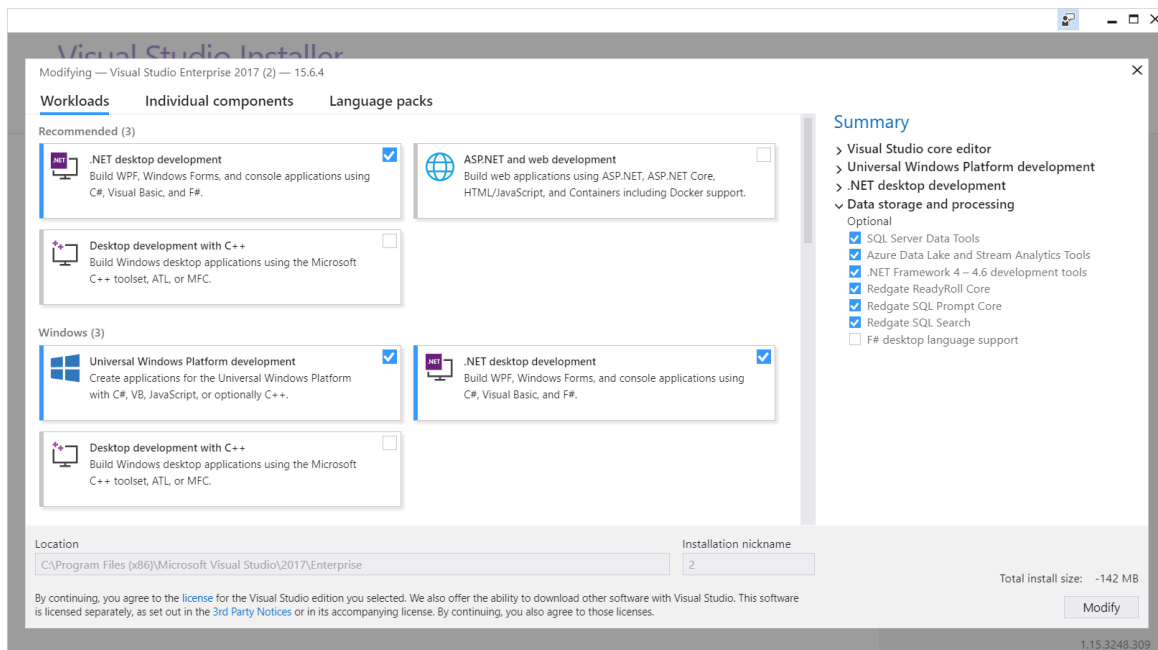# Development Environment Setup

NOTE: This installation manual is based on instructional use for a Windows 10 PC.

Installing Microsoft Visual Studio 2017

1. Open a browser and go to: **https://docs.microsoft.com/en-us/visualstudio/install/install-visual-studio?view=vs-2017**
2. Follow the steps that Microsoft provides for installing Visual Studio 2017. Once you click on the download button, it should take you to a downloads webpage where it asks which type of installation you'd like. Choose "Community" (free version).
3. After you have downloaded the installer to your local box, navigate to it and then double-click on it to launch the installer.
4. Follow the basic installation steps it prompts you to do but when you get to this page, note the certain installation packages you'll need to get set up properly (note the figure below shows Visual Studio Enterprise; the setup should still be the same for the Community version):

Select from "Recommended":

> **.NET desktop development**

Select from "Windows":

> **Universal Windows Platform development**

> **.NET desktop development**

Select from "Web & Cloud":

> **Data storage and processing**

5. Once you have these selected (these are bare minimum requirements), click on **Modify** (or **Install**) in the bottom right. Then wait for everything to install. You may need to restart your PC after this process completes.
6. After installation is complete, Launch *Visual Studio 2017*.
7. Ta-da! You should have a fully installed copy of *Visual Studio*.

Launching the Dovetail Software in Visual Studio 2017

1. Open Visual Studio 2017.
2. Go to **File → Open → Project/Solution**.
3. Navigate to the Git project folder and open the file at: *…\Dovetail\Dovetail.sln*
4. Once the solution (Visual Studio project) has loaded in the IDE, click on the **Start** button underneath the menu bar and that should launch the project. (NOTE: You'll need to get your dev box access to the Azure database (see Page 3) before you can log in to and use the software, even though it launches the product windows.)

