

# Back End Development

DAILY BASED TOOLS

**1**

## **Your Code**

Your Tasks, Code , PR ,  
IDE, Scripts and bugs

**2**

## **FE-Team**

Your API and Services  
Consumers

**3**

## **Servers**

Deployment Servers,  
Monitoring Services ,  
Cloud Services

**4**

## **Others**

Others Teams , like  
Devops , Marketing,  
Others backend Teams

# IDE & Editor

An IDE is a comprehensive software suite that provides tools for writing, testing, and debugging code,

A text editor is a more lightweight tool, primarily used for writing and modifying code, often enhanced with features such as syntax highlighting and autocomplete.



# IDE & Editor Examples



VS Code



PHP Storm



Sublime Text



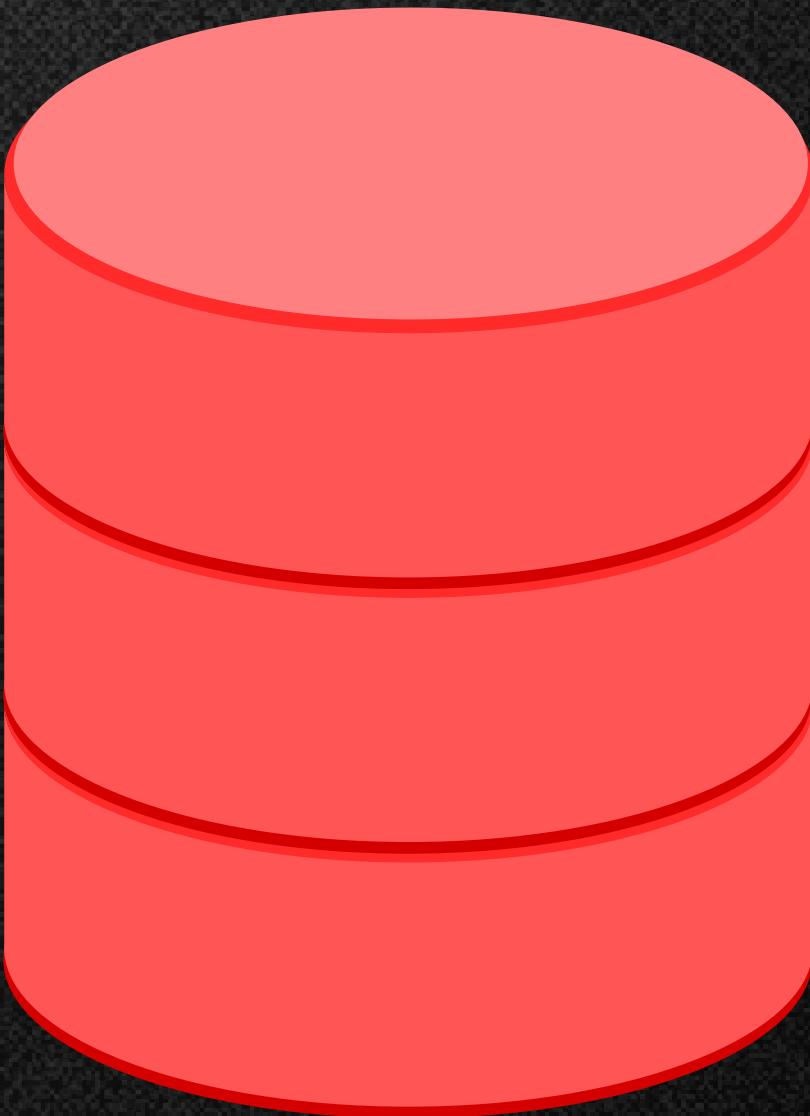
Pycharm



IntelliJ

# Database Tools

Are Software solutions designed to interact with, manage, and manipulate databases. These tools provide functionalities such as creating, editing, and executing SQL queries, managing database structures, and providing visual representations of data,



# Database Tools Examples



Data Grip



PHP MyAdmin



MySQL WorkBench



Table Plus



Resp App

# Version Control

Git is a distributed version control system that allows multiple people to work on a project at the same time without overwriting each other's changes, and it keeps a history of all modifications to the code.



