# Team Introduction

Our team members are:

* Austin Pagano (apagano1@umbc.edu), programmer
* Stephen Avrick (savrick1@gmail.com), programmer
* Michael Leung (leumi1@umbc.edu), programmer

# Project Location

The project is located at http://userpages.umbc.edu/~leumi1/scripting\_languages/proj2/azimuth/home.php.

# Project Description

The code already contained checks for math and science requirements, and the PHP and SQL table definitions were fully commented when we were given the project. Whoever originally created this wanted to make a landmark work.

# What We Added

Fortunately, we did have work to do thanks to the requirement that Javascript be used. We moved the validations and submissions into an active page via JQuery.

# What We Improved

By moving the validation and submissions into JQuery instead of just PHP, we were able to make the project more responsive; the application has fewer discrete pages for the user to navigate through, and the program’s path of execution is more obvious.

# Database Setup

To import the tables, we used phpMyAdmin with the .SQL files stored in our “docs” folder. With the tables initialized, we then changed the database user and password in the courses.php and student.php files.

# Database Dump

Database dump follows as a series of .sql files:

## Courses

-- phpMyAdmin SQL Dump

-- version 4.0.10.15

-- http://www.phpmyadmin.net

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-- Host: studentdb-maria.gl.umbc.edu

-- Generation Time: Apr 14, 2016 at 04:52 PM

-- Server version: 10.0.24-MariaDB-wsrep

-- PHP Version: 5.4.44

SET SQL\_MODE = "NO\_AUTO\_VALUE\_ON\_ZERO";

SET time\_zone = "+00:00";

/\*!40101 SET @OLD\_CHARACTER\_SET\_CLIENT=@@CHARACTER\_SET\_CLIENT \*/;

/\*!40101 SET @OLD\_CHARACTER\_SET\_RESULTS=@@CHARACTER\_SET\_RESULTS \*/;

/\*!40101 SET @OLD\_COLLATION\_CONNECTION=@@COLLATION\_CONNECTION \*/;

/\*!40101 SET NAMES utf8 \*/;

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-- Database: `XX`

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-- Table structure for table `Courses`

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CREATE TABLE IF NOT EXISTS `Courses` (

`ID` tinyint(4) NOT NULL AUTO\_INCREMENT COMMENT 'Unique ID for each course in table (auto-increments)',

`Subject` varchar(4) NOT NULL DEFAULT 'CMSC' COMMENT '4 letter char tag indicating subject area',

`Course` text NOT NULL COMMENT 'Course title according to UMBC course catalog',

`Number` smallint(6) NOT NULL COMMENT 'Course Number',

`Required` tinyint(4) NOT NULL DEFAULT '0' COMMENT 'Boolean value indicating whether class is required for CMSC major (''0'' means ''not required'')',

`Credits` tinyint(4) NOT NULL DEFAULT '3' COMMENT 'Number of credits accredited to the course',

`Prerequisites` tinyint(4) NOT NULL DEFAULT '0' COMMENT 'Number of prerequisites associated with the course',

`Description` text NOT NULL COMMENT 'Description for the course according to the UMBC course catalog',

`prereq1` tinyint(4) DEFAULT NULL COMMENT 'Course ID associated with first prerequisite',

`prereq2` tinyint(4) DEFAULT NULL COMMENT 'Course ID associated with second prerequisite',

`prereq3` tinyint(4) DEFAULT NULL COMMENT 'Course ID associated with third prerequisite',

`prereq4` tinyint(4) DEFAULT NULL COMMENT 'Course ID associated with fourth prerequisite',

PRIMARY KEY (`ID`),

UNIQUE KEY `ID` (`ID`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO\_INCREMENT=73 ;

/\*!40101 SET CHARACTER\_SET\_CLIENT=@OLD\_CHARACTER\_SET\_CLIENT \*/;

/\*!40101 SET CHARACTER\_SET\_RESULTS=@OLD\_CHARACTER\_SET\_RESULTS \*/;

/\*!40101 SET COLLATION\_CONNECTION=@OLD\_COLLATION\_CONNECTION \*/;

## Student Info

-- phpMyAdmin SQL Dump

-- version 4.0.10.15

-- http://www.phpmyadmin.net

--

-- Host: studentdb-maria.gl.umbc.edu

-- Generation Time: Apr 14, 2016 at 04:54 PM

-- Server version: 10.0.24-MariaDB-wsrep

-- PHP Version: 5.4.44

SET SQL\_MODE = "NO\_AUTO\_VALUE\_ON\_ZERO";

