INTRODUCTION

LESSON 1 – MR. MINH SANG

COURSE INTRODUCTION

FRONT-END WEB DEVELOPMENT WITH REACT

- ReactJs basic

- Frontent UI (Material UI)

- Redux

- Communicate API

- Optional: different way to build reactjs web instead of javascript

EVALUATION STRATEGY

- **Must attend more than 80% of contact hours (if not, not allow to take exam).**
- **Evaluating**
  - 02 Progress Tests (PT: 15%)
  - 08 Labs (L: 20%)
  - 01 Assignment (AS: 15%)
  - 01 Practical Exam (PE: 20%)
  - (Practical exam pass only when the score of PE >= 4))
  - Final Exam (FE: 30%)
  - Final result = 15%(PT) + 20%(L) + 15%(AS) + 20%(PE) + 30% (FE)
- **Pass:**
  - Every on-going assessment component > 0
  - Final Exam score >= 4 and
  - Final result >= 5

MODULE 1: REACTJS BASIC

- Install React app
- React Components

Lab1

- React Hook

Lab 2

- React Router, Single Page Applications

Lab 3

MODULE 2: FRONTEND UI

- Install/ configure Material UI

- Material Components

Lab 4

- CSS Preprocessor

Lab 5

MODULE 3: REDUX

- Redux
- React form

Lab 6

MODULE 4: COMMUNICATE API

- Client-Server Communication

- Brief Representational State Transfer (REST)

