

**Project 01 – Given Week 03  
Due Week 07 by Tuesday 4PM**

The first project consists of two parts. In the first part, you will create a database called “Portal Project Ecological Database”. This is a database from a scientific project for long-term monitoring and experimental manipulation of a Chihuahuan Desert ecosystem near Portal, Arizona. Hence it is a real scientific data gathered over a long period of time. You will be installing this database in your SQLite Database System instance that you have already created and will be using it for performing many data manipulation operations. In the second part, you will create a database called “Northwind” which consists of a schema for small businesses. This is a popular database used for learning about relational databases. You will use the SQLite system to install this database and perform data querying using SQL.

1. Portal Project: The data for the Portal Project can be found at the figshare site:

[https://figshare.com/articles/Portal\\_Project\\_Teaching\\_Database/1314459](https://figshare.com/articles/Portal_Project_Teaching_Database/1314459)

Create a folder called PortalProject and download the “Download All” zip file (called 1314459.zip). Unzip it and you will see a set of .csv files in there as well as a .sqlite file. I want you not to use the .sqlite file. Instead, create three tables (species, plots, surveys) using CREATE statements and then upload the files in the csv file into the database. Save the database in a file called YourName\_PortalProject.db and upload that also as part of the project submission. You will also do some SQL queries and data manipulation as mentioned below.

2. Northwind: The data for Northwind is found in GitHub at the followings location:

<https://github.com/jpwhite3/northwind-SQLite3>

Create a folder called Northwind, and then clone or download the zip file in there and unzip it. The website gives a README.md file which shows the schema for the database. It is also found in your directory as Northwind\_ERD. Unzip the Northwind\_large.sqlite.zip file. This contains the database that you want to upload into SQLite. This case, you can open the sqlite file as your database (no need for creating tables or uploading CSV files). You will do some SQL queries as mentioned below as part of the project submission.

I will provide a set of queries for the two database two weeks before the project deadline. I want you to perform these queries, capture the results in a text file and upload the results onto Canvas. You will also upload the YourName\_PortalProject.db file from part 1.