# Version Control Examples



Github



Bitbucket



Git Lab

# Issue Tracking Tools

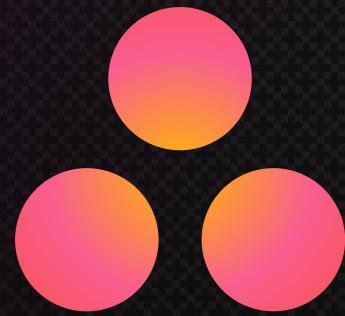
Issue tracking tools are software applications that allow teams to manage, track, and resolve issues, bugs, or tasks efficiently in their projects. They provide a centralized platform for collaboration, streamlining workflow, prioritizing tasks, and maintaining a detailed history of issues,



# Issue Tracking Tools Examples



Jira



Asana



YourTrack



Trello



Backlog

# Logging and Data Visualization Tools

Logging tools collect, store, and process logs from software applications or systems, aiding in monitoring, error debugging, and security. Data visualization tools convert complex data sets into visual graphics for easier understanding and analysis, thus facilitating decision-making processes.



# Logging and Data Visualization Tools Examples



Kibana



Grafana



Knowi



Splunk



Ramy Hakam

# **Web Servers Tools**

Are software applications that host websites and web applications on the internet, handling HTTP requests from clients and returning HTTP responses along with optional data contents.



# Web Servers Tools Examples



Apache



Nginx



Xampp



Wamp



Tomcat

# Building Tools

Building tools, or build tools, in programming are software utilities that automate the process of converting source code files into executable software. These tools handle tasks such as compiling, linking, and packaging the code



# Building Tools Examples



Phing



Maven



Gradle



Go Tool

# CI and CD Tools

CI/CD stands for Continuous Integration and Continuous Delivery/Deployment in software development.

Continuous Integration (CI) is the practice of merging all developers' working code copies to a shared mainline several times a day, while Continuous

Delivery/Deployment (CD) ensures that the software can be reliably released at any time by delivering every change to a production-like environment and ensuring that the software is production-ready.



# CI and CD Tools Examples



Travis CI

Travis CI



Bitbucket  
Pipelines



Github  
Actions



Gitlab  
CI/CD



Jenkins  
Jenkins



argo

Argo CD

# API Testing Tools

API testing tools are software applications that allow developers and testers to send requests to, and receive responses from, web services or Application Programming Interfaces (APIs), in order to evaluate their functionality, performance, and security. These tools can help ensure that APIs meet expected behaviors, handle error conditions gracefully, and can manage the expected load of users.



