Advanced Concepts in Web Development
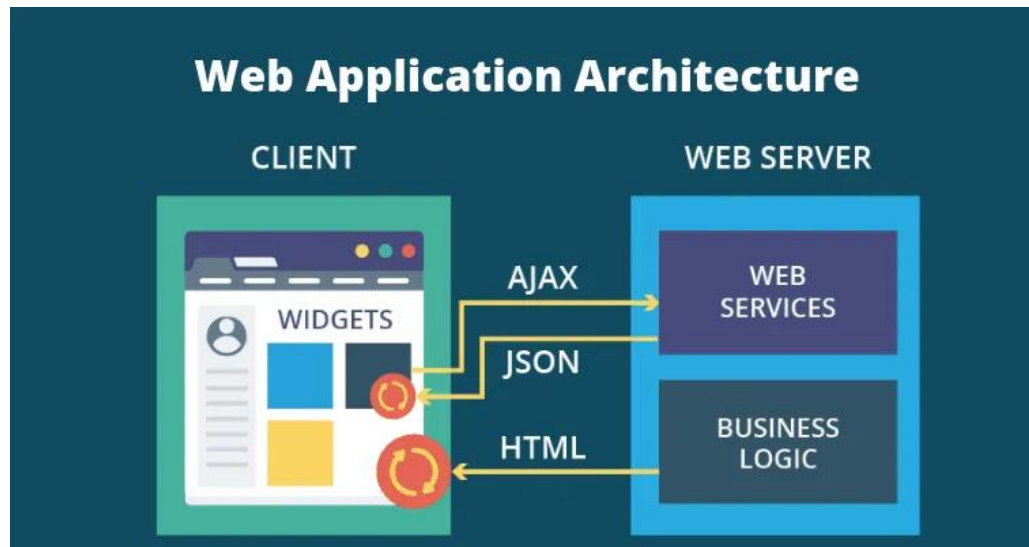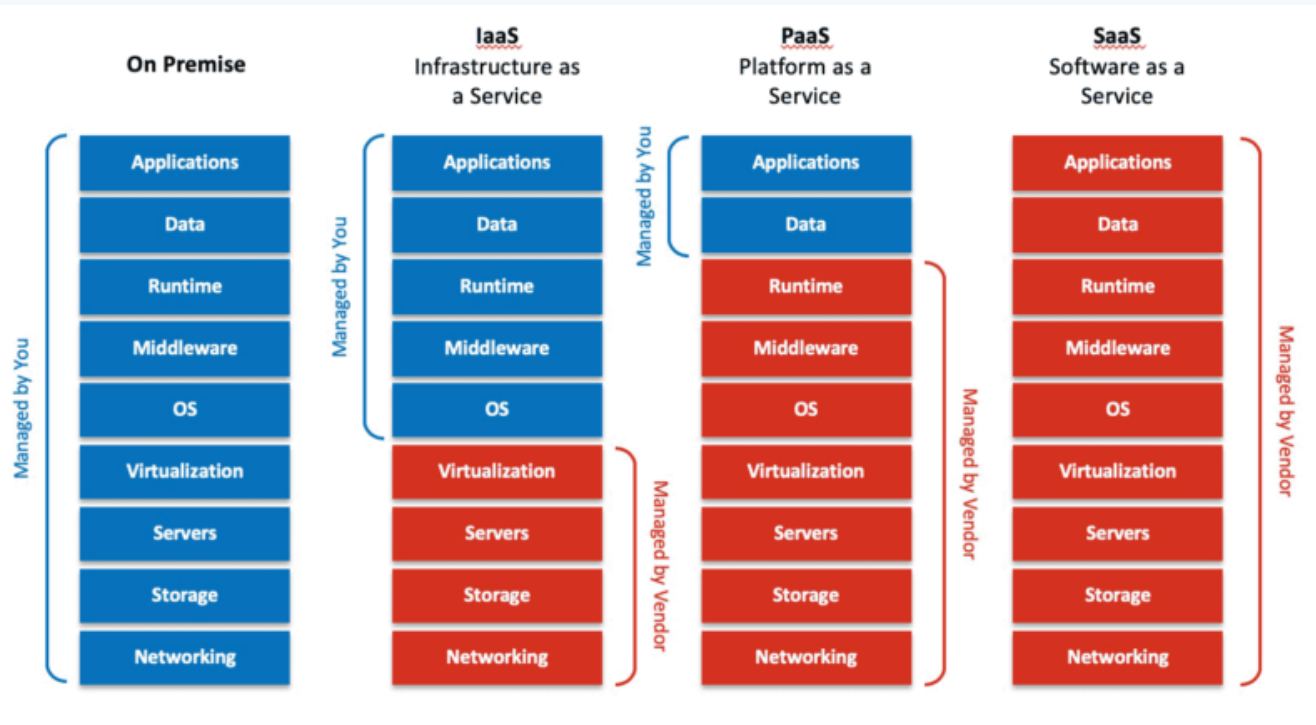
Ratana SOTH
rsoth@paragoniu.edu.kh

