**Azure and DevOps Workshop Syllabus**

Location: Texas Mutual

Dates: September 19 – 20, 2017

Presenter: Crystal Tenn

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Objective:

The objective of this workshop is to give an understanding of how applications are deployed to Azure and through the DevOps process. We will create a proof of concept (POC) with an Angular front end, C# backend API service, and an Azure SQL database. We will go through an in-depth lab with this POC on how to add it to Azure manually one piece at a time and see it’s communication from the front end, to the API services, to the backend database. Then, we will take the same POC through a full CI/CD process in VSTS with Dev, QA, and Staging/Production environments.

Around the POC, we will go through slides, diagrams, and demos that will explain how to use Azure, App Services, Git, PowerShell, Azure CLI, ARM Templates, Azure SQL, and VSTS. There will be additional hands on labs for Git commands, Azure CLI/PowerShell commands (includes Azure Tagging), and ARM Templates.

All the slides will be provided at the end of the sessions in PDF format. All POC code/labs and additional labs will be well documented and provided so they can be used as either a reference / refresher or to other team members who could not attend the workshop. Explanations and or solutions for the labs provided in the lab documentation so that you can keep them.

I want you to be able to immediately implement what is taught in this workshop and get enough repetition and practice in to understand these new concepts while in session. It’s no fun to have 2 days of lecture. We will not do that, I want to minimize your lecture time and maximize your hands-on time. Let’s have a fun session, lots of code practice, and get everyone involved with great discussions! I want this to be as interesting and interactive as possible for everyone.

**Day 1 (September 19, 2017) Azure**

* 8AM – 9AM
  + Azure Portal and App Services Overview / Discussion of your system
* 9AM – 9:30AM
  + Azure SQL (light overview + comparison to VM SQL Server)
* 9:30AM – 12PM
  + Introduce POC Azure Lab
  + POC Azure Lab (I will be walking around helping out / answering questions / discussing about your setup)
* 12PM – 1PM
  + Lunch Break
* 1PM – 1:30PM
  + Azure Tagging
* 1:30-2:30PM
  + Azure CLI and PowerShell
  + Azure CLI and PowerShell Lab (includes Azure tagging using Azure CLI and PS)
* 2:30PM-3:30PM
  + ARM Templates
  + ARM Templates Demos
  + ARM Template Lab
* 3:30PM-4:30PM
  + Azure Features Overview (few slides about as many features as I could cram into an hour)
* 4:30PM+
  + Extra time to work on Azure lab if needed, I will be happy to stay as late as needed on Day 1
  + Discussions / Recommendations

**Day 2 (September 20, 2017) DevOps**

* 8AM – 8:30AM
  + DevOps Overview
* 8:30AM – 10:00 AM
  + Git Presentation
  + Git Lab
* 10:00AM – 10:30AM
  + Environment Setup / Recommendations
* 10:30AM – 12PM
  + VSTS slides / demo / walkthrough / discussion
* 12PM – 1PM
  + Lunch Break
* 1PM – 4:30PM
  + CI/CD Slides
  + Introduce POC CI/CD Lab
  + POC CI/CD Lab (I will be walking around helping out / answering questions / discussing about your setup)
  + Recommendations