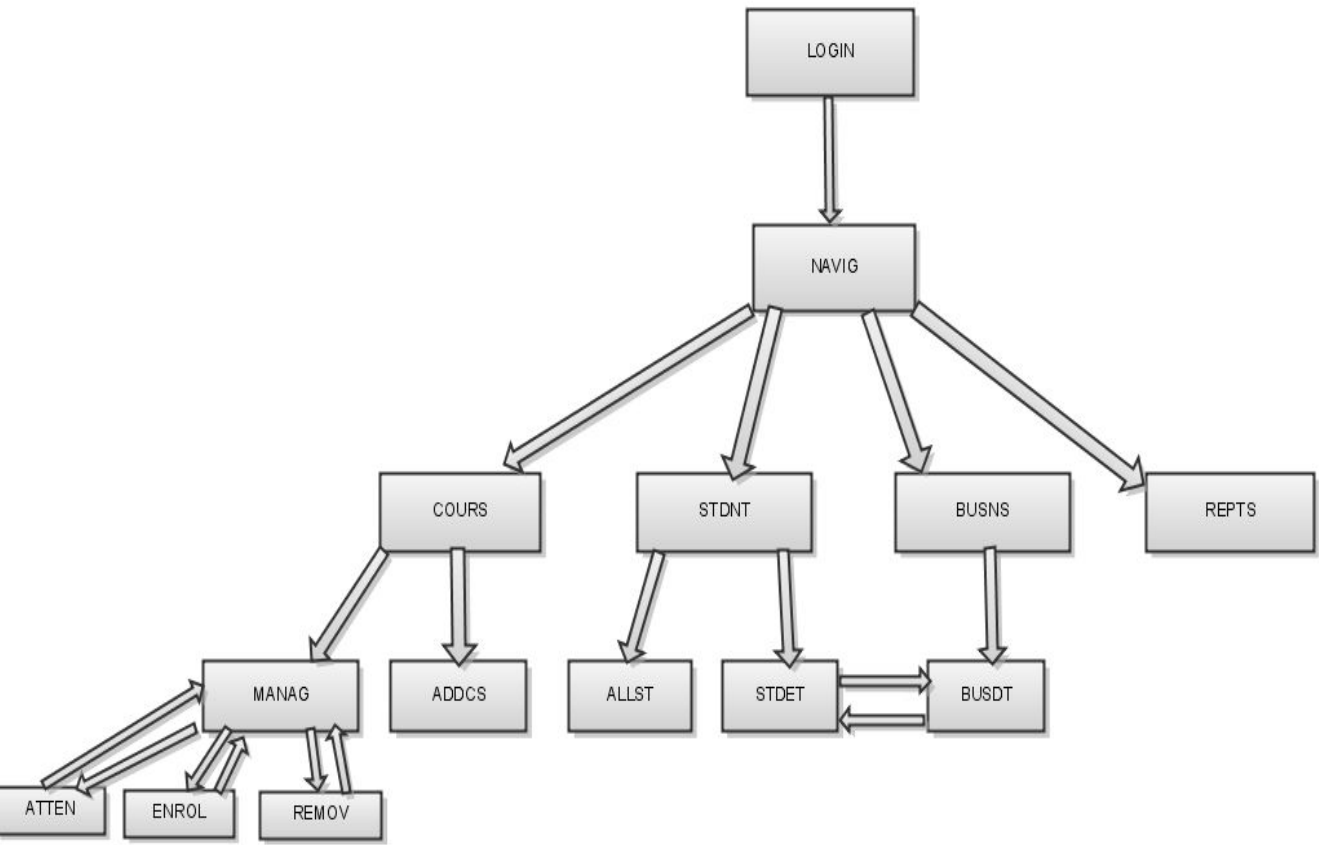
Microsoft .Net Framework 3.5 is required

Microsoft SQL Server 2005 Express or Equivalent is required

Microsoft Windows Active Directory or Equivalent is required.

# Final ER Diagram





CSC 4330 - CTS

Michael Miceli  
Christopher Miceli  
Justin Farr  
Will Folse  
Andy Bursavich

We focused most of our testing on three different areas. The first area was requirements testing. We had to know what our requirements were before we could develop our software. Once we had our product, we had to be sure that incorrect input would not cause unexpected crashing, or that incorrect input could be inserted into our database. Finally, we tested our graph outputs, because this is the most important part of our project. We tested our graphs on many different types of inputs.

Most of our testing was to ensure that we had correct requirements. This was done through almost constant communication with Mrs. Joyce. We had over 180 e-mails between us as well as more than 10 meetings to decide what we were going to do to help solve her situation. We presented many different concepts and designs before we found out what product would help her the most.

Input validation was very tedious work. Some examples of input errors that testing uncovered were inputting end dates that were before start were end dates being allowed before start dates. Another typical problem was not preventing insertion of non-nullable entries in a data table. Input testing was very exhaustive. If there were any problems in the database, then the correctness of the database would be wrong.

Final testing was making sure our graphs would come out correct on different inputs. One example was single case inputs. If there was only one data point it would not display on a graph. This was crucial because this would be used for future funding and must be correct.



