

Course Project

Introduction to Database Management

CS348 Spring 2020

Announcements

- **Project details** are posted on Learn
 - Group of size 4-5
- Reading materials
 - DB2atUW-Tutorial
 - ProjectNote-DB2
 - ProjectNote-GCP (Google Cloud Platform)
 - ProjectNote-JDBC-DB2
- Database.zip
- codesample.zip

Outline

- Project Details
 - Admin: important dates, grading, teamwork, platform
 - Task overviews and milestones
- Project sample codes
 - JDBC and DB2 on school servers
 - PHP and MySQL on GPC

Platform

- DB2 on student.cs.uwaterloo.ca
- MySQL on cloud-based platforms
- Other platforms work too!

Task Overview

1. Pick an application
2. Design the database schema
3. Create sample database with a small dataset
4. Design a user-interface(UI)
5. Write SQL queries (for UI)
6. Choose a platform, ``hello world`` app
7. Prepare production dataset
8. Test SQL from task 5 over production dataset
9. Implement and debug the app and UI
10. Test your app on production dataset
11. Polish UI

Milestone 0, 06/04

Milestone 1, 06/16

Milestone 2, 07/14

Demo, 08/03-06

Submission – Milestone 0

- Due by Thur, June 04, 11pm
- Member.txt
 - Names
 - Effort and progress made by the member
- Report.pdf
 - Brief description of the application: e.g. user, dataset
 - Choice of platform and user interface
- Code.zip
 - README.txt: how to load your sample code to your db on your platform
 - Source code for your hello world type of app

Submission – Milestone 1

- Due by Tue, June 16, 11pm
- Member.txt
 - Names
 - Effort and progress made by the member to date
- Report.pdf
 - Brief description of the application: e.g. user, dataset
 - Plan to populate the database
 - Database schema: assumptions, E/R diagram, keys
 - Description of user interface
- Code.zip
 - README.txt: how to load your sample code to your db on your platform
 - File containing the SQL code
 - Testsample.sql and testsample.out(for task 5)
 - Complete a simple but working app (1-2 simple tasks)
 - Code for obtaining real data, if applicable (for task 7)

Submission – Milestone 2

- Due by Tue, July 14, 11pm
- Member.txt
 - Names
 - Effort and progress made by the member since last milestone
- Report.pdf (highlight new/changes)
 - Description of the application: e.g. user, dataset
 - Plan to populate the database
 - Database schema: assumptions, E/R diagram, keys
 - Description of user interface
 - Features for performance, e.g. indexes
- Code.zip
 - README.txt: how to load your production code to your db on your platform, how to get production dataset
 - File containing the SQL code for production
 - Testproduction.sql and testproduction.out(for task 5)
 - Complete a simple but working app(1-2 more tasks)
 - Code for obtaining real data, if applicable (for task 7)

Submission – Final report & code

- Due by demo (August 03-06), updatable until Thur August 06.
- Member.txt
 - Names
 - Effort and progress made by the member **since last milestone**
- Report.pdf (**All the details**)
 - Description of the application: e.g. user, dataset
 - Plan to populate the database
 - Database schema: **assumptions, E/R diagram, keys**
 - Description of **user interface**
 - **Features for performance, e.g. indexes**
- Code.zip (**All the code**)
 - README.txt: how to load your production code to your db on your platform, **how to get production dataset**
 - File containing the SQL code **for production**
 - Test**production**.sql and test**production**.out(for task 5)
 - Complete a simple but working app(1-2 **more** tasks)
 - Code for obtaining real data, if applicable (for task 7)