

Enterprise Applications Azure DevOps

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Quick Introduction

- Kenneth D. Swegman Jr.
- La Roche University
- Major: Computer Science
- Minor: Computer Security
- Winter 2019
- Thanks to the people who supported me during this internship, namely (Dharmesh Desai, Jerry Regan, Robert Stampfle, Mike Bonetti, and Stephen Brooks).



Microsoft Azure

- Cloud Computing Platform



Power-BI

- Cloud Based Reporting Tool

The screenshot shows the Microsoft Azure portal dashboard. The left sidebar contains navigation options like Home, Dashboard, All services, Favorites, All resources, Resource groups, App Services, Function App, SQL databases, Azure Cosmos DB, Virtual machines, Load balancers, Storage accounts, Virtual networks, Azure Active Directory, Monitor, Advisor, Security Center, Cost Management + Billing, and Help + support. The main content area is titled 'Azure services' and includes a search bar and a 'Create a resource' button. Below this are icons for various services: Virtual machines, App Services, Storage accounts, SQL databases, Azure Database for PostgreSQL servers, Azure Cosmos DB, Kubernetes services, and Function App. There are also four featured tiles: Microsoft Learn, Azure Monitor, Security Center, and Cost Management. The 'Recent resources' section contains a table with columns for NAME, TYPE, and LAST VIEWED. The 'Useful links' section includes links for Technical Documentation, Azure Services, Recent Azure Updates, Azure Blog, and Find an Azure expert. The 'Azure mobile app' section shows download buttons for the App Store and Google Play.

NAME	TYPE	LAST VIEWED
kwegman-vm	Virtual machine	18 h ago
accuweather-dev-1a	Logic app	1 d ago
kwegman-rg	Resource group	2 d ago
accuweatherdevsa	Storage account	2 d ago
sql-4	API Connection	2 d ago
blobapi	API Connection	2 d ago
ftp-4	API Connection	2 d ago
sqlapi	API Connection	2 d ago
ftpapi	API Connection	2 d ago
azureblob	API Connection	3 d ago
ftp-sqlserver-tablestorage-test	Logic app	4 d ago
mnovak-vm	Virtual machine	1 wk ago