# Meeting Information

**Date:** 9/2/2009

**Start Time:** 5:00pm

**End Time:** 7:00pm

**Location:** Highland Coffees

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, Andy Bursavich, Michael Miceli, Chris Miceli, Will Folse

**Client Attendees:** Joyce James

## **Meeting Summary:**

The group had an initial face to face meeting with Joyce and discussed the program in detail that she need the software application created for. We primarily focused on the type on information she was hoping to capture in a database and the type of information she was hoping to extract in reports. The overall focus of this meeting was to get an idea of the business objects for the software application to assist with.

**Date:** 9/4/2009

**Start Time:** Morning

**End Time:** Morning

**Location:** Pleasant Hall

**Client:** Joyce James (UREC)

**Group Attendees:** Andy Bursavich

**Client Attendees:** Joyce James

## **Meeting Summary:**

This meeting was a brief drop off of information for the group from the client. This information included binders of old data, CDs of previous participants and other information helpful to create the database for the application.

**Date:** 9/9/2009

**Start Time:** 5:30pm

**End Time:** 6:30pm

**Location:** Miceli's Apartment

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr (By Phone), Andy Bursavich, Michael Miceli, Chris Miceli, Will Folse

**Client Attendees:** None

## **Meeting Summary:**

The information collected from the client was reviewed and determined that there was sufficient information to create the database at least from a high level. Additional fields could always be added later if new scope is identified. Brief discussions of technologies took place for the project. Design would be a more detailed discussion topic in future meetings.

**Date:** 9/13/2009

**Start Time:** 4:30pm

**End Time:** 4:45pm

**Location:** Miceli's Apartment

**Client:** Joyce James (UREC)

**Group Attendees:** Chris Miceli

**Client Attendees:** Joyce James

## **Meeting Summary:**

Joyce collected information that she needed for another project she is working on. She also presented some material that could help design our database.

**Date:** 9/27/2009

**Start Time:** 8:00pm

**End Time:** 9:15pm

**Location:** Folse's Apartment

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, William Folse, Chris Miceli, Michael Miceli

**Client Attendees:** none

**Agenda:**

1. Split work assignment for web page layout homework.
2. Establish requirements for Joyce
3. Briefly determine approach to take throughout the project.

**Meeting Summary:**

We discussed which website page we would be tackling for the homework assignment due 9/28/09. We discussed how we would present our requirements to Joyce and determine whether she was satisfied. We also established a tentative time to meet weekly.

**Date:** 10/8/2009

**Start Time:** 6:00pm

**End Time:** 7:30pm

**Location:** Chris and Michael's apartment

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, William Folse, Chris Miceli, Michael Miceli, Joyce James, Andy Bursavich

**Client Attendees:** Joyce James

**Agenda:**

1. Decide presentation layout
2. Split work for presentation
3. Show Joyce current status
4. Ask Joyce questions relating to requirements

**Meeting Summary:**

We used Google Docs to establish a presentation. Joyce directed our future work on the website and functionality required. Joyce clarified some vague requirements.

**Date:** 10/18/2009

**Start Time:** 6:00pm

**End Time:** 7:30pm

**Location:** East Campus Apartment Activity Center

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, William Folse, Chris Miceli, Michael Miceli, Andy Bursavich

**Client Attendees:** n/a

**Agenda:**

1. Decide website layout
2. Learn visual basic
3. Learn visual studio

**Meeting Summary:**

Justin demonstrated visual studio ASP, and visual basic programming capabilities. Andy went over views on website layout.

**Date:** 10/25/2009

**Start Time:** 6:00pm

**End Time:** 7:30pm

**Location:** East Campus Apartment Activity Center

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, William Folse, Chris Miceli, Michael Miceli, Andy Bursavich

**Client Attendees:** n/a

**Agenda:**

- VI. Debug current problems
- VII. Demonstrate Microsoft SourceSafe
- VIII. Decide next features to implement

- IX. Ask each other questions we may have
- X. resolve final database structure

**Meeting Summary:**

We showed each other current progress utilizing Justin's microsoft setup. We learned how to commit code and remotely work on project.

**Date:** 11/19/2009

**Start Time:** 6:00pm

**End Time:** 8:00pm

**Location:** Chris and Michael's apartment

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, William Folse, Chris Miceli, Michael Miceli, Andy Bursavich

**Client Attendees:** Joyce James

**Agenda:**

1. Demo webiste to Joyce
2. Ask any changes
3. Clarify functionality desired
4. Establish unified interface that Joyce desires

**Meeting Summary:**

Presented Joyce current beta version of project. She loved what she saw so much, she ate pork rinds. We clarified naming conventions used throughout the website. We clarified decisions made in the database to match actually

**Date:** 11/21/2009

**Start Time:** 12:00pm

**End Time:** 2:30pm

**Location:** Chris and Michael's apartment

**Client:** Joyce James (UREC)

**Group Attendees:** Justin Farr, William Folse, Chris Miceli, Michael Miceli, Andy Bursavich

**Client Attendees:** n/a

**Agenda:**

1. Prepare final presentation
2. Split workload to finish project
3. Split workload to finish presentation
4. Split workload to finish required documents

**Meeting Summary:**

We established a new presentation using Google Docs. We finished some required documents. Debugged some visual basic peculiarities. Finished implementing most stored procedures.