**IFT458 – Project Deliverable 1B**

**Project Component:** Database design and Implementation

Introduction

You’re implementing a backend DB to the website you created PD1.

For your problem definition and corresponding spreadsheet, you are to:

* Develop a Relational diagram with all the constraints and provide a table showing the data types, such as string, number, etc. Free diagramming tools (feel free to use and/or share any other that you find) are SmartDraw, draw.io, erdplus, etc.
* Write an SQL scripts to implement your Relational diagram in MySQL database.

Problem Definitions

IMPACT is a non-profit organization with the officers, volunteers and events.

An Officer is identified by a job title (example: Director, Manager…) and has a unique ID and respective attributes (names, age, address, description of the officer’s responsibilities). For each Officer, we record the office, the start and end dates at an office if applicable.

Volunteers also have the same attributes as Officer but without the job code, date of office…

IMPACT provides a certain number of voluntary events. Each volunteer event is assigned a unique code. As part of the organization registration, we record the name of the event, officer in charge of event, description (mission and objectives), date of volunteer, how many attending, address, and phone number.

When someone joins a volunteer event, the DB can record the voluntary event(s) of interest, request date, end date.

Deliverables

You are to upload the following items to Canvas:

1. A project report that includes

* Introduction: provide a short background to the problem, the problem statement, your approach to solving the problem, and the sequence of presentation (layout of your report).
* Description of your work (what you did and how you did it): include screenshots to illustrate your narrative. Also, include your Relational diagrams here, and the tool(s) used to generate these diagrams. ***Hand-drawn diagrams are not accepted***.
* There are many free diagramming tools available such as *SmartDraw* ([www.smartdraw.com](http://www.smartdraw.com)), and *draw.io*
* User manual: Provide a detailed description of how a non-technical user can take your zip file and get it up and running
* Conclusion: Indicate what you achieved, what was learned, the challenges faced, and how they were overcome, and how your work can be improved

1. A zip file of all your source code

Rubric

Complete Relational Diagram with constraints: 30 pts

Description of the work: 10 pts

SQL script: 40 pts

User Manual: 10 pts

Introduction: 5 pts

Conclusion: 1pts \* 5 = 5 pts