088 898 8085

Full Semester Learning Skills

Cloud Type

On Premise	IaaS Infrastructure as a Service	PaaS Platform as a Service	SaaS Software as a Service
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
OS	OS	OS	OS
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

1. Elasticity and Flexibility
2. Scalability
3. Automation
4. Costless (Pay as You Go)
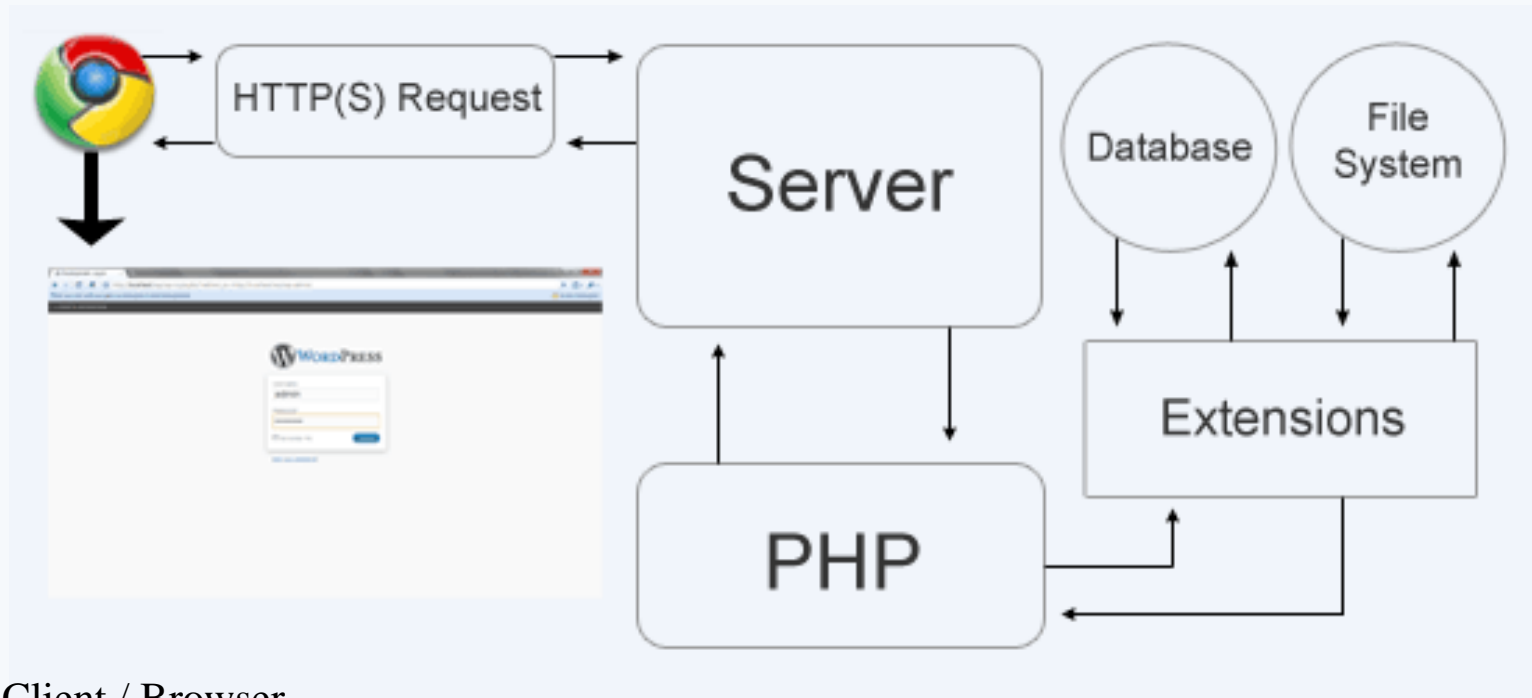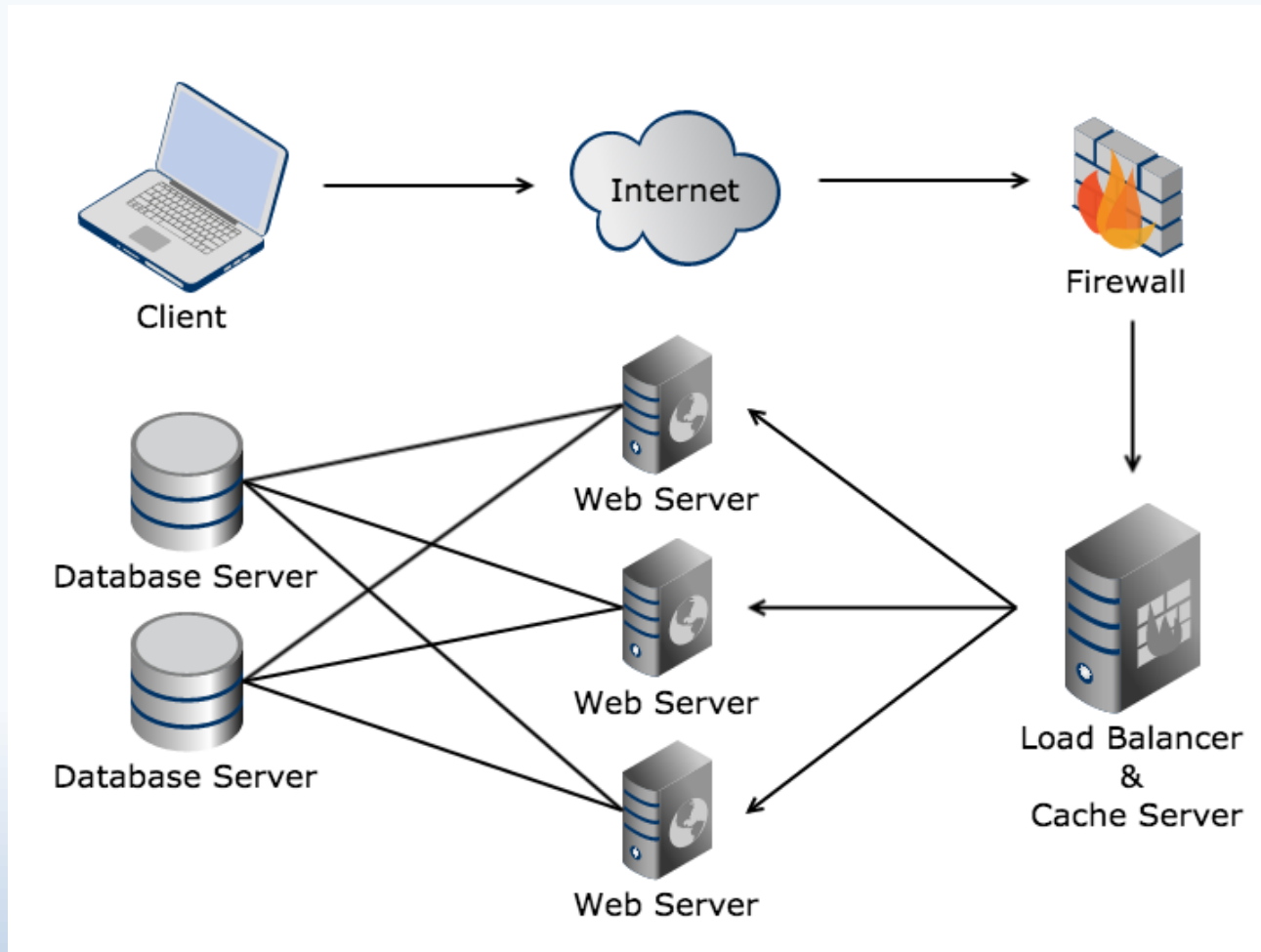5. Security

