
TickerMe

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Certificate

This is to certify that the project entitled **TickerMe** is a bonafide work of **Atharva Patil (Roll No.:- 46) Vivek Bajage (Roll No.:- 03) Priyanshu Verma (Roll No:- 71) Bhushan Dhonde (Roll no :- 16)** submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of **Undergraduate** in **DEPARTMENT OF COMPUTER ENGINEERING**.

Project Guide

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Abstract

The Project is based on the Microsoft Azure and using it to deploy a TickerMe Website. India has a great future regarding crypto market this project is made to get the most benefit once India accepts crypto currency by showing crypto screener as well as other financial screener including foreign stocks (NASDAQ SNP500 DOW) and Indian stocks. "TickerMe" is been developed in python programming language.

Acknowledgement

We would take this opportunity to thank our project **PROF.VISHAKHA VARADE** for providing timely assistance to our query and guidance that she gave owing to her experience in this age. She had indeed been a lighthouse for us in this journey.

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1. INTRODUCTION

1.1 Introduction

Microsoft Azure is usually described as having “limitless potential” and “unlimited possibilities,” but what does Azure actually *do* and what can it do for your business?

At its core, Azure is a public cloud computing platform with solutions including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS) that can be used for services such as analytics, virtual computing, storage, networking, and much more. It can be used to replace or supplement your on-premise servers.

Azure is a fast, flexible, and affordable platform, and its pricing and capabilities make it the best public cloud offering on the market. Now let's take a look at *how* to put it to work for you. Azure is a backup and disaster recovery dream tool. Why? Because of its flexibility, advanced site recovery, and built-in integration. As a cloud-based solution, Azure is innately flexible – it can back up your data in almost any language, on any OS, and from any location. Plus, you define the frequency and extent of your backup schedule (daily, weekly, monthly, etc.).

TickerMe(TM) will target the crypto audience and along with that it will also show (stock screener)other financial needs like stocks, FNO, commodities etc. Indian citizens will gradually accept crypto technology and once India RBI accepts Cryptocurrency TM will get into boom, till that time TM will show stocks, FNO. TM will also shows volume, mva, highest lowest point etc. which is basic needs for a stock screener. India will accept this market and citizens will find TM user friendly to search(screen) their favourite and convenient stock/crypto to buy and eventually will buy it through banking apps or other apps like zerodha(kite) or upstock. Along with NSE TM also shows NASDAQ, DOW, SNP500, dividends by this stock index making it one place for all country needs.

A cryptocurrency is a digital or virtual currency that is secured by cryptography, which makes it nearly impossible to counterfeit or double-spend. Many cryptocurrencies are decentralized networks based on blockchain technology a distributed ledger enforced by a disparate network of computers.

2. OVERVIEW OF EXISTING SYSTEM

Cloud computing is the use of computing resources (hardware and software) that are delivered as a service over a network. Today, cloud computing generates a lot of hype; it's both promising and scary. Businesses see its potential but also have many concerns. This Emerging computing paradigm offers attractive financial and technological advantages. Although the concept of time-shared remote services isn't new, cloud computing infrastructures use new technologies and services, some of which haven't been fully evaluated with respect to security. Security is considered one of the most critical aspects in everyday computing, and it is not different for cloud computing due to the sensitivity and importance of data stored in the cloud. Cloud computing infrastructures uses new technologies and services, most which haven't been fully evaluated with respect to security. Cloud Computing has several major issues and concerns, such as data security, trust, expectations, regulations, and performance issues.

3. LIMITATIONS OF EXISTING SYSTEM

Cloud downtime

The cloud, like any other IT set-up, can experience technical problems such as reboots, network outages and downtime. These events can incapacitate business operations and processes, and can be damaging to business.

You should plan for cloud downtime and business continuity. Try to minimise the impact and the number of outages and ensure the maximum level of service availability for your customers and staff.

Limited control

The cloud service provider owns, manages and monitors the cloud infrastructure. You, as the customer, will have minimal control over it. You will be able to manage the applications, data and services operated on the cloud, but you won't normally have access to key administrative tasks, such as updating and managing firmware or accessing server shell.

