# Project #1 (Milestone 4)

CSC 261/461 (Database Systems), Spring 2018, University of Rochester Due Date: 04/30/2018 (11:59 pm) Official due date. But, finish asap.

#### Introduction

This is the final milestone for this semester-long project (It's really due on the very last day of the semester)! This time, you will culminate your project with the semester-long learning. Remember the beginning of the semester, when most of you had a little knowledge about how to build a database and create a web-interface. As the end of the semester approaching, you probably are realizing how much you have learned in the process beginning with milestone 1 and ending with this last milestone. This is the time when you deliver what you had proposed in milestone 1. I believe that Milestone 1 had gone through many additions, modifications, corrections, and enhancements throughout the semester through rigorous analysis (ER diagram and BCNF decomposition) and enhancements and reached to the current stage. We have gone through all the steps required for designing a successful relational database, starting from requirement analysis to organizing the tables, creating relationships among tables, and refining (normalizing) the design. In this concluding milestone, you will deliver a full-fledged website that can interact with the underlying database system and perform necessary CRUD (create, read, update, delete) operations.

### **Build the complete website**

In milestone 3, you have provided us a few HTML files representing the forms. These forms did not necessarily communicate with the database. You have to make the necessary fixes to make these HTML files working. The report that you are going to submit should include only a single URL which takes us to the home page of your site. (Note, for a few of you, who are maintaining a different site for admin, you are allowed to submit two URLs.). From this homepage, there should be options to go to different pages. All the forms and reports (showing query results) should be working. Your website must validate input and report errors whenever necessary.

## **Project Report**

You report should contain the following components:

- Project Description: Give a short description of your project. Many of these components can be used from milestone 1 as it is.
- Contribution: Summerize how how your team has split the workload throughout the semester. Provide us a table containing four columns: Project Milestone, Team Member's Name, Contribution, Contribution % for that particular milestone.
  - (As we now know SQL, the primary key of the table is (project milestone, student's name)!!!)
- Summary: Summarize your learning from this project. Include which part was the most challenging to implement, and which part was most fun (yes, the same component might be both fun and challenging). Did you achieve whatever you planned in Project 1 Milestone 1. If you have drifted from the original plan, why did that happen? All we want to see is how your project got evolved over time.
- Future Works: How will you enhance your website if you get another semester? Note that this section is no excuse for submitting an incomplete website.

Save the report as project\_report.pdf.

#### **Submission instructions**

Your website must be hosted on betaweb server. Create a new directory milestone4. The directory should have two files, link.txt and project\_report.pdf. The file link.txt should contain the link(s) to the homepage. Create a tar file milestone4.tar from this directory.

```
mkdir milestone4
cp link.txt milestone4/
cp project_report.pdf milestone4/
tar -cvf milestone4.tar milestone4
```

Submit the tar file using the command:

```
~csc261/submit p1m4 milestone4.tar
```

You should get a feedback whether the submission is successful or not.

You may resubmit as many times as you like; however, only the latest submission (along with the timestamp) will be saved, and we will use your latest submission for grading your work. Submissions via email will not be accepted! No late submissions allowed.

You must adhere to the naming guideline to avoid losing points.

Note: As you will be quite busy with other projects towards the end of the semester, we strongly suggest that you finish Project 1 as early as possible. The due date should not make you wait for the last moment as there will be other projects due around that time (along with term papers and the final exam). You need to demo your project to the Grad TA during reading period. We will make an announcement later to schedule those meetings.

Final Note: We always give bonus points to the best submissions. So, give your best!