

CLOUD COMPUTING

DONE BY

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TABLE OF CONTENTS

1. Introduction
2. Azure service used
3. Key features
4. Deployment overflow
5. Result

Scalable Marks Viewer Web App on Azure

<https://github.com/venkatbhavan/CloudComputing>

The screenshot shows the GitHub repository page for 'venkatbhavan / CloudComputing'. The repository is public and has 1 branch (main), 0 tags, and 15 commits. The file list includes 'arm', 'templates', 'Procfile', 'app.py', 'init-script.sh', and 'requirements.txt'. The right sidebar shows repository statistics: 0 stars, 0 watching, and 1 fork. The 'About' section states 'No description, website, or topics provided.' and the 'Releases' section states 'No releases published'.

venkatbhavan / CloudComputing

Search: Type / to search

Code Issues Pull requests Actions Projects Wiki Security Insights

CloudComputing Public

Watch 0 Fork 1 Star 0

main 1 Branch 0 Tags

Go to file Add file Code

akshaya-30 Add files via upload 849a6e5 · now 15 Commits

arm	Add files via upload	now
templates	Update result.html	1 hour ago
Procfile	Add files via upload	2 days ago
app.py	Update app.py	28 minutes ago
init-script.sh	Update init-script.sh	last week
requirements.txt	Add files via upload	last week

README

About

No description, website, or topics provided.

Activity

0 stars

0 watching

1 fork

Report repository

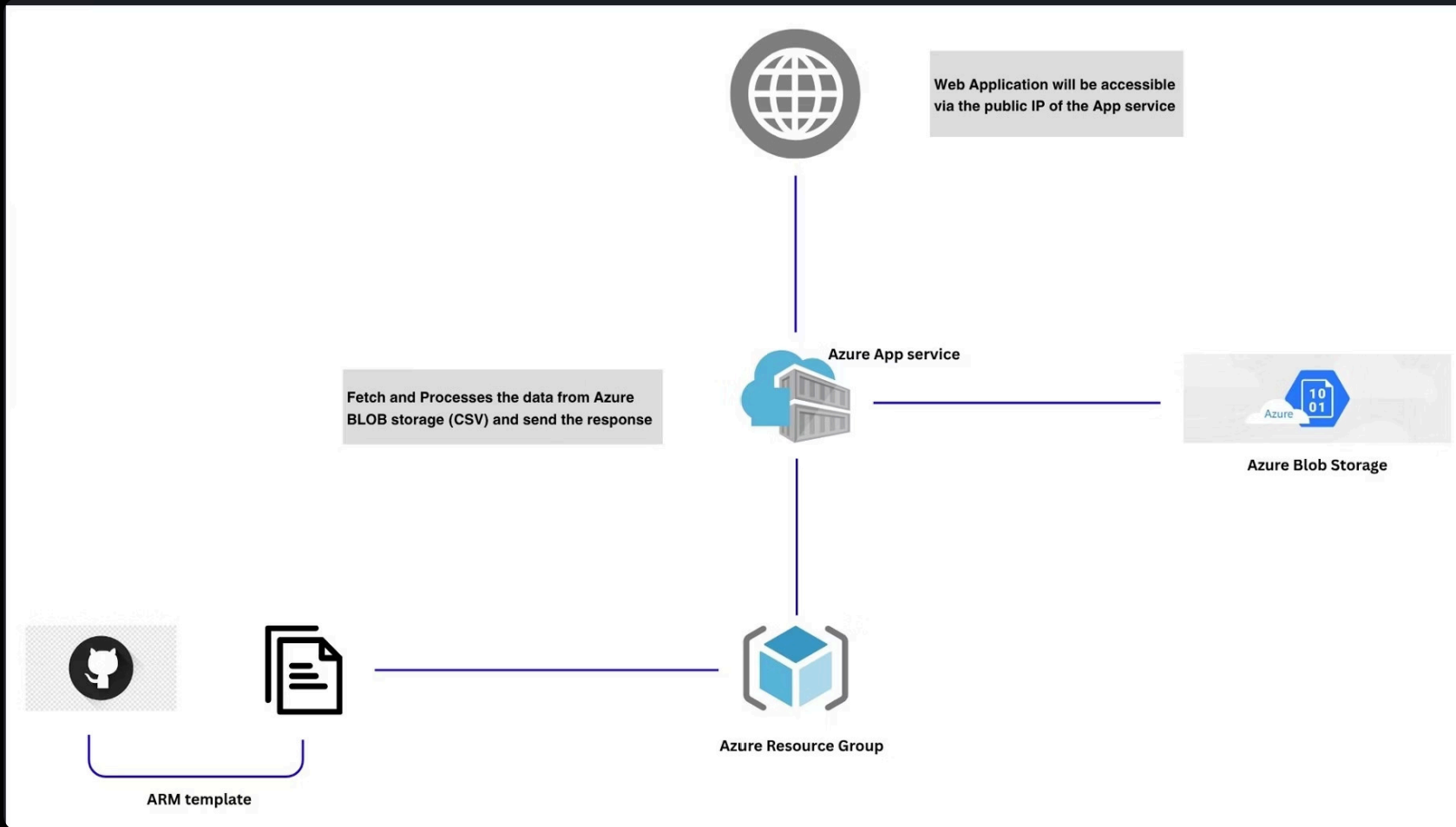
Releases

No releases published

[Create a new release](#)

Packages

Architecture diagram



Project Summary

- This project is a FastAPI-based web application that allows users to view student marks by submitting their ID and DOB. The data is securely fetched from a CSV file stored in Azure Blob Storage.

