

# CCSE PROJECT MANAGEMENT SYSTEM

## **MILESTONE 1 Report**

IT 4983 : IT CAPSTONE SPRING 2020

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# Agenda For Milestone 1 Report

- ◇ Project Summary
- ◇ Milestone Assessment
- ◇ Gantt Chart
- ◇ Challenges
- ◇ Planning for Phase II deliverables

# Project Summary I

The team is wrapping up Phase I of the project. The project sponsor has been interviewed, the requirements researched and gathered. Planning and designing the database has been completed. The team is ready to move into Phase II, where will create the GUI , the database and the corresponding SQL scripts. The final deliverables for the CCSE PMO PROJECT are:

- ◆ Project Plan
- ◆ Database design
- ◆ Project management system database
- ◆ Graphical User Interface
- ◆ Documentation

# Project Summary II: Accomplishments

- ◆ Interviewed project sponsors: Dawn Tatum, KSU Industry Liaison and Adriana Clark
- ◆ Researched Project Requirements
- ◆ Created Project Plan
- ◆ Implemented database planning and design
- ◆ Began database creation



# Milestone 1: Assessment

- ◆ Initial interviews with the Project Sponsor- completed
- ◆ Research and Requirements gathering - completed
- ◆ Database planning and design - in progress
- ◆ Database creation - in progress
- ◆ WBS and Gantt Chart- completed
- ◆ Project Plan - completed

# Interview Q&A

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- Are we allowed to use Microsoft Access to build the DB?
  - To what extent may we use the automated features of MS Access?  
Not sure about Microsoft Access being suitable – but certainly willing to be proven wrong. No technology is off limits except those that are cost prohibitive
  - Is there a requirement for how much of the DB is hard coded?  
No, but if done in MA, keep in mind there may be a requirement for data being imported from other systems.
- Which roles and what kind of access level is expected for each role in the DB?
  - How many different roles are expected in the DB?  
There should be only 3 roles currently admin, user (input/edit their own data, delete their own data), viewer (for querying, reporting)
  - How is the KSU system laid out in regards to access? Do we need to worry about the users/access levels of the current ADDS environment in use by KSU?  
At some point (beyond the scope of this capstone), the decision will be made whether the system will be part of the data center for CCSE only or at the KSU level (which would also include incorporating DUO)
  - Is there an expectation of Authentication for users accessing the Database? If so, are there specific requirements for the authentication of users using the database?  
During this phase, a password should be required (opt: to incorporate TFA)
- How should the reports be formatted and what parameters should they fit?
  - When is the ability to make reports actually due? With the first deliverable or as a final deliverable?

Database creation and Signon capability by 2<sup>nd</sup> milestone (around midterm). Reporting capability by final deliverable (screen only – print to pdf) Formatting will be based on information requested

- Are there any specific filters, settings, or Search criteria requested for reports?  
Some possibilities are “All Projects by Industry Partner Name”, “All Projects by Faculty Name”, “All Projects for CS Faculty”, etc. then subsets: All capstone projects by ....., all research projects by .... etc.

- I have been told there will be a sample of the data that will be stored? When/where can we see this data? There is not a sample, but you can take the capstone projects for this semester, which will use the fields on the capstone project request form and I can get the spreadsheet of projects from the IT department since they have them stored that way.
  - Is there a maximum table size per table?  
No, just manageable (this may come up in testing) but I do not foresee a problem.
  - Is there a maximum number of tables for the DB?  
No, I do not imagine you will have so many that you start to encounter problems for joins/unions

Should be available on a Windows system

- Where is our final project going to be hosted in the KSU environment after hand off?  
Yes, but may be in CCSE Data Center

- What exactly is expected from the documentation for the second phase team?
  - Diagrams? Yes

- Tests cases? Yes
- Pictures? Screenshots are always good in documentation

- Are we expected to produce a system requirement document?  
You are required to create requirements documents to support your design
- Should these documents primarily be recordings of the actions, tools, and methods used to create our project?  
Data diagrams and Design documents necessary

- Do we schedule the milestone presentations or are they on the due date?
  - Can we schedule these during our meeting? These can be scheduled with Adriana Clark

- What exactly is expected by each deliverable? We are of the understanding that running reports and entering data are Final Deliverables, but the DB itself is due in February. Is this correct? There are usually 3 Milestones 1) Project Plan/Design 2) Prototype – limited functionality, 3) Final Product – additional functionality/Documentation/System

- How should we present the database itself during the first meeting?
  - Is there a preferred method for displaying the database?  
Not sure what you are asking
  - Are the milestone presentations required to be in person? Can be webex/skype

- Are there any request for buttons, functions, or other specific layout instructions for the GUI? These are all part of your design – Make your GUI something simple and usable

Screen 1 of 4

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- Are there any questions that where not asked but should be?
  - Do you have any information to give us that is pertinent that we have not asked about? Use the items in the CCSE Capstone Project Proposal Request form for a start on your design. Know that there are at least 3 types of projects: Capstone, Research, Center

End of document

Screen 2 of 4

# RBAC Research

Researched articles regarding RBAC and SQL.