Azure Admin

- Maintained Access Control of Azure Resources
- Deployed VMs and Databases

Tagging Azure Resource Groups

Tagging Process

- Billing
- Reporting

Tagged Azure Resource Groups

- Environment
- App Name
- App Tier
- Department
- Work Order
- Cost Center

Created Azure Resource Group Tagging Policy

- When new Resource Group is created, has to have new tags

SonarQube Server & DB



Dev side of Dev/Ops

Technologies I learned



Logic Apps



Azure SQL
DB



ARM
Templates



Azure
DevOps



Azure
PowerShell

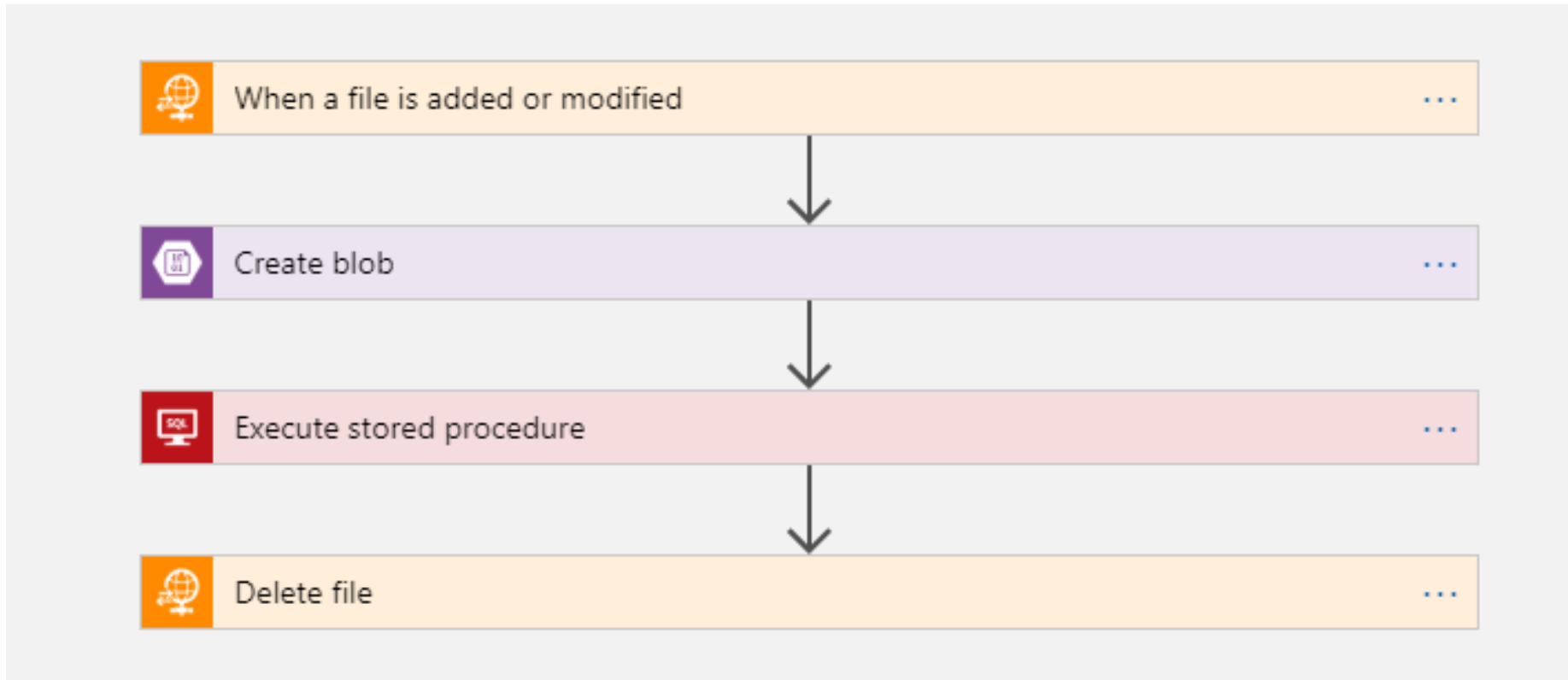
AccuWeather Project Overview

Finance procures AccuWeather Data


Process is done manually to get Data currently


Project is to automate process of getting AccuWeather Data



Logic App Workflow





FTP Trigger in Logic App


 When a file is added or modified i ...


* Folder
 

Include file content
  

Infer Content Type
  


How often do you want to check for items?


* Interval * Frequency 



Connected to ftpapi. [Change connection.](#)


Azure Blob in Logic App

 Create blob ...

* Folder path
 


* Blob name

* Blob content



Connected to blobapi. [Change connection.](#)

Execute Stored Procedure in Logic App

 Execute stored procedure ...

* Procedure name

 ▼

Delimited_FilePath

 ×

Connected to sqlapi. [Change connection.](#)

FTP Delete file from Server



AccuWeather Data in Azure SQL DB

	Weather_Station_Code	Data_Type	Date	Time	Time_Zone	Lat_Station	Long_Station	Elev_Station	Temperature
385609	KPIT	O	2011-07-02	01:00:00	EST	40.491	-80.233	1204	65
385610	KPIT	O	2011-07-02	02:00:00	EST	40.491	-80.233	1204	63
385611	KPIT	O	2011-07-02	03:00:00	EST	40.491	-80.233	1204	63
385612	KPIT	O	2011-07-02	04:00:00	EST	40.491	-80.233	1204	62
385613	KPIT	O	2011-07-02	05:00:00	EST	40.491	-80.233	1204	61
385614	KPIT	O	2011-07-02	06:00:00	EST	40.491	-80.233	1204	63
385615	KPIT	O	2011-07-02	07:00:00	EST	40.491	-80.233	1204	66
385616	KPIT	O	2011-07-02	08:00:00	EST	40.491	-80.233	1204	72
385617	KPIT	O	2011-07-02	09:00:00	EST	40.491	-80.233	1204	76
385618	KPIT	O	2011-07-02	10:00:00	EST	40.491	-80.233	1204	79
385619	KPIT	O	2011-07-02	11:00:00	EST	40.491	-80.233	1204	81
385620	KPIT	O	2011-07-02	12:00:00	EST	40.491	-80.233	1204	83
385621	KPIT	O	2011-07-02	13:00:00	EST	40.491	-80.233	1204	82
385622	KPIT	O	2011-07-02	14:00:00	EST	40.491	-80.233	1204	82
385623	KPIT	O	2011-07-02	15:00:00	EST	40.491	-80.233	1204	81
385624	KPIT	O	2011-07-02	16:00:00	EST	40.491	-80.233	1204	81
385625	KPIT	O	2011-07-02	17:00:00	EST	40.491	-80.233	1204	81
385626	KPIT	O	2011-07-02	18:00:00	EST	40.491	-80.233	1204	80
385627	KPIT	O	2011-07-02	19:00:00	EST	40.491	-80.233	1204	80
385628	KPIT	O	2011-07-02	20:00:00	EST	40.491	-80.233	1204	78
385629	KPIT	O	2011-07-02	21:00:00	EST	40.491	-80.233	1204	77
385630	KPIT	O	2011-07-02	22:00:00	EST	40.491	-80.233	1204	76
385631	KPIT	O	2011-07-02	23:00:00	EST	40.491	-80.233	1204	75
385632	KPIT	O	2011-07-03	00:00:00	EST	40.491	-80.233	1204	75
385633	KPIT	O	2011-07-03	01:00:00	EST	40.491	-80.233	1204	71
385634	KPIT	O	2011-07-03	02:00:00	EST	40.491	-80.233	1204	68
385635	KPIT	O	2011-07-03	03:00:00	EST	40.491	-80.233	1204	69

