Cloud Introduction

The purposes of this homework assignment are:

A) To get your Azure development environment installed and working and ready for future assignments, and

B) To familiarize you with the basic steps of generating and deploying an Azure project, and

C) To show you how easy it is to get your simple app plugged into the Cloud

0. Start at Azure developers site: [http://www.windowsazure.com/en-us/](http://www.windowsazure.com/en-us/%20) .

1. On that page, perform item 1, “Download the Tools.” Click the link, which should take you to <http://msdn.microsoft.com/en-us/windowsazure/cc974146.aspx> . Follow the directions on this page. If you don’t already have Visual Studio 2012, then perform Step 1, installing the “Install Visual Studio 2012 Express” (<http://www.microsoft.com/express/web/>) . After finishing or skipping this step, then perform Step 2, “Install the Azure tools for Visual Studio”.

2. You now have the necessary Visual Studio editions and tools to perform Azure project development. Back at the main page in step 0, perform Step 2, “Create Your First Local Application.” Click the “Start The Tutorial” link, which will take you to <http://www.windowsazure.com/en-us/develop/net/tutorials/web-site-with-sql-database/>. Perform these instructions, until you get to the section that says, “Add Code To Your Application.” At this point, instead of following the instructions in the tutorial, perform the following steps:

2a. Your project will contain a page named “default.aspx”. Open this page by double-clicking it in the Solution Explorer. Switch to the Design View by clicking the “Design” tab under the main editing window. From the control toolbox, drag a label control onto your design surface into location that can be conveniently seen when the program runs.

2b. Now open the code-behind file for default.aspx, which is called default.aspx.cs . In it, you will find an event handler method labeled Page\_Load. In that handler, add code which fetches the current *local* (not UTC) time and displays it in the label you just added. We are going to use this local time to verify the location in which our cloud application is being hosted. An example would look like this:

protectedvoidPage\_Load**(**objectsender**,** EventArgse**)**

**{**

this.Label1.Text=

DateTime.Now.ToLocalTime**()**.ToLongTimeString**();**

**}**

2c. Complete the rest of this tutorial as specified in the documentation.

3. It is now time to obtain an Azure account with which to access the production Azure system. Your instructor will probably provide you with the account and credentials to use. If not, then you will need to obtain your own account. There exists, at the time of this writing an option offering a limited account at no charge. You will need your Azure account for the next step.

4. We will now publish and deploy our Azure sample program to the Azure framework. Return to the main page. The “Start the Tutorial” link will take you to <http://www.windowsazure.com/en-us/develop/net/tutorials/web-site-with-sql-database/>

4a. Perform the tutorial according to the instructions, through Step of “To Select a Project and Create a Compute Service.”

4b. In the “Region” drop-down list, select a region which is different from the one in which you currently reside.

4c. Run the rest of the tutorial according to the directions. Note that the time displayed by the code that you added to the web page is UTC time.

4d. Repeat using a region with a different local time than the first iteration. Note that the displayed time is still UTC. Also note that you have to install a new service using the manager. It is not possible at the time of this writing to change the region of a service once it’s installed.

4e. How about that? You tried to fetch local time, and you couldn’t, or more properly, the local time on the Azure network was always UTC time, regardless of the physical location of the server. Looks like a cloud isn’t bound to earthly time zones.