- FETCH & React Animation

Lab 7

MODULE 5: TYPESCRIPT

- Configure

- Function

Lab 8

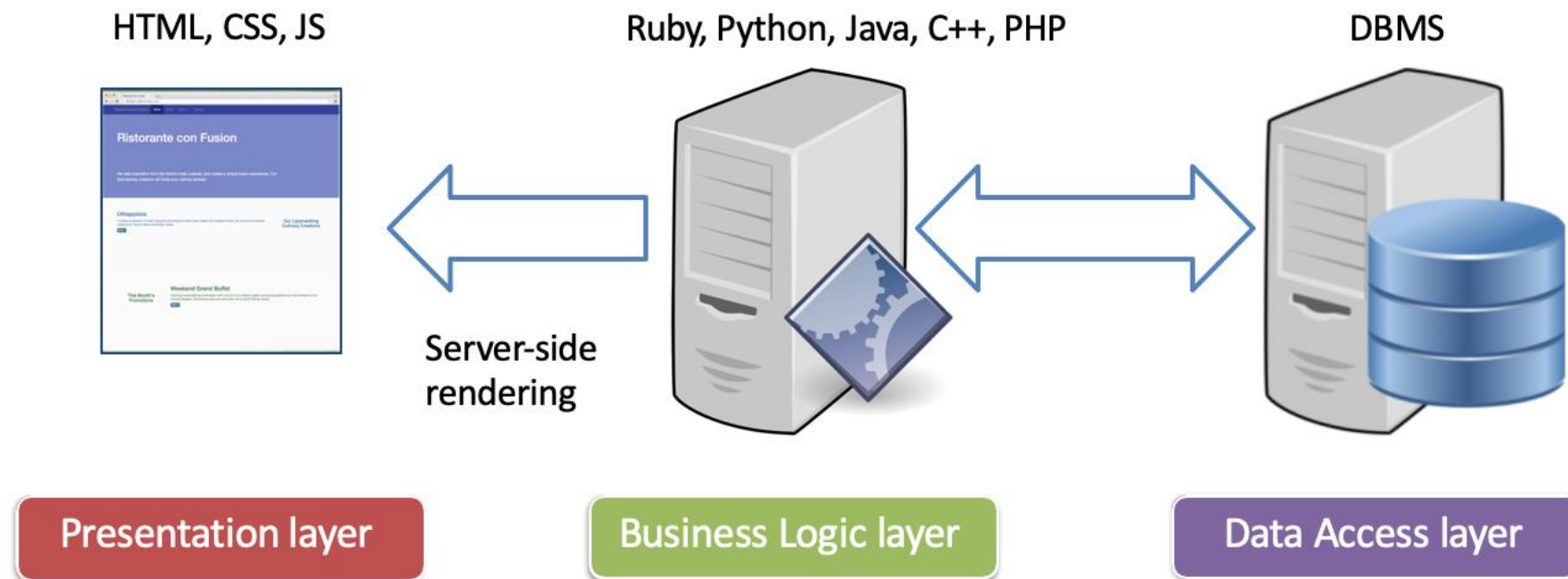# FULL STACK WEB DEVELOPMENT AND SETUP DEVELOPMENT EVIRONMENT

FULL STACK WEB DEVELOPMENT AND SETUP DEVELOPMENT EVIRONMENT

- Understand what is meant by full stack in the context of web development

- Distinguish between front-end, back-end and full stack web development

- Set up a Git repository and perform basic Git operations

- Set up and use online Git repositories

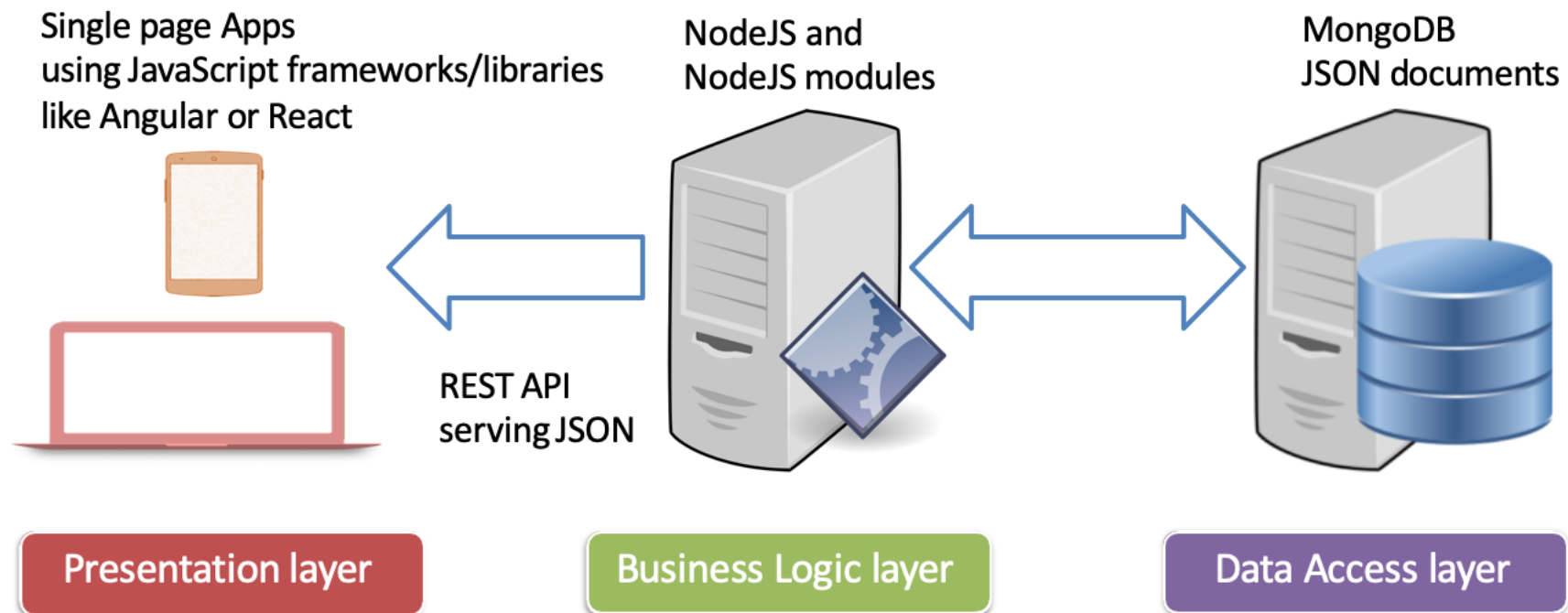- Use Node-based modules to perform basic operations.