Cloud security and data

Most cloud service providers implement relevant security standards and industry certifications to ensure that their cloud environment remains safe. However, storing data and business-critical files in virtual data centres can potentially open you up to risks.

4. OVERVIEW OF PROPOSED SYSTEM

Whether you're looking for a platform for hosting, developing, or managing a web or mobile app, Azure makes those apps autonomous and adaptive with patch management, Auto Scale, and integration for on-premise apps. With Automatic patch management for your virtual machines, you can spend less time managing your infrastructure and focus on improving your apps. Azure also comes with continuous deployment support, which allows you to streamline ongoing code updates. AutoScale is a feature built into Azure Web Apps that adjusts your resources automatically based on customer web traffic so you have the resources you need when traffic is high, and save money when you're not in peak times. Through Azure, you can seamlessly link your web app to an on-premise app. Connecting apps in both locations lets both employees and partners securely access resources inside your firewall—resources that would otherwise be difficult to access externally.

Azure can integrate with your Active Directory to supplement your identity and access capabilities—this gives your DNS a global reach, centralized management, and robust security. With Azure, you can globally distribute an Active Directory environment that is direct connect enabled. No other cloud provider has the ability to extend the reach of your domain controller and consolidate AD management like Azure. If you have multiple locations or use on-premise apps or cloud apps like Microsoft 365, Active Directory integration with Azure will be the central tool for managing and maintaining access to all of these tools. Azure also enables you to utilize multi-factor authentication, adding a new layer of security to your data and applications with zero hassle for your users. You can also easily implement single sign-on for Windows, Mac, Android, and iOS cloud apps.

5. REQUIREMENTS

□ Hardware:

- Processor: i3 or any other compatible processor
- RAM: 4 GB or more
- Hard disk: 16 GB or more

• Software:

- Google Chrome browser or any other browser.

• Other:

- Microsoft Azure Account.
- Docker hub.
- Github

6. SYSTEM ANALYSIS

System analysis is the purpose of granting and interfering facts diagnosing problems facts and using facts to improve the system. A system is asset of components that interacts to accomplish some purposes:

1. Identify the drawbacks of the existing systems
2. Identify the need of conversion.

Deliverables:

- Completed, functioning small-scale test environment.
- Lab workstations configured to work with the system.
- Functioning back-end (server, v CSA, storage).
- Successful remote scheduling solutions.
- Reliable network communication/configuration.

7. IMPLEMENTATION

Creating Microsoft Azure account

1. Go to the Azure Home Page.
2. Click on Free Azure Account on the top right corner.
3. Click on Start Free.
4. Sign-in/Sign-up for a Microsoft account using an email address and password.
5. Enter your Country/Region and Date of Birth and click next.
6. Enter the verification code received on the email address and click next.
7. Type the captcha you see on your screen and click on next.
8. You'll be redirected to the Azure Sign-up page. Enter your Region, Name, Phone number, Email address. Note: You should use the same email address for Azure sign-up and for the Microsoft account.
9. Verify your phone number by clicking Text Me or Call Me and enter the verification code received.
10. Enter the payment details. Make sure you have a Master Card/American Express/ Visa Credit card and international payments should be enabled.
11. Check the Terms and Conditions and click Sign-up.
12. You have successfully created a Microsoft Azure free account.

Process for Deploying a website on Azure.

Step 1 —

Create a container on ACR via Azure portal

Sign into Azure portal

From Azure Marketplace select Containers > Container Registry

Enter the required information

Select "Review + Create"

Once created, you should be redirected to a landing page with information pertaining to your container

On the "Overview" tab, there should be something called "Login Server" (e.g. specificregistryname.azurecr.io). Note down this value as you will need again when you push and pull images with Docker.