Azure Services Used

- App Service – Hosts the FastAPI application
- Blob Storage – Stores student marks CSV file
- Resource Group – Manages Azure resources
- ARM Template – Defines infrastructure as code
- GitHub Actions – Automates CI/CD deployment

App service

The screenshot displays the Microsoft Azure portal interface for a Web App named 'flaskmarksapp'. The browser address bar shows the URL: `portal.azure.com/#@tativenkatbhavangmail.onmicrosoft.com/resource/subscriptions/9579498d-efd9-4336-ade6-be4cd8a4d3b2/resourceGroups/fla...`. The page header includes the 'Microsoft Azure' logo, a search bar, and the user profile 'tativenkatbhavan@gma...'.

The left sidebar contains a navigation menu with the following items: Overview (selected), Activity log, Access control (IAM), Tags, Diagnose and solve problems, Microsoft Defender for Cloud, Events (preview), Recommended services (preview), Log stream, Resource visualizer, Deployment, and Deployment slots.

The main content area features a toolbar with actions: Browse, Stop, Swap, Restart, Delete, Refresh, Download publish profile, and Reset publish profile. A notification banner at the top of the main area states: 'Consider using Azure Front Door since your app receives incoming requests from multiple regions.'

The 'Essentials' section is divided into two columns:

Essentials	Details
Resource group (move)	Default domain
flaskmarks-rg	flaskmarksapp.azurewebsites.net
Status	App Service Plan
Running	flaskmarksapp-plan (F1: 1)
Location (move)	Operating System
West Europe	Linux
Subscription (move)	Health Check
Azure for Students	Not Configured
Subscription ID	External Repository Project
9579498d-efd9-4336-ade6-be4cd8a4d3b2	https://github.com/venkatbhavan/CloudComputing.git
Tags (edit)	
Add tags	

At the bottom of the page, a small note reads: 'Add or remove favorites by pressing Ctrl+Shift+F'.

BLOB STORAGE

The screenshot displays the Microsoft Azure portal interface for a storage account named 'studentmark'. The left sidebar contains a navigation menu with options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, Storage browser, Storage Mover, Partner solutions, Resource visualizer, and Data storage. The main content area shows the 'Overview' tab selected, displaying the account's status (Primary: Available, Secondary: Available) and a list of tabs: Properties, Monitoring, Capabilities (7), Recommendations (1), Tutorials, and Tools + SDKs. The 'Properties' tab is active, showing two sections: 'Blob service' and 'Security'. The 'Blob service' section lists various features and their status, while the 'Security' section lists security-related settings. The 'Networking' section is partially visible at the bottom.

Section	Feature	Status
Blob service	Hierarchical namespace	Disabled
	Default access tier	Hot
	Blob anonymous access	Disabled
	Blob soft delete	Enabled (7 days)
	Container soft delete	Enabled (7 days)
	Versioning	Disabled
	Change feed	Disabled
	NFS v3	Disabled
	Allow cross-tenant replication	Disabled
	Security	Require secure transfer for REST API operations
Storage account key access		Enabled
Minimum TLS version		Version 1.2
Infrastructure encryption		Disabled
Networking	Allow access from	All networks
	Private endpoint connections	0
	Network routing	Microsoft network routing

ARM TEMPLATE

```
arm > {} template.json > ...
1  {}
2  "$schema": "https://schema.management.azure.com/schemas/2019-04-01/deploymentTemplate.json#",
3  "contentVersion": "1.0.0.0",
4  "parameters": {
5    "appName": { "type": "string" },
6    "location": {
7      "type": "string",
8      "defaultValue": "westeurope"
9    },
10   "azureConnectionString": { "type": "securestring" },
11   "containerName": { "type": "string" },
12   "blobName": { "type": "string" }
13 },
14 "resources": [
15   {
16     "type": "Microsoft.Web/serverfarms",
17     "apiVersion": "2022-03-01",
18     "name": "[concat(parameters('appName'), '-plan')]",
19     "location": "[parameters('location')]",
20     "sku": {
21       "name": "F1",
22       "tier": "Free"
23     },
24     "properties": {
25       "reserved": true
26     }
27   },
28   {
29     "type": "Microsoft.Web/sites",
30     "name": "[concat(parameters('appName'), '-web')]",
31     "location": "[parameters('location')]",
32     "sku": "Free",
33     "kind": "app",
34     "properties": {
35       "siteConfig": {
36         "application": "init-script.sh"
37       }
38     }
39   }
40 ]
```

RESOURCE GROUP

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

tativenkatbhavan@gma...
DEFAULT DIRECTORY

Home >

flaskmarks-rg
Resource group

Search

+ Create Manage view Delete resource group Refresh Export to CSV Open query Assign tags Move

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Cost Management

Monitoring

Automation

Help

Essentials JSON View

Resources Recommendations (3)

Filter for any field... Type equals all Location equals all Add filter

Showing 1 to 2 of 2 records. Show hidden types No grouping List view

Name	Type	Location
flaskmarksapp	App Service	West Europe
flaskmarksapp-plan	App Service plan	West Europe

Add or remove favorites by pressing Ctrl+Shift+F

Key Features

- FastAPI backend with HTML form input
- Fetches CSV from Azure Blob Storage
- Environment variables for security
- Scalable via App Service Plan
- CI/CD pipeline with GitHub Actions

Deployment Workflow

- Code is pushed to GitHub
- GitHub Actions trigger automatic deployment
- ARM Template provisions Azure resources
- FastAPI app runs on Azure App Service
- App fetches data from Blob Storage

RESULT:

flaskmarksapp.azurewebsites.net

Student Result Lookup

Student ID

Date of Birth

[View Result](#)

flaskmarksapp.azurewebsites.net/result

Result for Student ID 303869	
DOB:	2001-12-25
Cloud Computing:	74
Big Data:	1
Data Science:	97
AI:	91
Total:	263
Result:	Fail
Go Back	

Thank you