WHAT IS FULL STACK WEB DEVELOPMENT?

- Front end / Client-side

  - HTML, CSS and Javascript

- Back end / Server-side

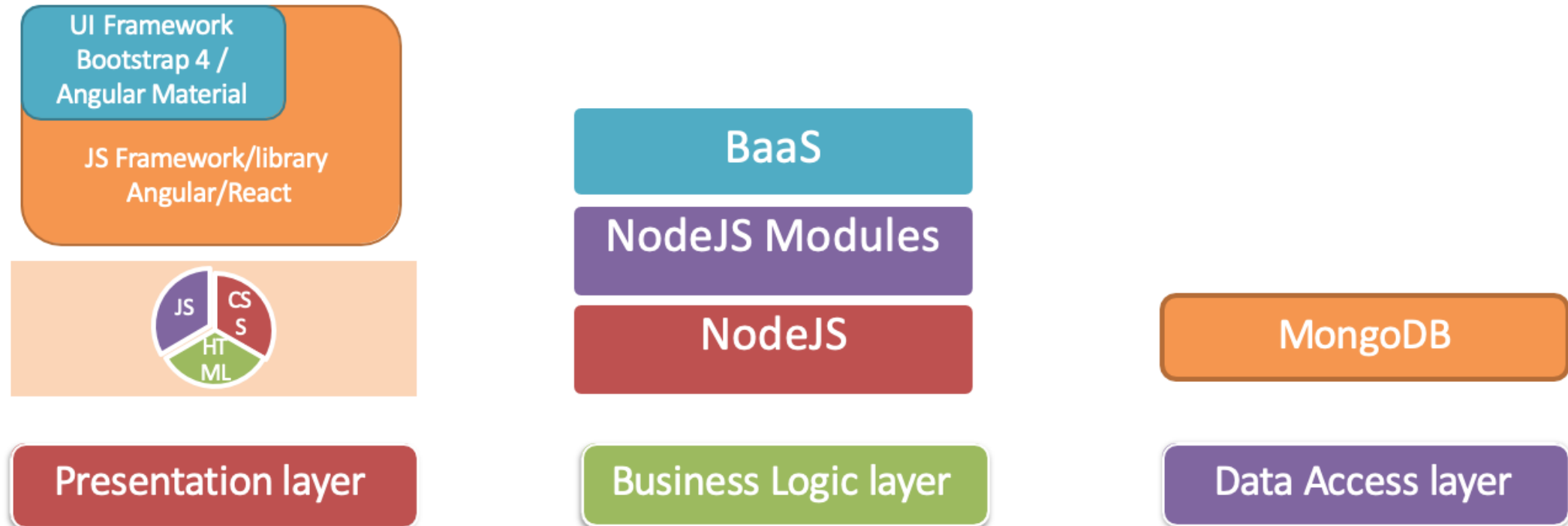 - Various technologies and approaches – PHP, Java, ASP.NET, Ruby, Python

TRADITIONAL WEB DEVELOPMENT

HTML, CSS, JS

Ruby, Python, Java, C++, PHP

DBMS

Server-side rendering

Presentation layer

Business Logic layer

Data Access layer

FULL STACK JAVASCRIPT DEVELOPMENT

Single page Apps
using JavaScript frameworks/libraries
like Angular or React

NodeJS and
NodeJS modules

MongoDB
JSON documents

REST API
serving JSON

Presentation layer

Business Logic layer

Data Access layer

FULL STACK WEB DEVELOPMENT

SUMMARY

- Understand what is meant by full stack in the context of web development

- Distinguish between front-end, back-end and full stack web development