**Custom Roles Based Access Control (RBAC) in ASP.NET MVC Applications - Part 1 (Framework Introduction)**

<https://www.codeproject.com/Articles/875547/Custom-Roles-Based-Access-Control-RBAC-in-ASP-NET>

**Custom Roles Based Access Control (RBAC) in ASP.NET MVC Applications - Part 2 (Role Based Reporting)**

<https://www.codeproject.com/Articles/1004208/Custom-Roles-Based-Access-Control-RBAC-in-ASP-NE-2>

**How to Build Role-Based Access Control in SQL Published Aug 16, 2006 in Databases, Security**

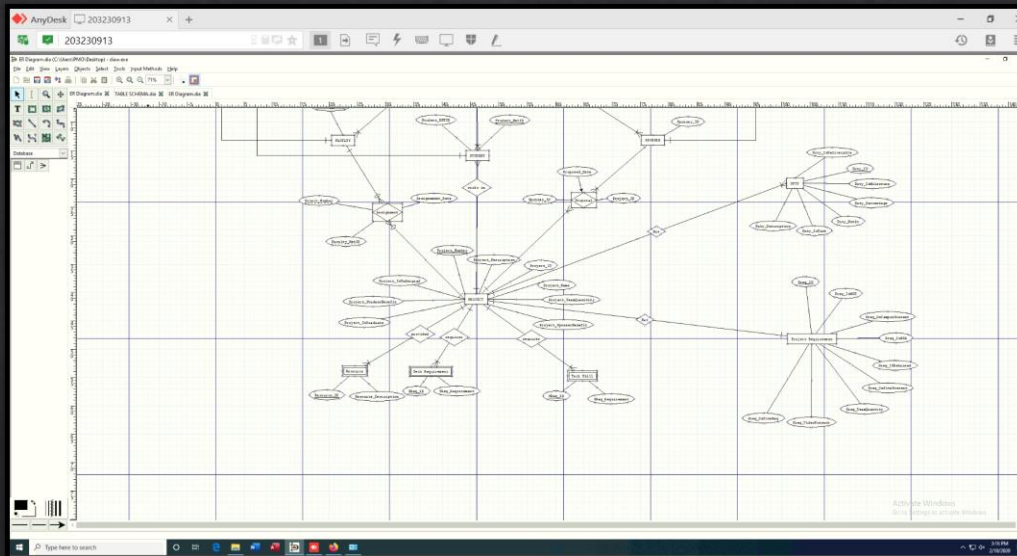
<https://www.xaprb.com/blog/2006/08/16/how-to-build-role-based-access-control-in-sql/>

**Database-Level Roles 07/11/2019**

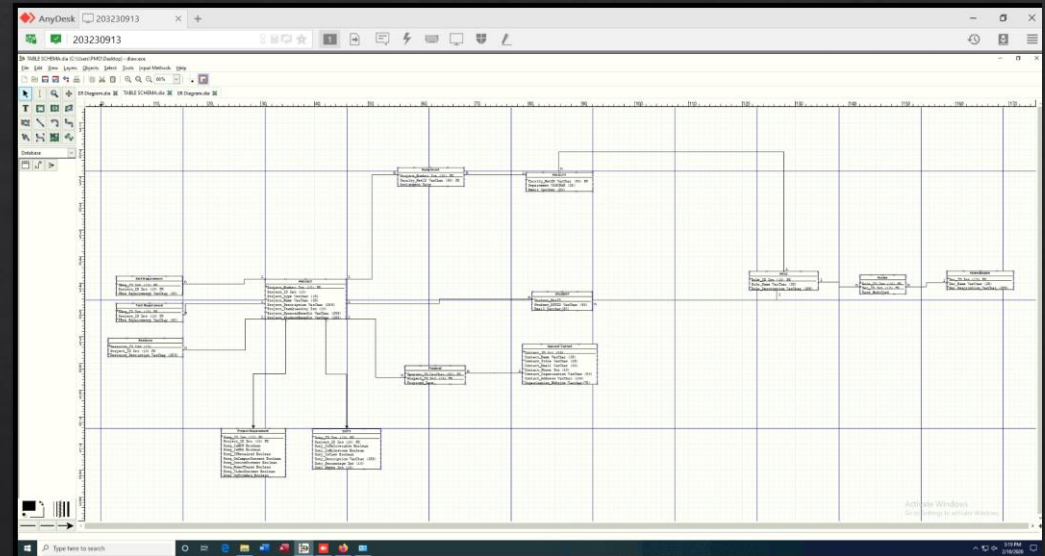
<https://docs.microsoft.com/en-us/sql/relational-databases/security/authentication-access/database-level-roles?view=sql-server-ver15>