# API Testing Tools Examples



Postman



Swagger UI



Soap UI



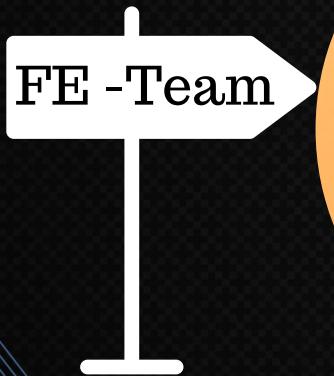
JMeter



katalone studio

# FrontEnd Team Socket

How To Send API Docs To The FE Team



## الحج عبد السلام

عايزين ال API الجديدة يا حج ابراهيم عشان  
نشتغل عليها ونخلص ال Ticket



## الحج ابراهيم

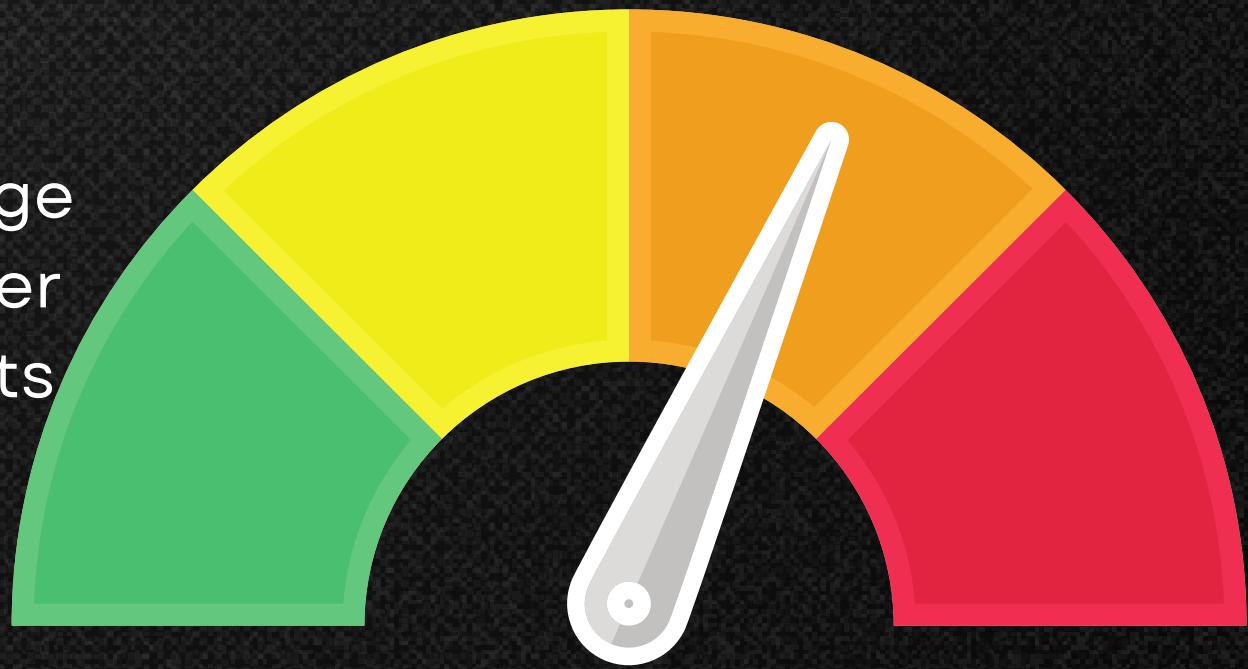
تمام ..هبعتك Collection  
دلوقي فيها كل الداتا المطلوبة



Ramy Hakam

# Performance Profiling Tools

Performance profiling tools are software applications used to analyze a program's behavior and resource usage to identify areas of code that can be optimized for better speed or efficiency. These tools provide detailed insights such as execution time, memory usage, and CPU utilization, thereby allowing developers to locate bottlenecks and optimize their code for better performance.



# Performance Profiling Tools Examples



Xdebug



Blackfire.io



VisualVM



Yourkit



JProfile

# Code Quality Tools

Code quality tools, also known as static code analyzers or linters, are software applications that analyze source code to detect bugs, code smells, security vulnerabilities, and enforce coding standards, without actually executing the program



