**Due Date**: **June 30th, 2017**

You are to create a Database Management System which must have the following **tables** and **fields**:

**Student**:

Id
First Name
M.I.
Last name
ID "**W#**"
DOB (**MM**/**DD**/**YY**)
Major
Degree Program
Graduate/Undergraduate

**Course**:

Id
Abbreviation
Name
Number
Description
Credit Hours

**Requirements for Project Part 1:**

- Your **DBMS** must be able to run the following **SQL** queries:
  - **CREATE TABLE** <table-name> (<column-name> <datatype>, …)
  - **INSERT INTO** <table-name> (<column-names>) **VALUES** (<values>)
  - **DELETE** <column-names> **FROM** <table-name> **WHERE** <column> = <value>
  - **SELECT** <column-names> **FROM** <table-name> **WHERE** <column-name> = <value>

- Create a **text** file or **XML** file that can used seed the required data into your database.
- Enforce datatype constraints when inserting data.
- List the names of all **CMPS** students.
- List all course names and numbers for courses with more than **3 credit hours**.
- Delete all Courses with a Course number less than **200**.

**Specifications:**

- Handle all errors and exceptions from user input.
- You can include the required queries as part of the seed script, and demo the results, provided you print out changes to tables where it is relevant to do so.
- You can use **C#**, **Java**, or **JavaScript**, but keep in mind that your work must be demo-able. It can be a console application, or **GUI** optional.

- For the next iteration, you will be changing data, using chained conditions, **foreign keys**, **joins**, **aggregate functions**, and executing addition queries on result sets. These queries will use at least two new tables: **Semester** and **Courses Taken**.

**Important Suggestions:**

- Design your full system as fully as you can before coding. It will make it much easier to expand on the next half of the assignment.
- Tuples and Linked Lists are great data structures for this assignment. You can use these to build your base objects.
- When selecting or deleting an entire row (i.e. all the columns for one row), you can add the asterisk as an alternative to listing all the column names.
- You may use source control like **GitHub** or **Bitbucket** to share your project as a group. If you create a repository, invite me as a collaborator.
- Allocate your work efficiently to get this assignment done on time.

**Important Notes**:

- You will give a demo of the database and the queries.
    - A team member demo should suffice for the whole group.
    - I am available on campus on **Tuesdays** so the team member demoing the project should contact the Professor to assign a time slot for the project demonstration.
    - Students must inform the Professor immediately who the team members are per group.
- Do not procrastinate and remember that **Google** is your friend.