# Database Planning and Design

## Entity Relationship Diagram

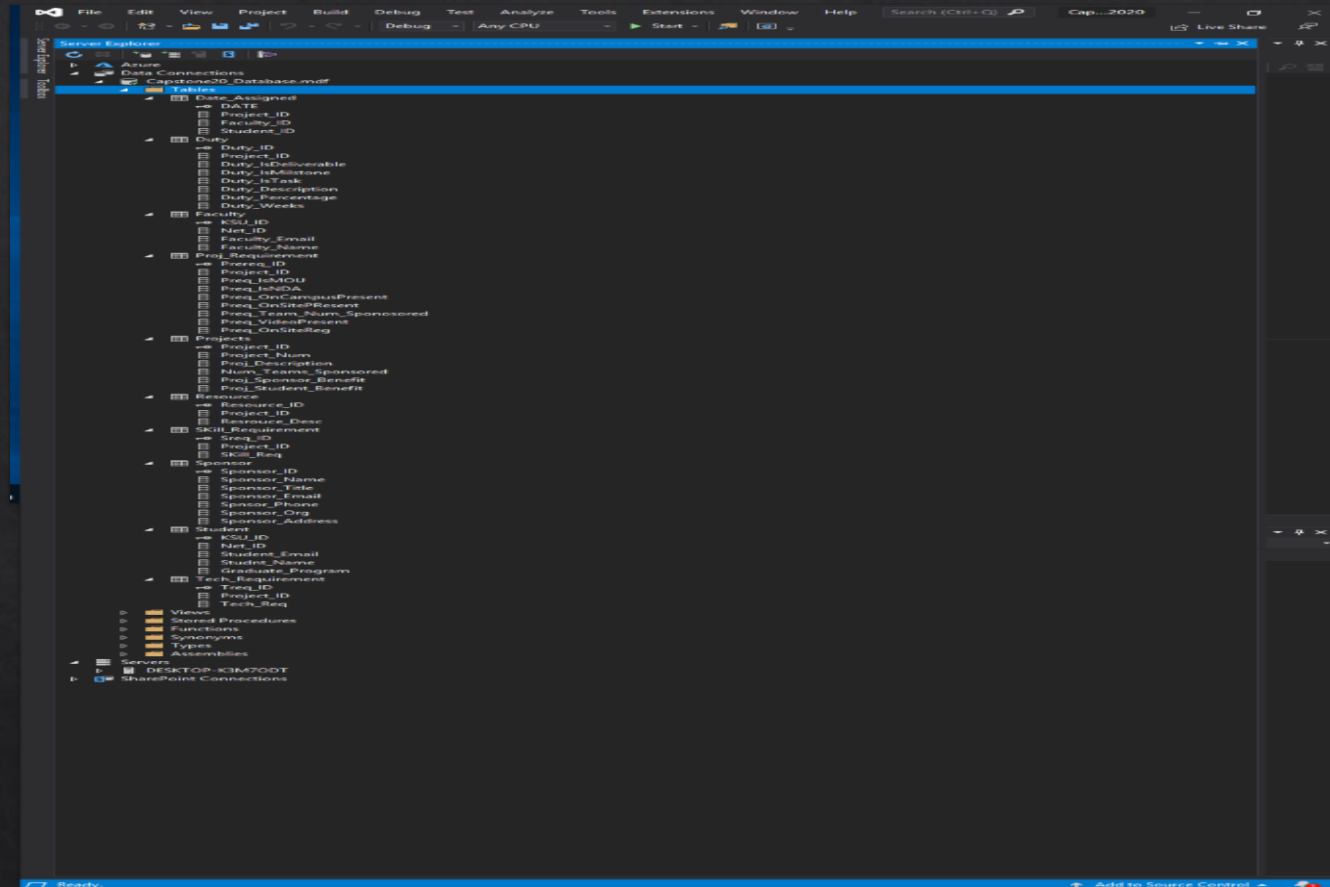


## Table Schema

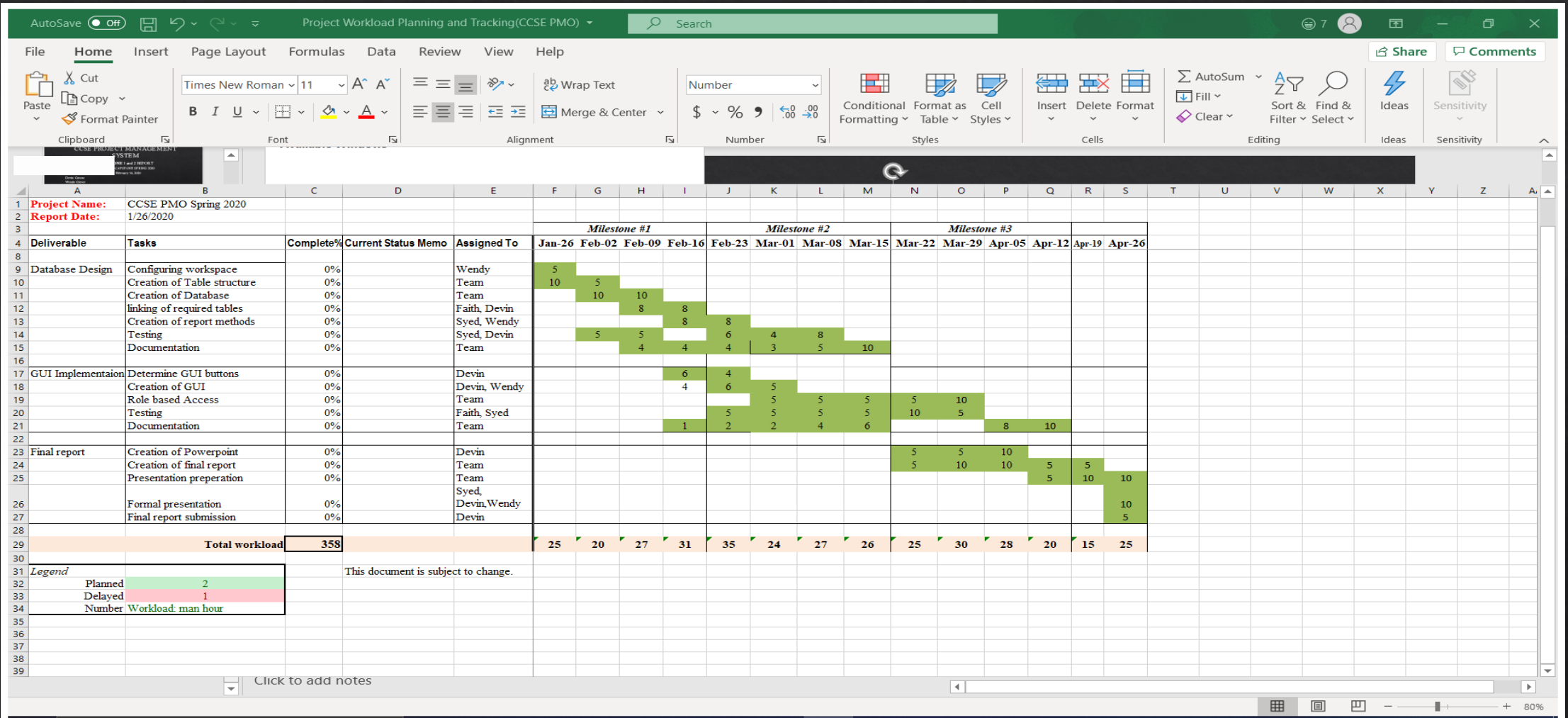




# Database Creation



# Gantt Chart



# Project Experience

## ◆ Challenges:

- ◆ Relearning Visual Studio
- ◆ Learning Role Based Access concepts in SQL
- ◆ Organizing projects by type without an excessive amount of tables
- ◆ Table Schema
- ◆ Integrating information brought in after Table Schema completion
- ◆ User Research

## ◆ Lessons:

- ◆ Creation of Database using Visual Studio
- ◆ Basic Roles Based Access in SQL

# Milestone 2: Phase II Planning

- ◆ Update ERD and Table Schema
- ◆ Create Database
- ◆ Create GUI
- ◆ Create SQL Queries
- ◆ Implement Testing
- ◆ Documentation
- ◆ Prepare Milestone 2 presentation and report



# Other Issues

- ◇ Creating workspace – solved
- ◇ Selection of remote access software – solved
- ◇ Distribution of roles – In Progress