# Code Quality Tools Examples



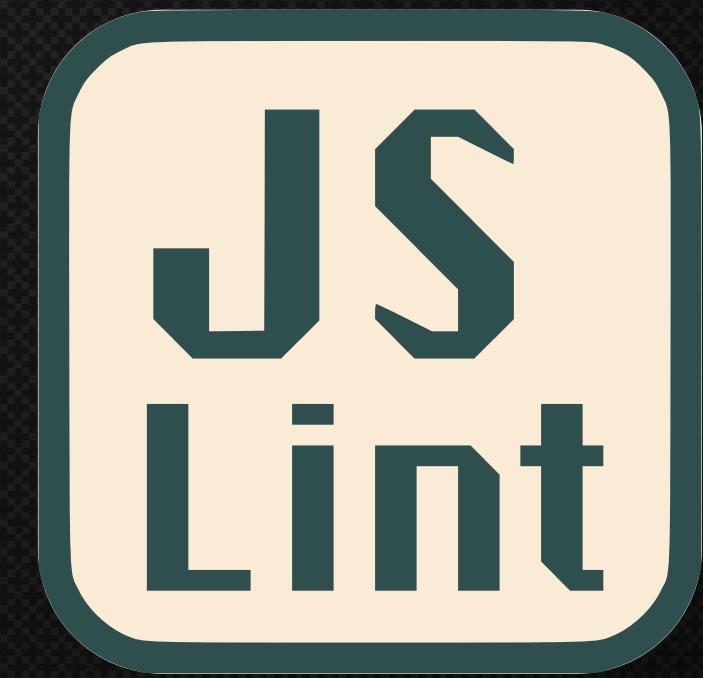
**PHP Stan**



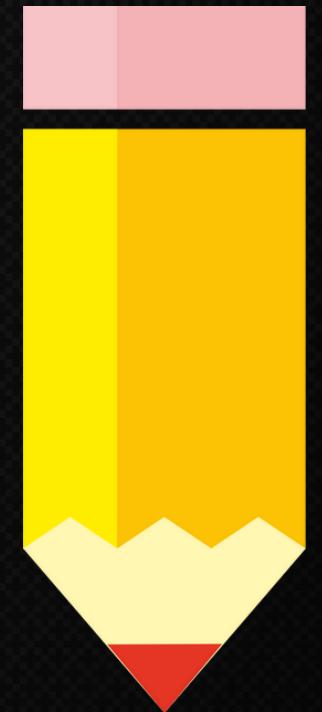
**Code Sniffer**



**PHP MD**



**JS Lint**



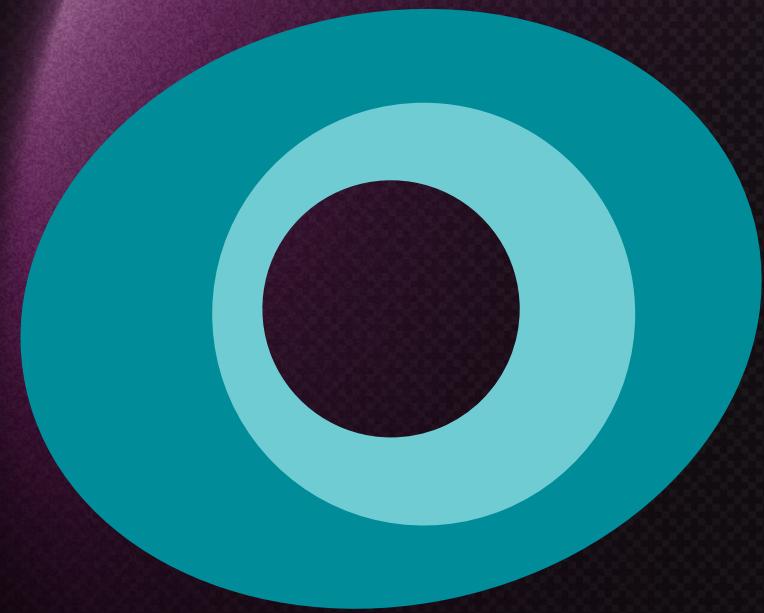
**Check Style**

# Application Performance Monitoring Tools

Application Performance Monitoring (APM) is a method that uses tools and techniques to track, analyze, and manage the performance and availability of software applications. It helps ensure optimal functionality and user experience by identifying and addressing performance issues before they negatively impact users.