Git Integration for Dovetail Project in Visual Studio 2017 (Optional)

1. Open Visual Studio 2017.
2. Go to **Team → Manage Connections…** to open the Team Explorer pane (should open on the right side).
3. Under "Local Git Repositories", click **Add**.
4. Click on the **…** button and navigate to the Git repo where the Dovetail project root folder is located. Then click **OK**.
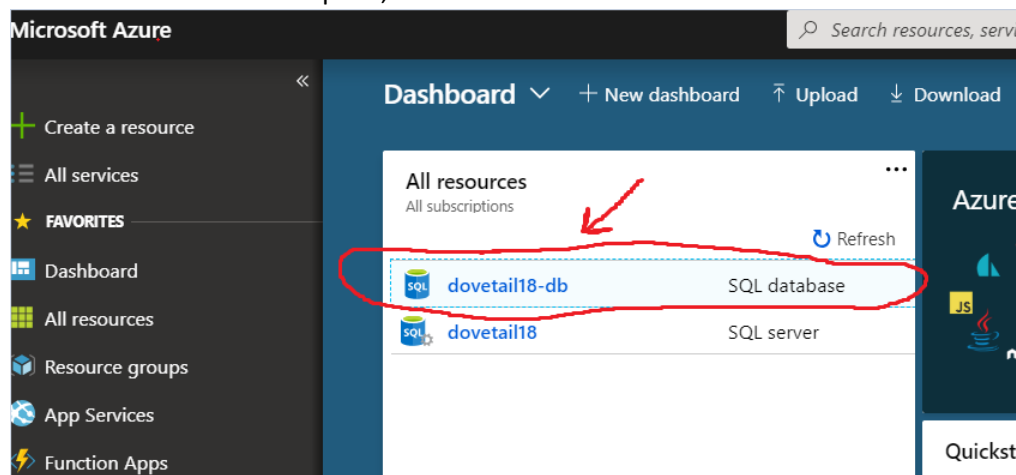5. Click on the **Add** button and that should integrate the Dovetail Git repository in Visual Studio.

Using Microsoft Azure

NOTE: Dovetail (Ashby's Cabinetry Analytics) currently uses a Microsoft Azure account to manage server/database space for the project. Here are the instructions for getting logged in online and allowing developers' dev boxes access to the database. THIS PART IS REQUIRED BEFORE ANYONE CAN THE DATABASE USING VISUAL STUDIO (ABOVE) OR SSMS (BELOW)!
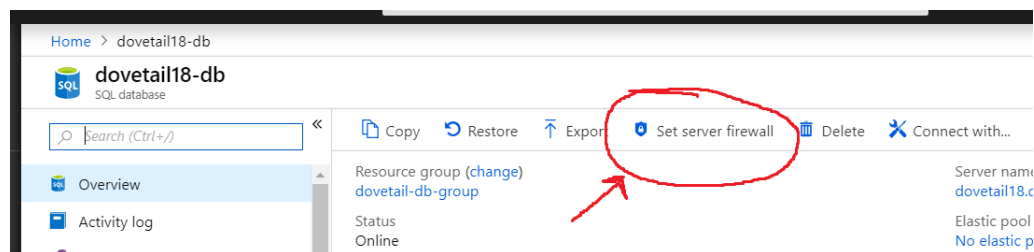
1. Open a browser and go to: **portal.azure.com**
2. Enter the following credentials to log in:
   a. Email/Username: **dovetail18@outlook.com**
   b. Password: **bronco!devs098**
3. Once logged in, you should see the Azure dashboard.

Allowing a developer's dev box access to the database:

1. Under the "All resources" pane, click on **dovtail18-db**.

2. Click on **Set server firewall**.

3. In the **RULE NAME** entry, name the rule to the developer's name.
4. For the **START/END IP** entries, copy the first three numbers (not digits) of the developer's IP into both fields.
5. In the **START IP**, append a ".0" to the end; in the **END IP**, append a ".255" (this opens up all possible host IDs in the network in case their IP changes; you don't necessarily need to be specific unless you want to).

Installing Microsoft SQL Server Management Studio 17 (SSMS)

NOTE TO THE DEVELOPER: Before proceeding, please send Justin Brown (jbro11980@gmail.com), or your current database administrator, your current IP address so that he/they can allow your box a connection to our Azure SQL Server database. You will not be able to connect to the database without doing so!

1. Open a browser and go to: **docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms**
2. Click on the download link for the latest version of *SSMS*: "Download SQL Server Management Studio 17.6" (Note: Version 17.6 is the most current when this manual was written).
3. Once the installer has downloaded, navigate to and launch the installer.
4. Follow the basic installation steps it prompts you to do.
5. After the software has installed, launch *SSMS*.
6. A window prompt should appear at the start asking you to "Connect to Server". Fill out the following information in the first window:
   a. Server type: **Database Engine**
   b. Server name: **dovetail18.database.windows.net**
   c. Authentication: **SQL Server Authentication**
   d. Login: **admin0**
   e. Password: **bronco!devs098**
7. Click on **Options >>**
   a. Connect to database: **dovetail18-db**
   b. Then check the box in the "Connection" section labeled **Encrypt connection**
   c. Click **Connect**
8. Ta-da! You are now connected to our test development database.