Cloud Type
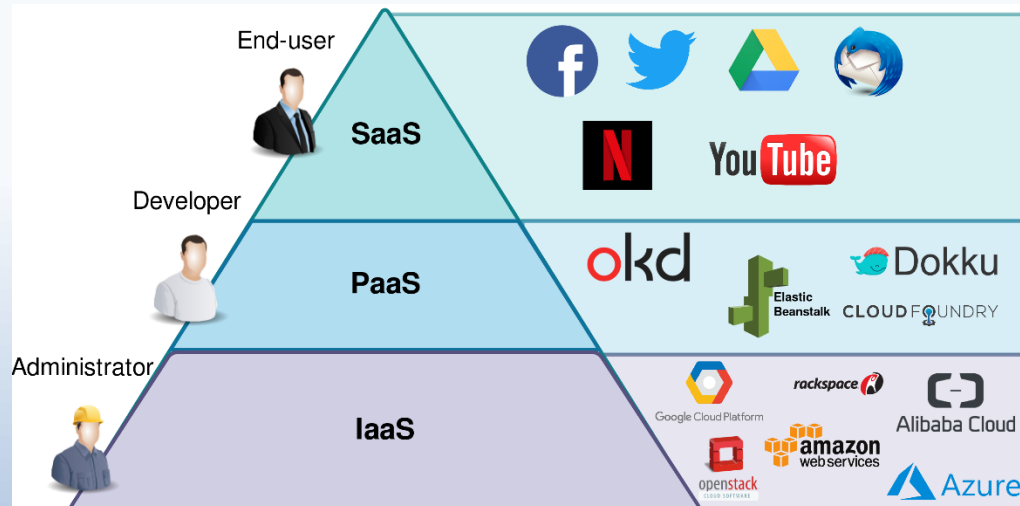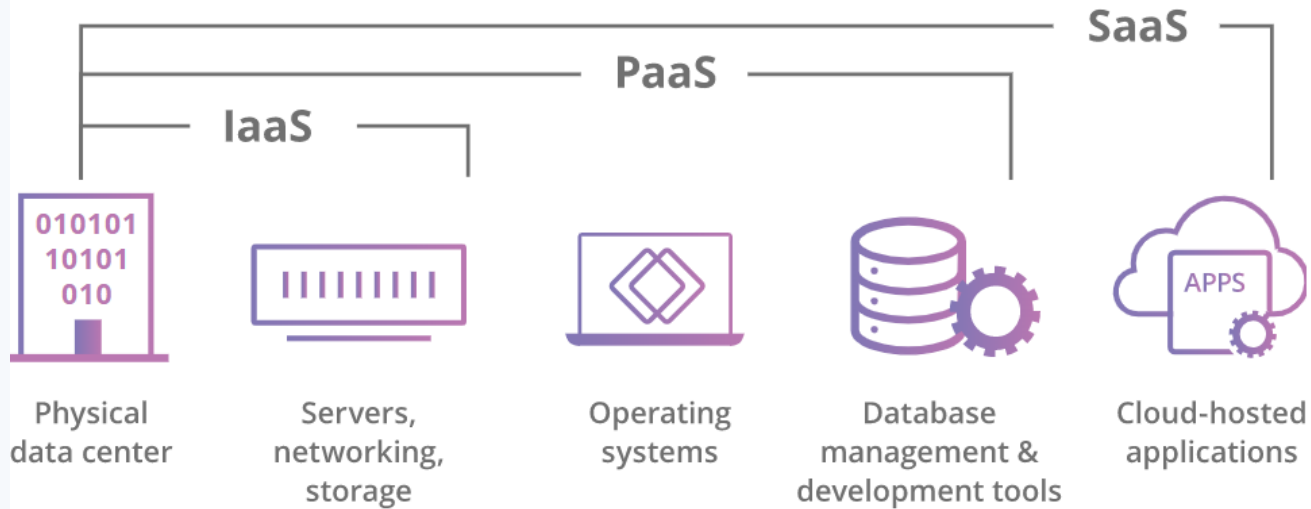
Cloud Provider