SET time\_zone = "+00:00";

/\*!40101 SET @OLD\_CHARACTER\_SET\_CLIENT=@@CHARACTER\_SET\_CLIENT \*/;

/\*!40101 SET @OLD\_CHARACTER\_SET\_RESULTS=@@CHARACTER\_SET\_RESULTS \*/;

/\*!40101 SET @OLD\_COLLATION\_CONNECTION=@@COLLATION\_CONNECTION \*/;

/\*!40101 SET NAMES utf8 \*/;

--

-- Database: `XX`

--

-- --------------------------------------------------------

--

-- Table structure for table `StudentInfo`

--

CREATE TABLE IF NOT EXISTS `StudentInfo` (

`#` int(5) NOT NULL AUTO\_INCREMENT COMMENT 'Unique ID for each student entry (auto-increments)',

`StudentName` text NOT NULL COMMENT 'Name submitted to be associated with student',

`UMBCID` varchar(7) NOT NULL COMMENT 'UMBC ID associated with student',

`Email` text NOT NULL COMMENT 'UMBC email of the student',

`1` tinyint(1) NOT NULL DEFAULT '0' COMMENT 'Boolean value indicating whether the student has passed this unique course ID (''0'' means ''not passed'')',

`2` tinyint(1) NOT NULL DEFAULT '0',

`3` tinyint(1) NOT NULL DEFAULT '0',

`4` tinyint(1) NOT NULL DEFAULT '0',

`5` tinyint(1) NOT NULL DEFAULT '0',

`6` tinyint(1) NOT NULL DEFAULT '0',

`7` tinyint(1) NOT NULL DEFAULT '0',

`8` tinyint(1) NOT NULL DEFAULT '0',

`9` tinyint(1) NOT NULL DEFAULT '0',

`10` tinyint(1) NOT NULL DEFAULT '0',

`11` tinyint(1) NOT NULL DEFAULT '0',

`12` tinyint(1) NOT NULL DEFAULT '0',

`13` tinyint(1) NOT NULL DEFAULT '0',

`14` tinyint(1) NOT NULL DEFAULT '0',

`15` tinyint(1) NOT NULL DEFAULT '0',

`16` tinyint(1) NOT NULL DEFAULT '0',

`17` tinyint(1) NOT NULL DEFAULT '0',

`18` tinyint(1) NOT NULL DEFAULT '0',

`19` tinyint(1) NOT NULL DEFAULT '0',

`20` tinyint(1) NOT NULL DEFAULT '0',

`21` tinyint(1) NOT NULL DEFAULT '0',

`22` tinyint(1) NOT NULL DEFAULT '0',

`23` tinyint(1) NOT NULL DEFAULT '0',

`24` tinyint(1) NOT NULL DEFAULT '0',

`25` tinyint(1) NOT NULL DEFAULT '0',

`26` tinyint(1) NOT NULL DEFAULT '0',

`27` tinyint(1) NOT NULL DEFAULT '0',

`28` tinyint(1) NOT NULL DEFAULT '0',

`29` tinyint(1) NOT NULL DEFAULT '0',

`30` tinyint(1) NOT NULL DEFAULT '0',

`31` tinyint(1) NOT NULL DEFAULT '0',

`32` tinyint(1) NOT NULL DEFAULT '0',

`33` tinyint(1) NOT NULL DEFAULT '0',

`34` tinyint(1) NOT NULL DEFAULT '0',