# Application Performance Monitoring Tools Examples



New Relic



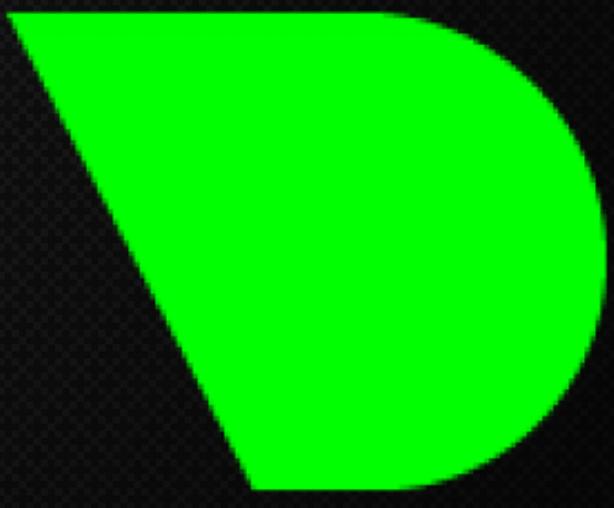
DataDog



NinjaOne



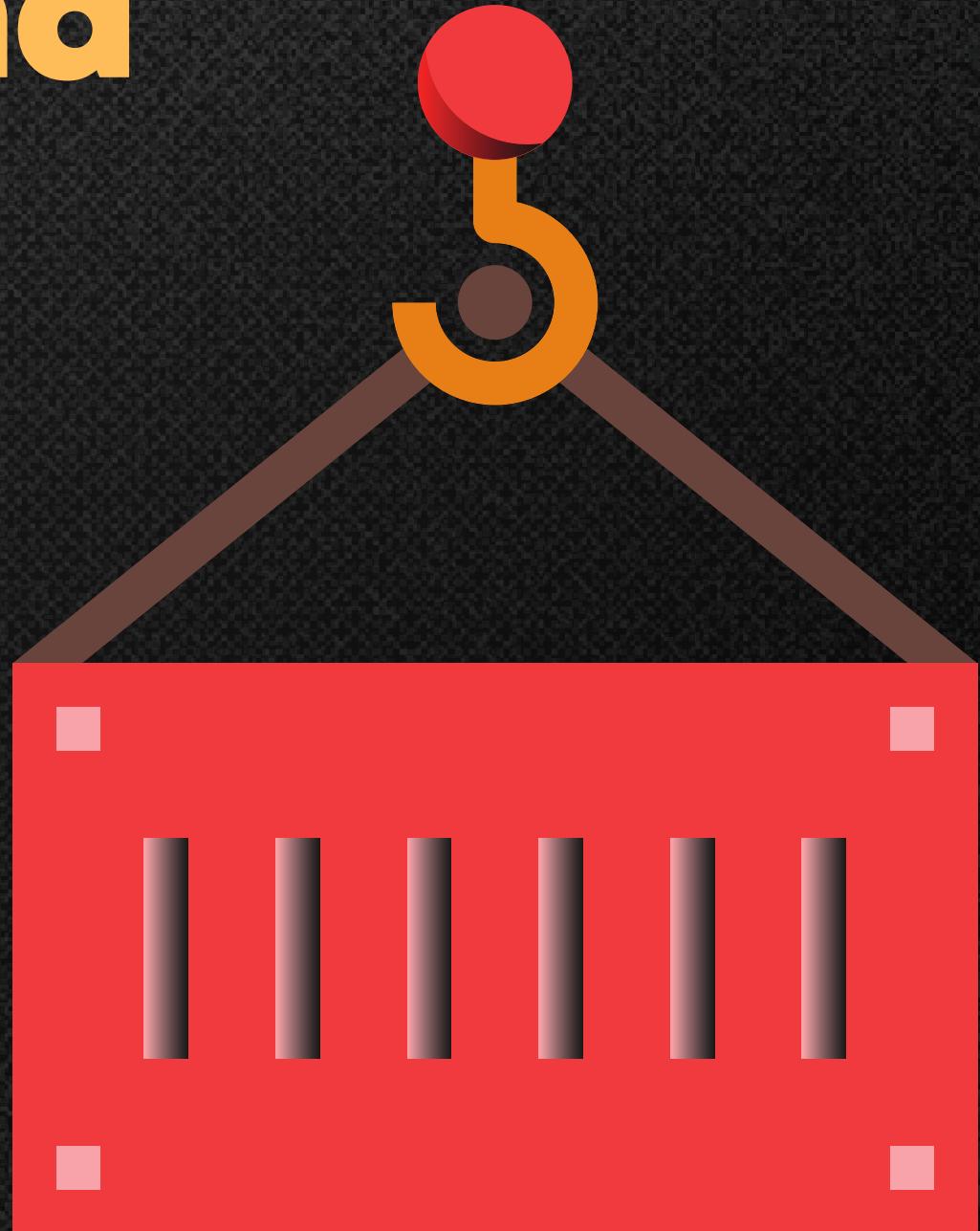
HTop



Net Data

# Containerization and Environments Tools

Tools allow developers to package applications with their dependencies and run them in isolated, controlled environments. These tools help to eliminate the "works on my machine" problem, ensuring consistent performance and behavior across different computing systems, from development to production.