Login to registry

- Sign in to Azure CLI by running the command 'az login' in your terminal ** Note that this command will not work if you do not have Azure CLI installed
- Log into Azure ACR by running 'az acr login — name <registry-name>'. ** Note do not include azurecr.io for the registry name

Step 2 —

Create a Requirements.txt file

Run the command 'pip freeze > requirements.txt' in your application terminal to autogenerate the requirements.txt file

This file contains all of your application's dependencies

Step 3 —

Create a Dockerfile

The Dockerfile contains the instructions to build the image. Here is my Dockerfile for reference:

```
FROM python:3.8
WORKDIR /app
COPY requirements.txt ./requirements.txt
RUN pip3 install -r requirements.txt
EXPOSE 8501
COPY ./app
ENTRYPOINT ["streamlit", "run"]
CMD ["first_app.py"]
```

If you choose to use this file just remember to change the Python version and your application .py file (in my case I named it "first_app.py")

Step 4 —

Build Docker container locally

To build Docker container:

```
docker build -t mystapp:latest .
```

To view all your Docker images:

```
docker images
```

To run locally:

```
docker run -p 8501:8501 mystapp:latest
```

Step 5 —

Push local image to ACR

Type in the following command:

```
docker login streamlittest.azurecr.io — username streamlittest
```

{Enter in any one of the two password values for the password — I found that it was easiest to copy and paste}

Tag your image:

```
docker tag mystapp:latest streamlittest.azurecr.io/myimage:v1
```

Push your image:

```
docker push streamlittest.azurecr.io/myimage:v1
```

Step 6 —

Create an Azure App Service web app

Go to Azure portal

Search for App Services (or it can appear as Web App)