`35` tinyint(1) NOT NULL DEFAULT '0',

`36` tinyint(1) NOT NULL DEFAULT '0',

`37` tinyint(1) NOT NULL DEFAULT '0',

`38` tinyint(1) NOT NULL DEFAULT '0',

`39` tinyint(1) NOT NULL DEFAULT '0',

`40` tinyint(1) NOT NULL DEFAULT '0',

`41` tinyint(1) NOT NULL DEFAULT '0',

`42` tinyint(1) NOT NULL DEFAULT '0',

`43` tinyint(1) NOT NULL DEFAULT '0',

`44` tinyint(1) NOT NULL DEFAULT '0',

`45` tinyint(1) NOT NULL DEFAULT '0',

`46` tinyint(1) NOT NULL DEFAULT '0',

`47` tinyint(1) NOT NULL DEFAULT '0',

`48` tinyint(1) NOT NULL DEFAULT '0',

`49` tinyint(1) NOT NULL DEFAULT '0',

`50` tinyint(1) NOT NULL DEFAULT '0',

`51` tinyint(1) NOT NULL DEFAULT '0',

`52` tinyint(1) NOT NULL DEFAULT '0',

`53` tinyint(1) NOT NULL DEFAULT '0',

`54` tinyint(1) NOT NULL DEFAULT '0',

`55` tinyint(1) NOT NULL DEFAULT '0',

`56` tinyint(1) NOT NULL DEFAULT '0',

`57` tinyint(1) NOT NULL DEFAULT '0',

`58` tinyint(1) NOT NULL DEFAULT '0',

`59` tinyint(1) NOT NULL DEFAULT '0',

`60` tinyint(1) NOT NULL DEFAULT '0',

`61` tinyint(1) NOT NULL DEFAULT '0',

`62` tinyint(1) NOT NULL DEFAULT '0',

`63` tinyint(1) NOT NULL DEFAULT '0',

`64` tinyint(1) NOT NULL DEFAULT '0',

`65` tinyint(1) NOT NULL DEFAULT '0',

`66` tinyint(1) NOT NULL DEFAULT '0',

`67` tinyint(1) NOT NULL DEFAULT '0',

`68` tinyint(1) NOT NULL DEFAULT '0',

`69` tinyint(1) NOT NULL DEFAULT '0',

`70` tinyint(1) NOT NULL DEFAULT '0',

`71` tinyint(1) NOT NULL DEFAULT '0',

`72` tinyint(1) NOT NULL DEFAULT '0',

PRIMARY KEY (`#`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO\_INCREMENT=10 ;

/\*!40101 SET CHARACTER\_SET\_CLIENT=@OLD\_CHARACTER\_SET\_CLIENT \*/;

/\*!40101 SET CHARACTER\_SET\_RESULTS=@OLD\_CHARACTER\_SET\_RESULTS \*/;

/\*!40101 SET COLLATION\_CONNECTION=@OLD\_COLLATION\_CONNECTION \*/;

## Suggestions

-- phpMyAdmin SQL Dump

-- version 4.0.10.15

-- http://www.phpmyadmin.net

--

-- Host: studentdb-maria.gl.umbc.edu

-- Generation Time: Apr 14, 2016 at 04:54 PM

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/\*!40101 SET @OLD\_CHARACTER\_SET\_RESULTS=@@CHARACTER\_SET\_RESULTS \*/;

/\*!40101 SET @OLD\_COLLATION\_CONNECTION=@@COLLATION\_CONNECTION \*/;

/\*!40101 SET NAMES utf8 \*/;