Power-BI Weather Data Dashboard

81
Max of Temperature

57
Min of Temperature

69.48
Average of Temperature

91
Max of Temperature

56
Min of Temperature

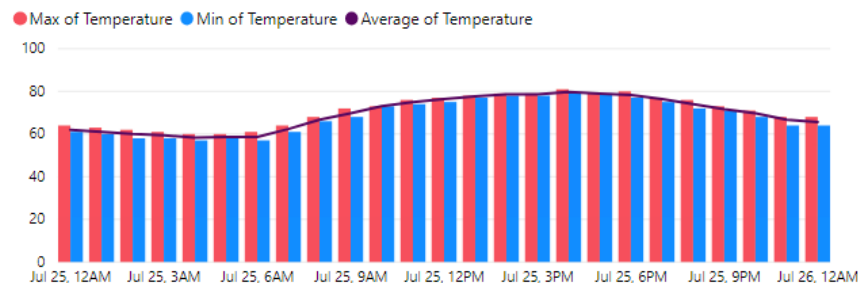
70.74
Average of Temperature

91
Max of Temperature

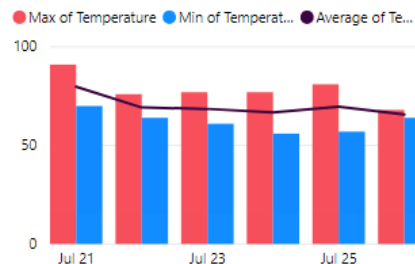
54
Min of Temperature

74.40
Average of Temperature

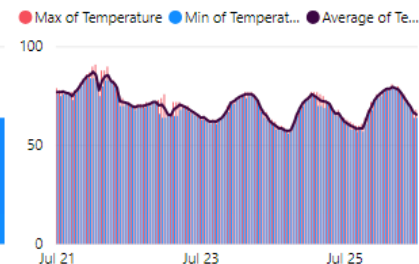
Yesterdays Weather by Hour



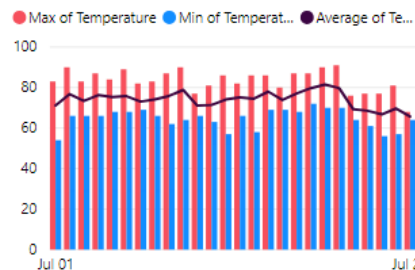
This Week to Date Temperature by Day



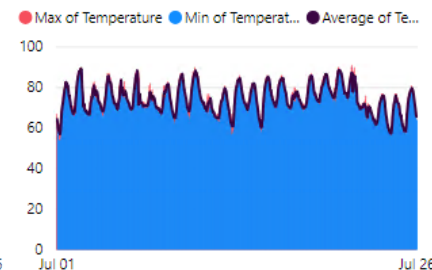
This Week to Date Temperature by Hour



This Month to Date Temperature by Day



This Month to Date Temperature by Hour

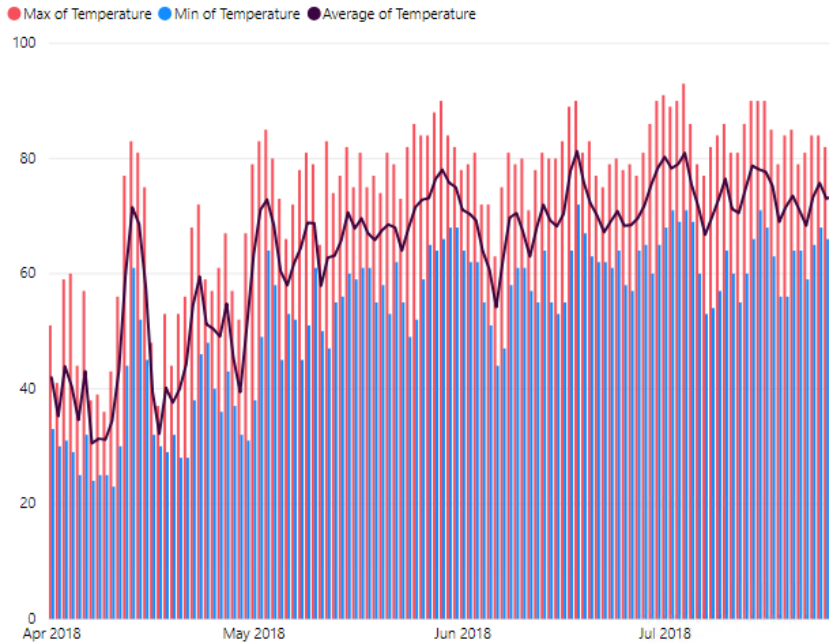


Power-BI Archive Weather Data

AccuWeather Historical Data 2002-2019



Historical Data by Day



AccuWeather Archive 2019-



2019-Onward Weather Data Archive by Day

