

# Final Project

**Complete By:** Friday, August 5<sup>th</sup> @ 11:59pm

**Policy:** You may work alone, or with a partner;  
late work is not accepted since class ends on 8/5

**Submission:** electronic submission of project to BB

## The final project

The idea of the final project is to put into practice what you have learned this semester. Think about a problem you would like to solve — a problem that involves data. Design a database for this data, create the database using SQL and SQL Server in Azure, populate the database with meaningful data, and then build an app that reads and writes your cloud-based Azure database. You may work alone, or with a classmate; in a team, both members receive the same project score.

## Requirements

To maximize flexibility, there are very few requirements. The goal is not to solve a complex problem — you only have 2 weeks — but instead to solve a problem completely from beginning to end, design to implementation. Requirements:

- The database must be hosted in Azure
- You must create the database using SQL (e.g. an SQL script file), or by using a C# app (like we did in HW 2)
- You must populate the database using SQL (e.g. an SQL script file), or by using a C# app (like we did in HW 2)
- You must write an app in C# to access the database, reading \*and\* modifying the data in the database (like we did in HW 3)
- Design and build for the multi-user case, i.e. your app should work correctly if multiple users are running the app and accessing the data at the same time; use transactions as needed (like we did in HWs 5 and 6)

## Project ideas

If you can't think of something to work on, try visiting Chicago's data portal, and look for interesting data. Here's the link:

<https://data.cityofchicago.org/>

For example, what we did in CS 341 was analyze Chicago Crime data by year. Obviously you cannot repeat that assignment, but you might consider doing something else with the Chicago Crime data. Or with Chicago restaurants. Or traffic data. Or salary data. Or...

Feel free to search other "data-oriented" sites, such as data.gov. Or movie data (imdb.com). Or look for music data, and build-out an iTunes-like app for music reviews.

## Class Presentations, Thursday August 4<sup>th</sup>

On Thursday August 4<sup>th</sup> (the last day of class), a few students will be selected at random to showcase their final project. No PPT is required, if called simply give a quick overview of your project domain (e.g. "Traffic Data in Chicago"), and then run your app. As you run the app, you can discuss the data and the design of your database. Plan on 5-10 minutes. All students are expected to attend class, and present if called; you could very well fail the final project if you are called but are not in class / not ready to present.

## Electronic Submission

The various pieces of your final project — creation script / app, population script / app, client-side app — should be placed in a folder with your last name (and that of your partner, if any). Then create an archive (.zip) of this entire folder: right-click, Send To, and select "Compressed (zipped) folder". Finally, submit the resulting .zip file on Blackboard: open "Assignments" and submit under "Final Project".

## Policy

Late work is not accepted. Group work is allowed if working with a classmate. However, the work that you submit (either alone or with a classmate) must be your own work. You cannot submit work from a previous class, nor obviously the work of someone else. The University's policy on student conduct is described here:

<http://www.uic.edu/depts/dos/docs/Student%20Disciplinary%20Policy.pdf> .