1. Amazon Web Services (AWS)
2. Google Cloud Platform (GCP)
3. Microsoft Azure
4. DigitalOcean (DO)
5. Alibaba Cloud
6. Oracle Cloud
7. IBM Cloud
8. More …
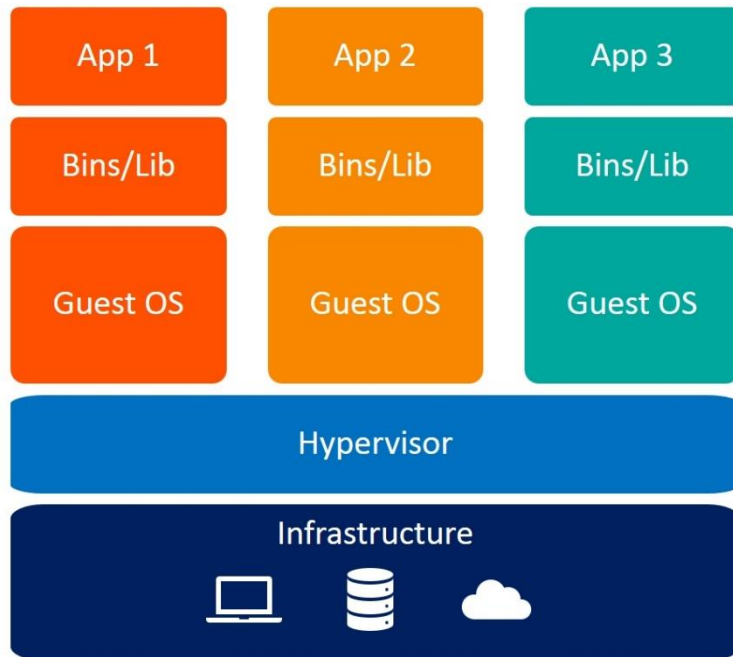   Market of cloud (Guru99, 2020)

WebApp Work

1. Client / Browser
2. Cloud Server
3. Web Server – Apache/NginX
4. Application Server – PHP, NodeJS - Extension/ Module
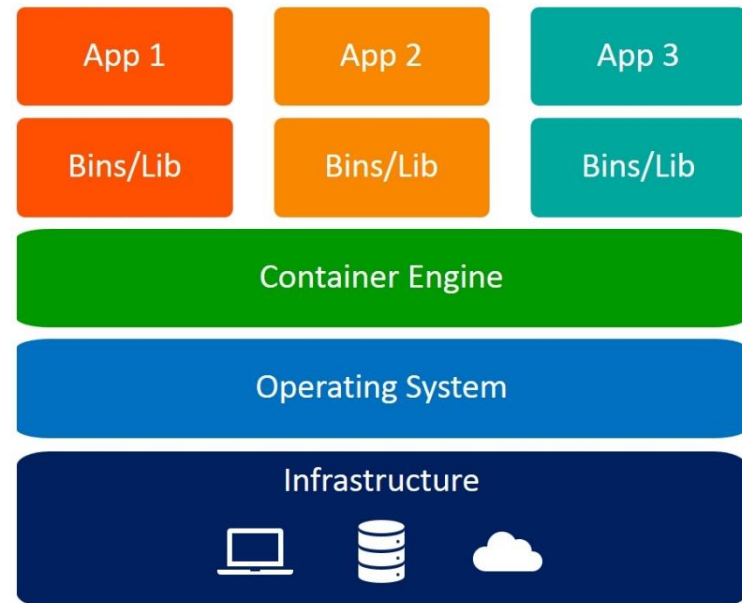5. Database Servers
6. Images Folder/ Storage Object File

