📂Project READMEs – Dhanush Srikakulapu

✂️Deploying a Machine Learning Model with Azure Machine Learning

📌Description

This project demonstrates the end-to-end lifecycle of building and deploying a machine learning model using **Azure Machine Learning Studio**. The solution involves data preprocessing, model training using automated ML and custom Python scripts, and deploying the model as a REST API via **Azure Container Instance**.

Technologies Used

- Azure ML Studio
- Python
- Azure Container Instance
- REST API

💼Real-Time Use Case

Can be used for **fintech fraud detection**, **loan approval scoring**, or **insurance claim predictions**, where a trained model predicts outcomes and returns results in real-time.

🗜️Features

- Dataset import and preprocessing
- Model training with AutoML and Python
- Deployment as REST API
- Real-time predictions exposed via API endpoint

✒️Building a Real-Time Dashboard with Google BigQuery and Looker Studio

📌Description

A powerful real-time data visualization dashboard using **Google BigQuery** and **Looker Studio**. It connects to live data and presents dynamic Key Performance Indicators (KPIs) in an easy-to-read dashboard format.

Technologies Used

- Google BigQuery

- Looker Studio
- SQL

💼Real-Time Use Case

Perfect for **SaaS business dashboards**, **investment and trading analytics**, **user engagement tracking**, or **sales monitoring** for instant decision-making.

🗜️Features

- Real-time data fetching from BigQuery
- Visualization of KPIs
- Automated and interactive reports
- Decision-friendly visual interfaces

🛏️Building a Serverless API with AWS Lambda and API Gateway

📌Description

This project features a serverless backend built using **AWS Lambda** and **API Gateway** for efficient and scalable RESTful services. It integrates with **DynamoDB** for data storage.

Technologies Used

- AWS Lambda
- AWS API Gateway
- DynamoDB
- Python

💼Real-Time Use Case

Used in **event-driven fintech platforms**, **order confirmation systems**, or **notification microservices** where real-time response and serverless architecture is ideal.

🗜️Features

- No server management required
- Auto-scalable REST APIs
- DynamoDB integration
- Cost-effective and fault-tolerant backend

🌂Multi-Cloud Kubernetes Cluster

📌Description

A highly available Kubernetes cluster deployed across **AWS, Azure, and GCP**, ensuring resilience and zero downtime. CI/CD pipelines and load balancing were implemented for smooth operations.

Technologies Used

- Kubernetes
- Docker
- Jenkins / GitHub Actions
- AWS / GCP / Azure

💼Real-Time Use Case

Ideal for **global SaaS platforms**, **financial trading systems**, or **AI/ML model serving** that demand high uptime, disaster recovery, and scalability.

🗜️Features

- Multi-cloud deployment
- High availability and fault tolerance
- CI/CD pipeline with GitHub Actions
- Load balancing and network policy setup

🌡️ Full Stack E-Commerce Platform

📌Description

An end-to-end e-commerce application built using **React.js** and **Java Spring Boot**, with JWT authentication, MySQL database, and Stripe/PayPal payment integrations.

Technologies Used

- React.js (Redux)
- Java Spring Boot
- MySQL
- Stripe / PayPal APIs

💼Real-Time Use Case

Mimics real-world **e-commerce systems** or **online marketplaces** with user accounts, product management, and transaction handling. Can be adapted to **fintech marketplaces** or **digital services**.

🗜️Features

- Secure user login via JWT
- Real-time inventory updates
- Cart, checkout, and order tracking
- Payment gateway integration
- Admin dashboard for order/user management

🎒Real-Time Weather Analytics Dashboard

📌Description

A real-time weather analytics app built with **Python Flask** for the backend and **vanilla JavaScript** + **Chart.js** for the frontend. Integrates multiple weather APIs and stores data in MySQL.

Technologies Used

- Python Flask
- JavaScript (Chart.js)
- HTML5, CSS3
- MySQL

💼Real-Time Use Case

Great for **real-time data monitoring**, **climate-based financial modeling**, **disaster alert systems**, or any platform that relies on **real-time API data processing and visualization**.

🗜️Features

- Real-time weather data from multiple APIs
- Dynamic visualization using Chart.js
- MySQL-based data persistence
- Performance optimized through query indexing

Each of these projects reflects practical skills aligned with **AI/ML, Full Stack SaaS Development, and Cloud DevOps**, making Dhanush a strong candidate for high-impact tech roles in modern fintech environments like Alsatronix.