Click the “Add” button

Fill out all the necessary fields

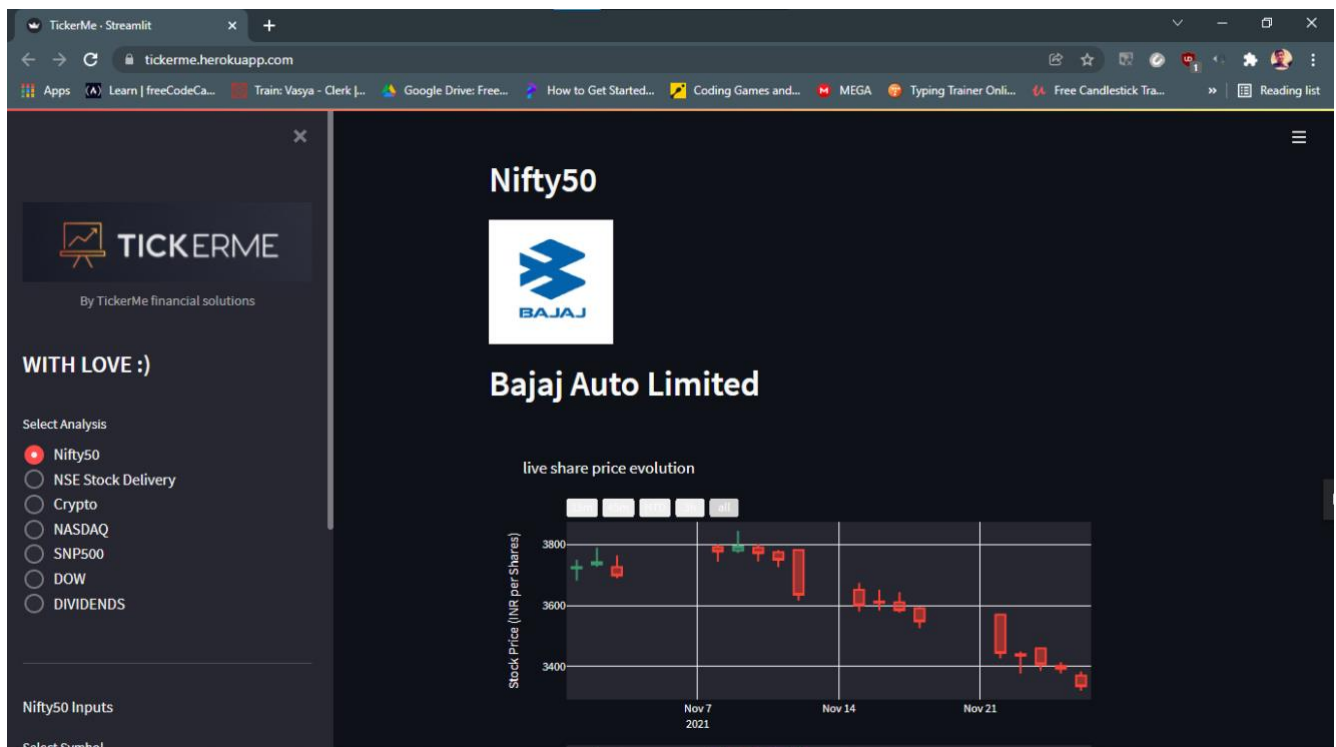
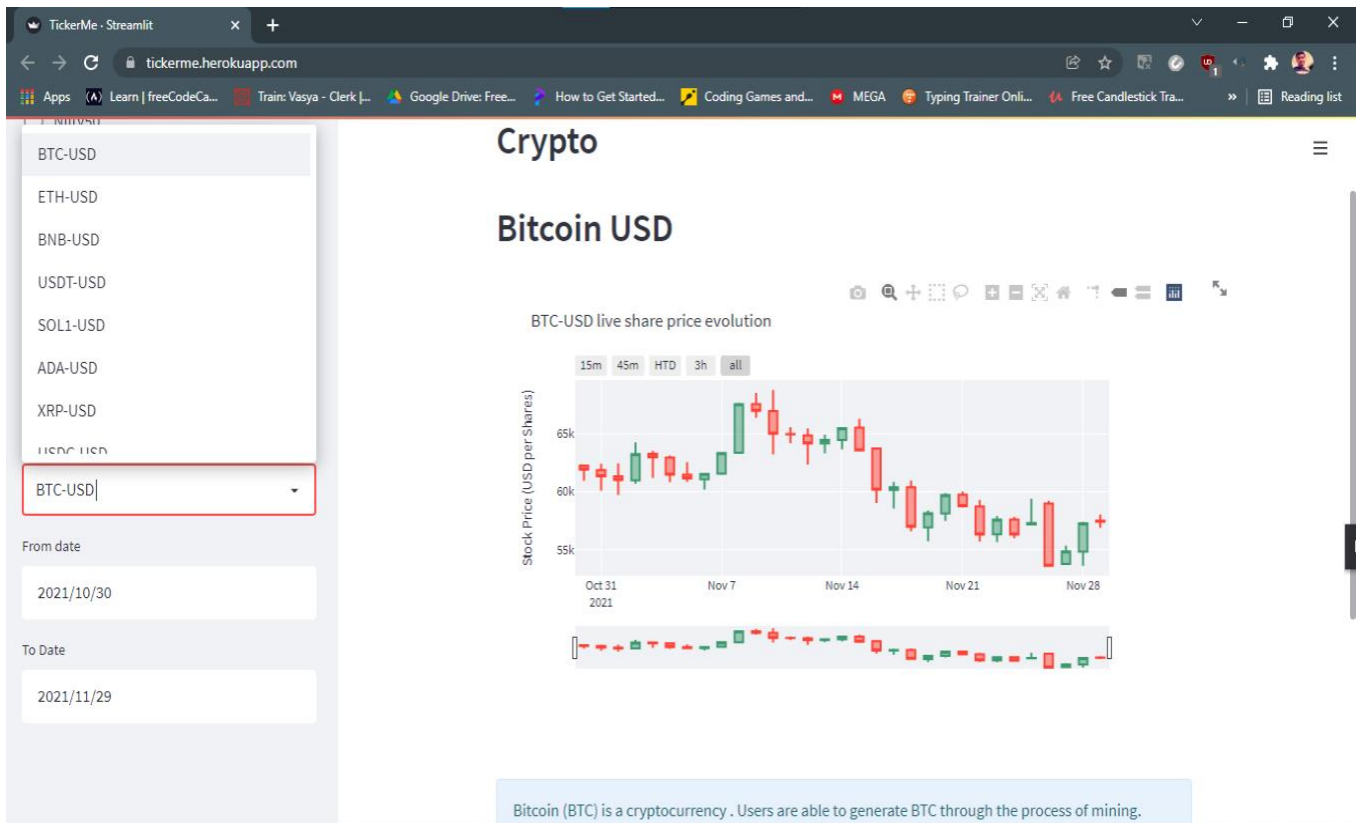
For Publish -> select “Docker Container”