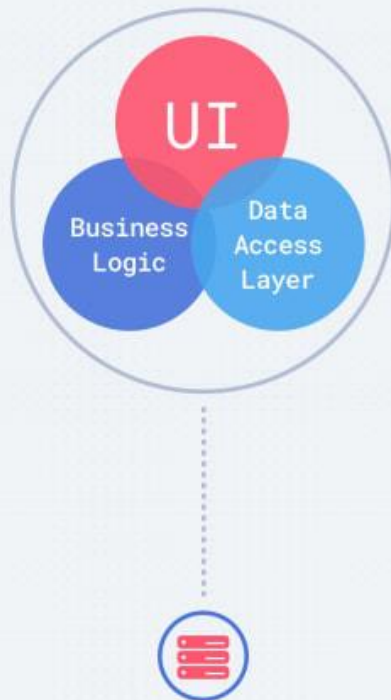# Web Server Work

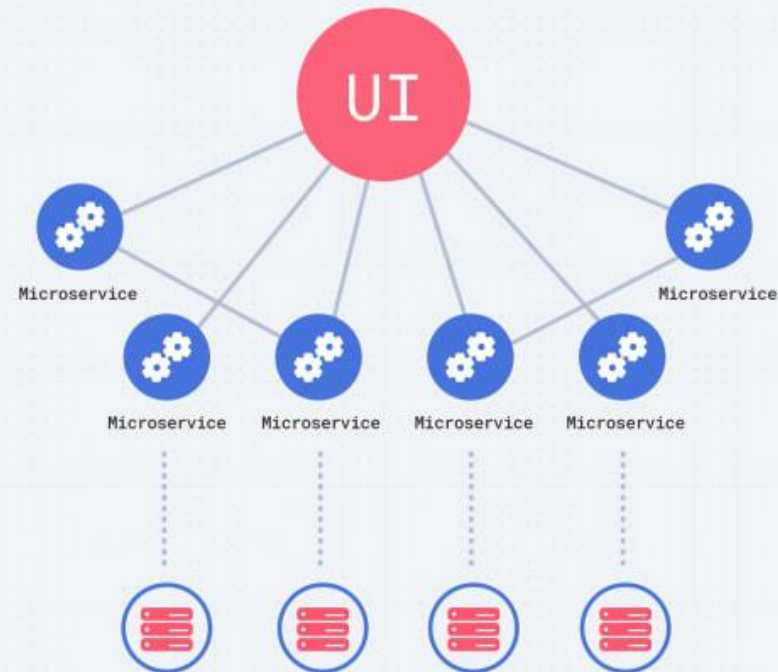# Docker Container

Virtual Machines | Containers

Virtual Machines: App 1, App 2, App 3 / Bins/Lib / Guest OS / Hypervisor / Infrastructure

Containers: App 1, App 2, App 3 / Bins/Lib / Container Engine / Operating System / Infrastructure

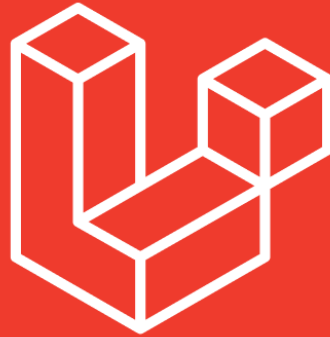# Monolithic vs Microservice

PHP - Server Programming
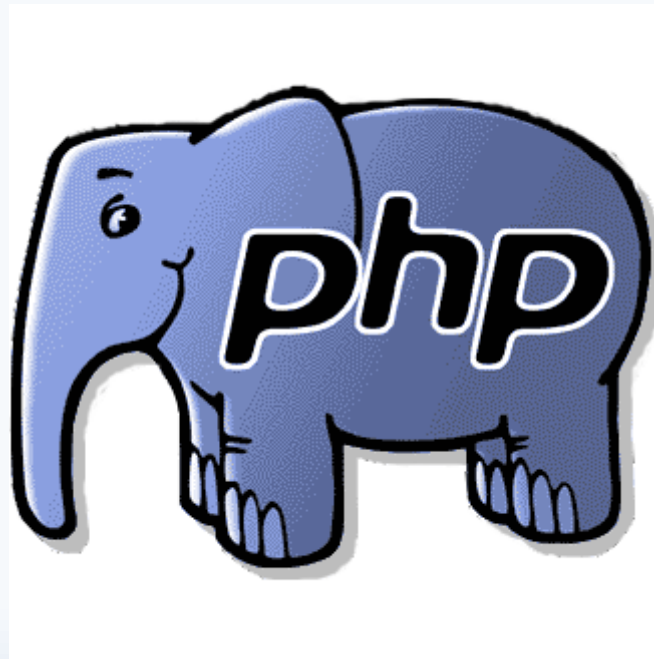
MySQL – Relational Database

