# CLEVELAND STATE UNIVERSITY Monte Ahuja College of Business Administration Department of Information Systems

## IST 634 Enterprise Databases – Fall 2023 Group Project

**Purpose** – The group project gives you an opportunity to apply what you have learned in the course and extend on it. The project is to be done in pairs in order to allow you to explore ideas together. You will demonstrate ability to articulate the components of a data-based application, as well as a fitting approach for their implementation. You will then share your experience in a presentation in class.

#### **Requirements** – The project consists of five major elements

- 1) Finding an interesting dataset to work with, and an interesting application to develop for that dataset
- 2) Building different queries/stored procedures to work with your chosen dataset to allow for the implementation of your application. You can have your DBMS relational or other.
- 3) Be able to demonstrate the workings of the implementations of (2), and how these implementations support the interesting functionality of point (1) above.
- 4) Find an appropriate framework for implementing your idea (such as web embedded SQL, XAMPP, Entity Farmwork, Core IoS, and be able to explain about fundamental steps to work with it in your application.
- 5) Build a skeleton of your application -you do not need to have the full implementation your implemented application will demonstrate the work with your queries/sorted procedures of point (2) above.

### **Project Description Paper:**

You will need to submit a concise summary of your work. The summery should include:

- 1) A description of your application idea and data and its source (up to half a page)
- 2) The different queries and stored procedures you created, what they do and how they are used in your application to achieve the application purpose
- 3) A concise description of the farmwork you used (up to half a page)
- 4) Code snippets demonstrating how you used your application. (Be concise! Show major points)

**Presentation**: Projects will be presented during the last 2 weeks of the semester. You will have 15-20 minutes. Your presentation must include an explanation of the framework you used, queries and implementation points, and a demonstration of the tool (hopefully, a demonstration of your project). Attendance at all days of presentation is *required*.

**Grading**: Project description: 20 points. Presentation: 45 points.

#### **Grading Rubric**

Functionality (5): your project includes interesting application of data to support some unique functionality

**Data** (3): Data is interesting and not conventional

**DBMS application framework (5):** (New DBMS- 2; New programming framework/language/approach- 3; non-relational database bonus 3)

Explanation about programming framework and the way to use it for your application (4)

Explanation of DBMS queries and stored procedures and what they achieve (5)

**Demo of work (8):** Live Demo (8)/ Recorded only – (max. 6). No working demo – (max 3)

Length of presentation (8): Should be 15-20 minutes for 8 pts.

Communication effectiveness (7): Tone of voice, volume, speed, eye contact, not reading notes, etc