--

-- Database: `XX`

--

-- --------------------------------------------------------

--

-- Table structure for table `Suggestions`

--

CREATE TABLE IF NOT EXISTS `Suggestions` (

`#` int(5) NOT NULL AUTO\_INCREMENT,

`StudentName` text NOT NULL,

`UMBCID` varchar(7) NOT NULL,

`Email` text NOT NULL,

`1` tinyint(1) NOT NULL DEFAULT '0',

`2` tinyint(1) NOT NULL DEFAULT '0',

`3` tinyint(1) NOT NULL DEFAULT '0',

`4` tinyint(1) NOT NULL DEFAULT '0',

`5` tinyint(1) NOT NULL DEFAULT '0',

`6` tinyint(1) NOT NULL DEFAULT '0',

`7` tinyint(1) NOT NULL DEFAULT '0',

`8` tinyint(1) NOT NULL DEFAULT '0',

`9` tinyint(1) NOT NULL DEFAULT '0',

`10` tinyint(1) NOT NULL DEFAULT '0',

`11` tinyint(1) NOT NULL DEFAULT '0',

`12` tinyint(1) NOT NULL DEFAULT '0',

`13` tinyint(1) NOT NULL DEFAULT '0',

`14` tinyint(1) NOT NULL DEFAULT '0',

`15` tinyint(1) NOT NULL DEFAULT '0',

`16` tinyint(1) NOT NULL DEFAULT '0',

`17` tinyint(1) NOT NULL DEFAULT '0',

`18` tinyint(1) NOT NULL DEFAULT '0',

`19` tinyint(1) NOT NULL DEFAULT '0',

`20` tinyint(1) NOT NULL DEFAULT '0',

`21` tinyint(1) NOT NULL DEFAULT '0',

`22` tinyint(1) NOT NULL DEFAULT '0',

`23` tinyint(1) NOT NULL DEFAULT '0',

`24` tinyint(1) NOT NULL DEFAULT '0',

`25` tinyint(1) NOT NULL DEFAULT '0',

`26` tinyint(1) NOT NULL DEFAULT '0',

`27` tinyint(1) NOT NULL DEFAULT '0',

`28` tinyint(1) NOT NULL DEFAULT '0',

`29` tinyint(1) NOT NULL DEFAULT '0',

`30` tinyint(1) NOT NULL DEFAULT '0',

`31` tinyint(1) NOT NULL DEFAULT '0',

`32` tinyint(1) NOT NULL DEFAULT '0',

`33` tinyint(1) NOT NULL DEFAULT '0',

`34` tinyint(1) NOT NULL DEFAULT '0',

`35` tinyint(1) NOT NULL DEFAULT '0',

`36` tinyint(1) NOT NULL DEFAULT '0',

`37` tinyint(1) NOT NULL DEFAULT '0',

`38` tinyint(1) NOT NULL DEFAULT '0',

`39` tinyint(1) NOT NULL DEFAULT '0',

`40` tinyint(1) NOT NULL DEFAULT '0',

`41` tinyint(1) NOT NULL DEFAULT '0',

`42` tinyint(1) NOT NULL DEFAULT '0',

`43` tinyint(1) NOT NULL DEFAULT '0',

`44` tinyint(1) NOT NULL DEFAULT '0',

`45` tinyint(1) NOT NULL DEFAULT '0',

`46` tinyint(1) NOT NULL DEFAULT '0',

`47` tinyint(1) NOT NULL DEFAULT '0',

`48` tinyint(1) NOT NULL DEFAULT '0',

`49` tinyint(1) NOT NULL DEFAULT '0',

`50` tinyint(1) NOT NULL DEFAULT '0',

`51` tinyint(1) NOT NULL DEFAULT '0',

`52` tinyint(1) NOT NULL DEFAULT '0',

`53` tinyint(1) NOT NULL DEFAULT '0',

`54` tinyint(1) NOT NULL DEFAULT '0',

`55` tinyint(1) NOT NULL DEFAULT '0',

`56` tinyint(1) NOT NULL DEFAULT '0',

`57` tinyint(1) NOT NULL DEFAULT '0',

`58` tinyint(1) NOT NULL DEFAULT '0',

`59` tinyint(1) NOT NULL DEFAULT '0',

`60` tinyint(1) NOT NULL DEFAULT '0',

`61` tinyint(1) NOT NULL DEFAULT '0',

`62` tinyint(1) NOT NULL DEFAULT '0',

`63` tinyint(1) NOT NULL DEFAULT '0',

`64` tinyint(1) NOT NULL DEFAULT '0',

`65` tinyint(1) NOT NULL DEFAULT '0',

`66` tinyint(1) NOT NULL DEFAULT '0',

`67` tinyint(1) NOT NULL DEFAULT '0',

`68` tinyint(1) NOT NULL DEFAULT '0',

`69` tinyint(1) NOT NULL DEFAULT '0',

`70` tinyint(1) NOT NULL DEFAULT '0',

`71` tinyint(1) NOT NULL DEFAULT '0',

`72` tinyint(1) NOT NULL DEFAULT '0',

PRIMARY KEY (`#`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO\_INCREMENT=10 ;

/\*!40101 SET CHARACTER\_SET\_CLIENT=@OLD\_CHARACTER\_SET\_CLIENT \*/;

/\*!40101 SET CHARACTER\_SET\_RESULTS=@OLD\_CHARACTER\_SET\_RESULTS \*/;

/\*!40101 SET COLLATION\_CONNECTION=@OLD\_COLLATION\_CONNECTION \*/;

# Languages Used

The original implementer used PHP 4 for all active pages; there was no Javascript of any kind. We used jQuery to add our active validation.

# Slick Sheet : screen shots of features we added C:\Users\apaga_000\Downloads\ScreenShot1.pngC:\Users\apaga_000\Downloads\ScreenShot2.pngC:\Users\apaga_000\Downloads\ScreenShot4.pngC:\Users\apaga_000\Downloads\ScreenShot3.png