PHP Framework
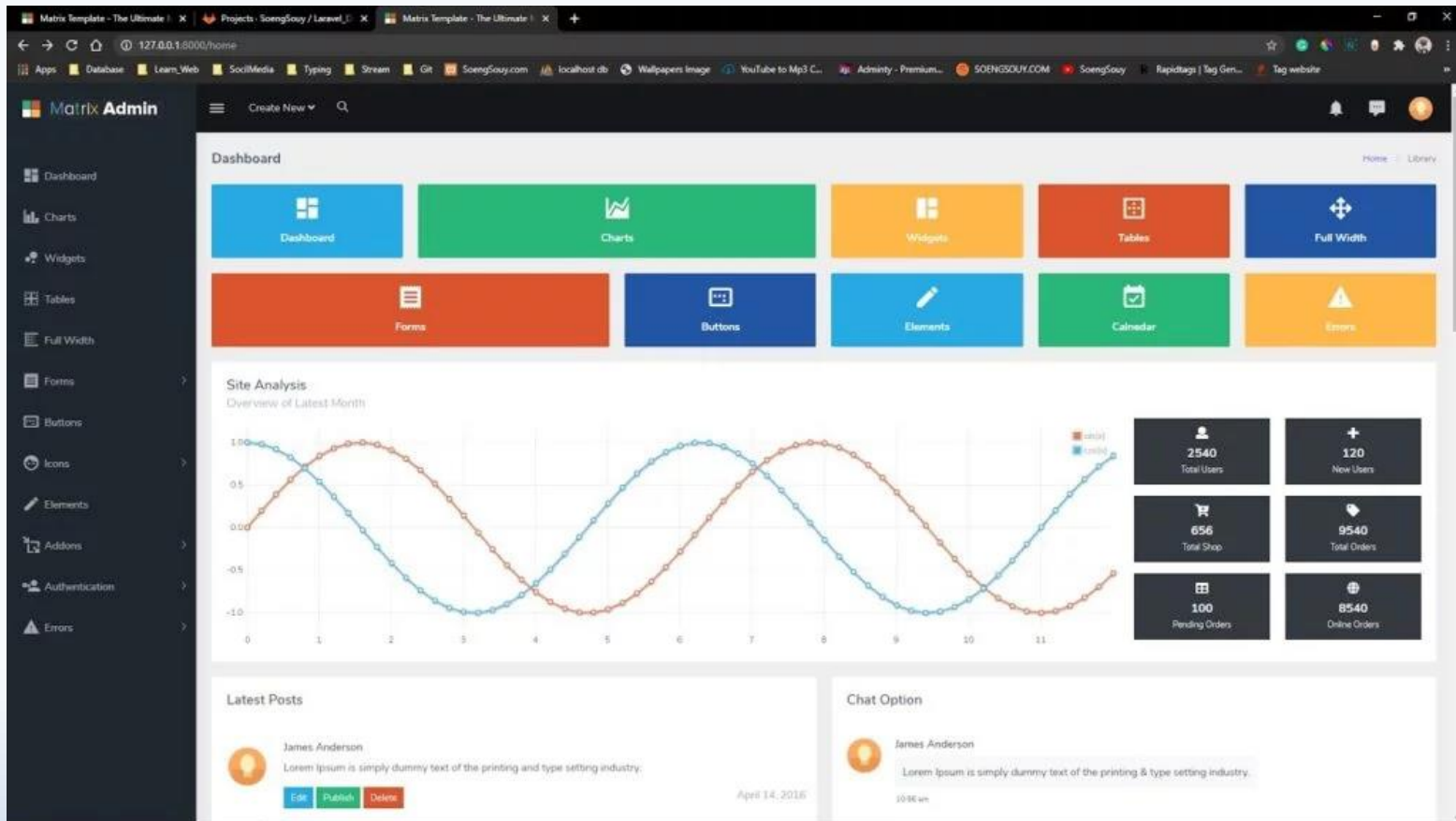
API

Backend – Admin Panel

Defense Final Project

1. Web-based Application System
2. Ready Hosted on Cloud
3. Scalable Database Server
4. Scalable Application Server
5. Documentation