On the “Docker” tab -> under Image Source -> select “Azure Container Registry” -> select your registry (which should appear on the dropdown list)

Select “Review + Create”

Awesome! Now you can see your app running on Azure by browsing to <http://Tickerme.azurewebsites.net>

8. SCREENSHOT



WITH LOVE:)

Select Analysis

☐ Nifty50
 ☐ NSE Stock Delivery
 ☐ Crypto
 ☐ NASDAQ
 ☐ SNP500
 ☐ DOW
 ☒ DIVIDENDS

DIV Inputs


Select Stock exchange

NASDAQ

Select Symbol

MSFT

DIVIDENDS



Microsoft Corporation

	dividend	ticker
2003-02-19T00:00:00	0.0800	MSFT
2003-10-15T00:00:00	0.1600	MSFT
2004-08-23T00:00:00	0.0800	MSFT
2004-11-15T00:00:00	3.0800	MSFT
2005-02-15T00:00:00	0.0800	MSFT
2005-05-16T00:00:00	0.0800	MSFT
2005-08-15T00:00:00	0.0800	MSFT
2005-11-15T00:00:00	0.0800	MSFT
2006-02-15T00:00:00	0.0900	MSFT
2006-05-15T00:00:00	0.0900	MSFT

Microsoft Corporation develops, licenses, and supports software, services, devices, and solutions worldwide. Its Productivity and Business Processes segment offers Office, Exchange, SharePoint,

WITH LOVE:)

Select Analysis

☒ Nifty50
 ☐ NSE Stock Delivery
 ☐ Crypto
 ☐ NASDAQ
 ☐ SNP500
 ☐ DOW
 ☐ DIVIDENDS

Nifty50 Inputs

Select Symbol

BAJAJ-AUTO.NS

From date


2021/10/30

To Date

2021/11/29

live share price evolution

15m 45m HTD 3h all



Bajaj Auto Limited develops, manufactures, and distributes automobiles in India. It operates through two segments, Automotive and Investments. The company offers motorcycles, commercial vehicles, electric two-wheelers, etc., as well as related parts. It also exports its products to approximately 70 countries in Latin America, Africa, South Asia, the Middle East, Europe, and the Asia Pacific. The company was founded in 1945 and is based in Pune, India.

CONCLUSION

Microsoft Azure simplifies website hosting process.

Features of Microsoft Azure are as follows:

- Fast processing and immediate results with high security.
- Leveraging Microsoft Azure's best in class infrastructure.
- Has Each and every requirement that a Web developer needs.

REFERENCES

- [Portal.azure.com](https://portal.azure.com)
- [Docker.com](https://docker.com)
- [GitHub.com](https://github.com)
- [Googledeveloper.com](https://googledeveloper.com)
- [Medium.com](https://medium.com)
- Discord developer group
- [Dev.com](https://dev.com)
- [Geeksforgeeks.com](https://geeksforgeeks.com)
- [Python.org](https://python.org)
- [Reactjs.org](https://reactjs.org)
- heroku.com
- tradingview.com
- streamlit.io
- [Researchgate.net](https://researchgate.net)
- [Digitalocean.com](https://digitalocean.com)
- [Yahoofinance.com](https://yahoofinance.com)
- https://en.m.wikipedia.org/wiki/Microsoft_Azure
- <https://ccbtechnology.com/what-microsoft-azure-is-and-why-it-matters/>
- <https://k21academy.com/microsoft-azure/create-free-microsoft-azure-trial-account/>
- <https://www.azuredevopslabs.com/labs/vstsextend/docker/>