# Containerization and Environments Tools Examples



Docker



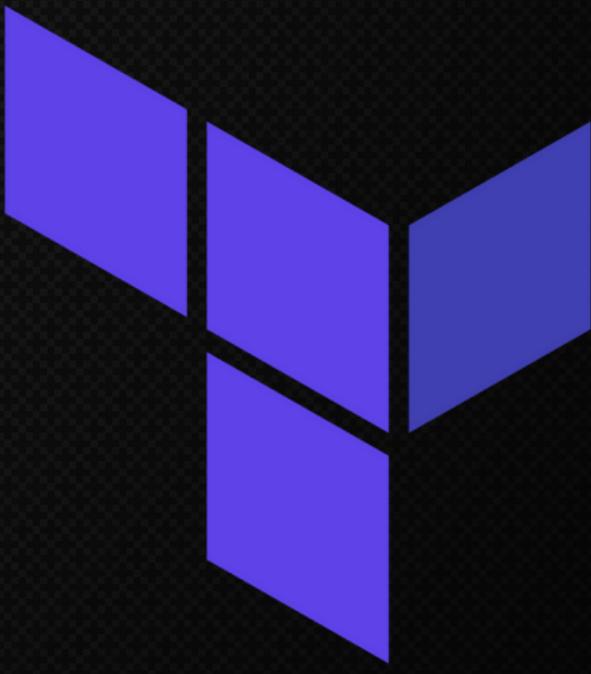
VAGRANT  
Vagrant



Kubernetes



Ansible



TerraForm

# DevOps Team Socket

How To Validate Issues with Devops



الحج محمود

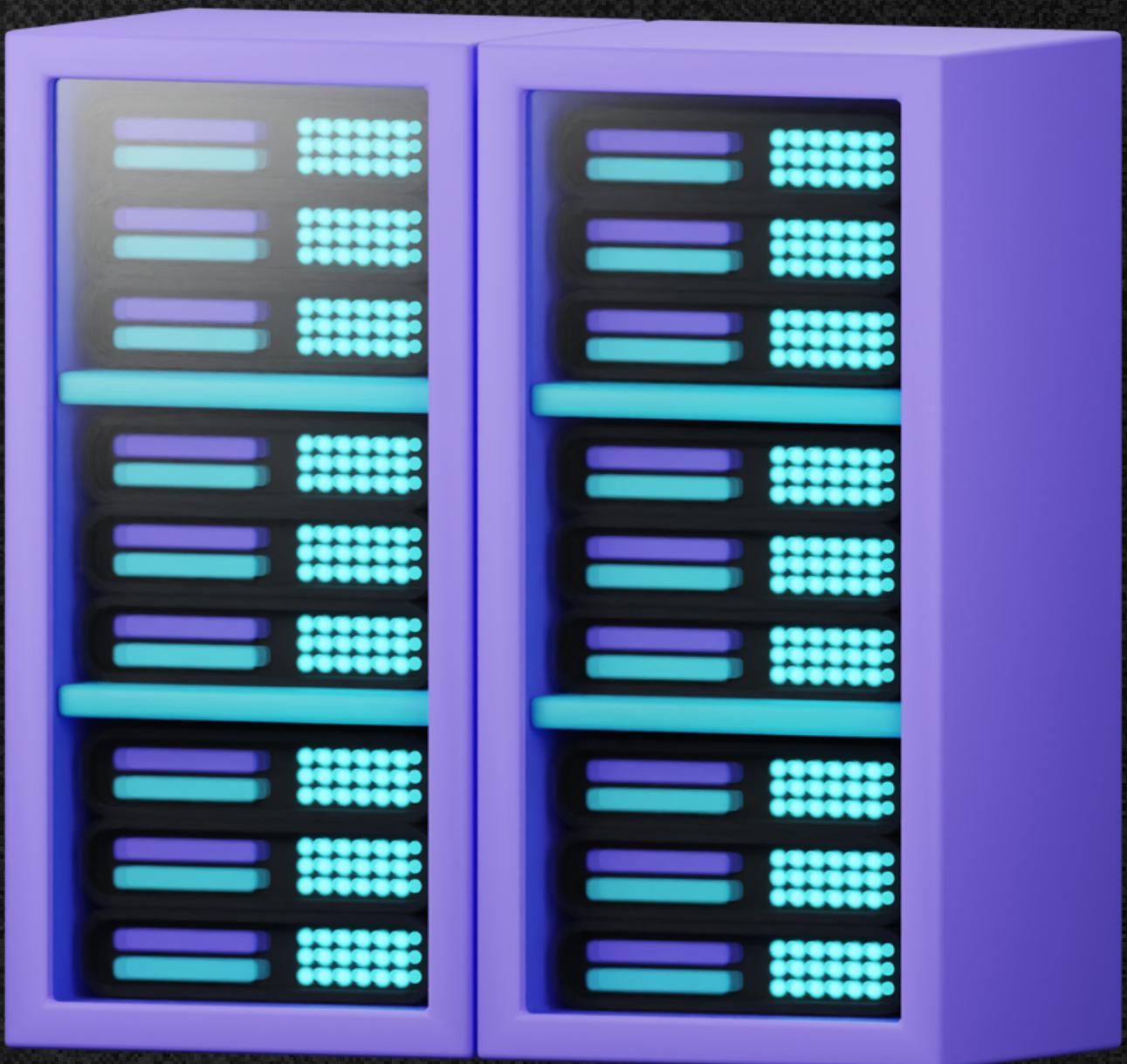
ال API الجديدة يا حج ابراهيم مش شغاله  
علي ال Demo بترمي exception



الحج احمد  
بس هي شغاله عندي لوكل

# Servers and Cloud Tools

Hosting servers and cloud tools are platforms and services that provide computing resources, storage, and a variety of other services over the internet, effectively acting as the backbone for hosting websites, apps, and online services. They remove the need for owning and maintaining physical servers.



# Hosting Servers Examples



Go Daddy



HOSTINGER

Hostinger



Ipage

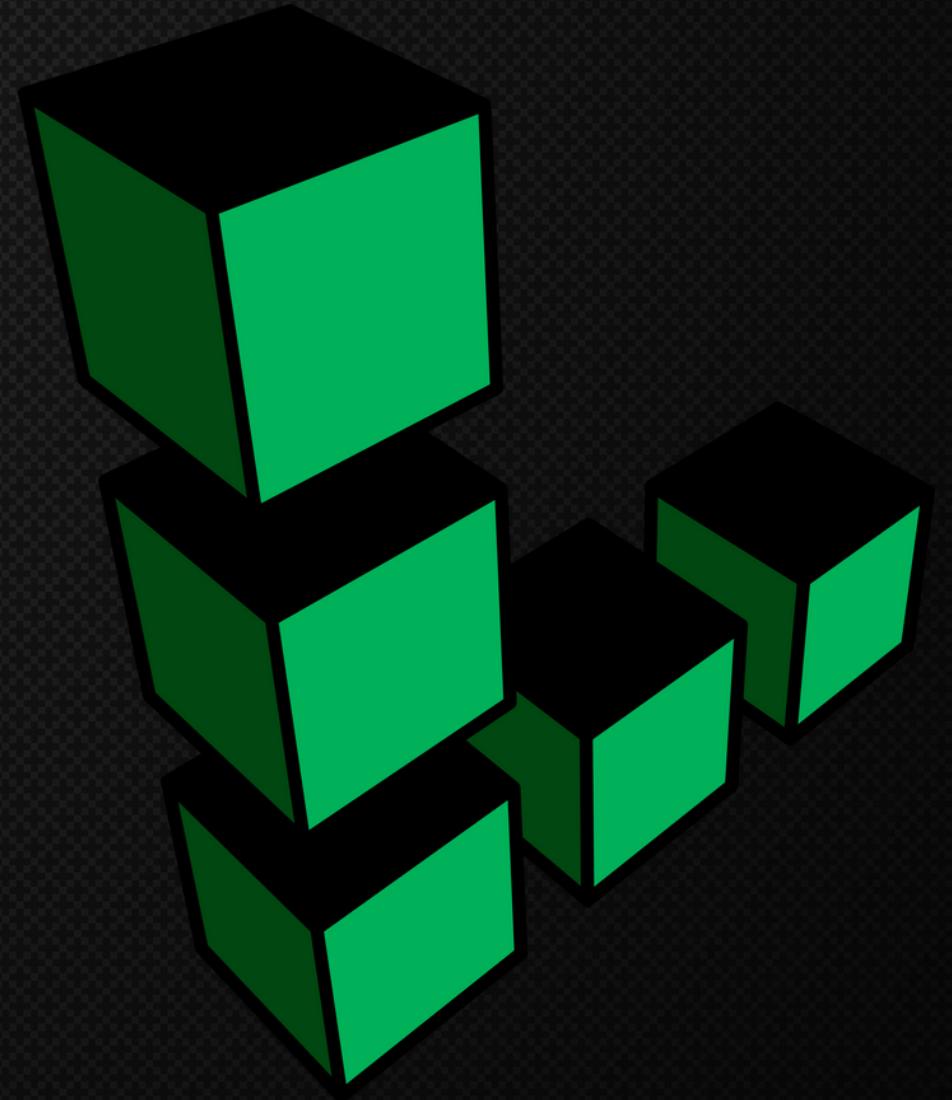
# Cloud Infrastructure Provider Examples



DigitalOcean



Heroku



Linode

# Cloud Services Provider Examples



AWS



Azure



GCP

# AI Tools

AI tools are technologies and platforms that use artificial intelligence (AI) and machine learning to aid in software development. These tools can help automate tasks, improve code quality, detect bugs and security vulnerabilities, and even write code.



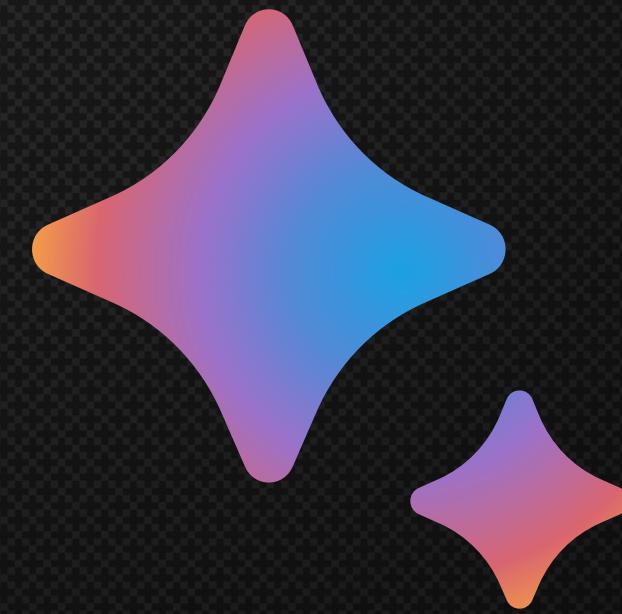
# Programming AI Tools Examples



Copilot/X



Chat GPT



Bard



BlackBox AI



# Thank You

Ramy Hakam

---