



Open Source Software Club | AIT , Pune

# Introduction To WebApp Architecture

WebApp Architecture Series





# Types of Softwares

## A Broad Classification



### Web Application

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Today most of the services and products of companies are present in the form of web applicatoin



### Mobile Application

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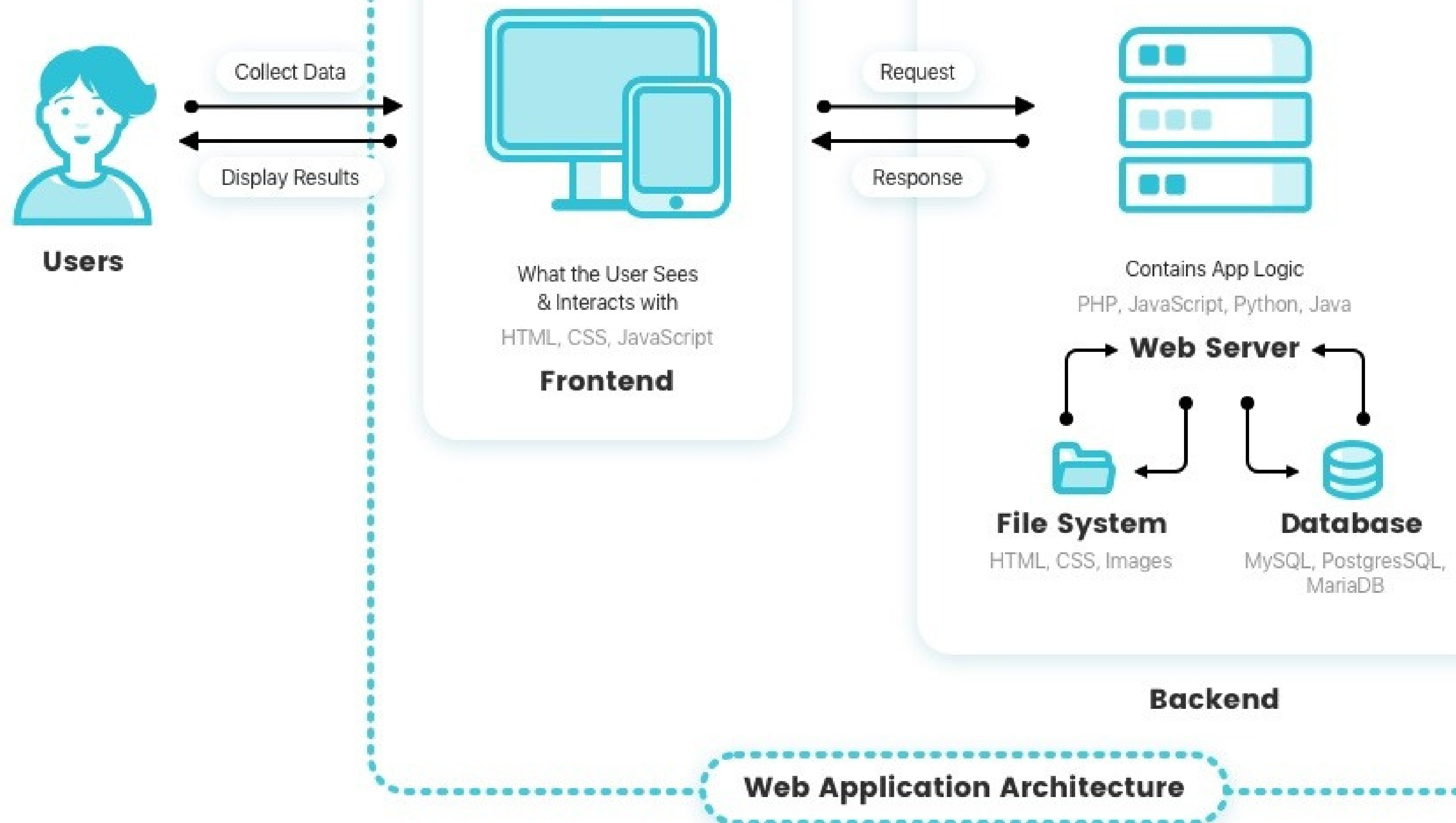
Android and IOS applications are equally important for companies to expand their userbase.



### Desktop Applications

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Backbone in making any OS popular





# In the Context of Application

Frontend

Backend

Database







# Frontend Development

## Basics – HTML, CSS & JS

All the frameworks and libraries eventually boil down to the basics which are HTML, CSS and JS in Frontend development.

## Frameworks & Libraries

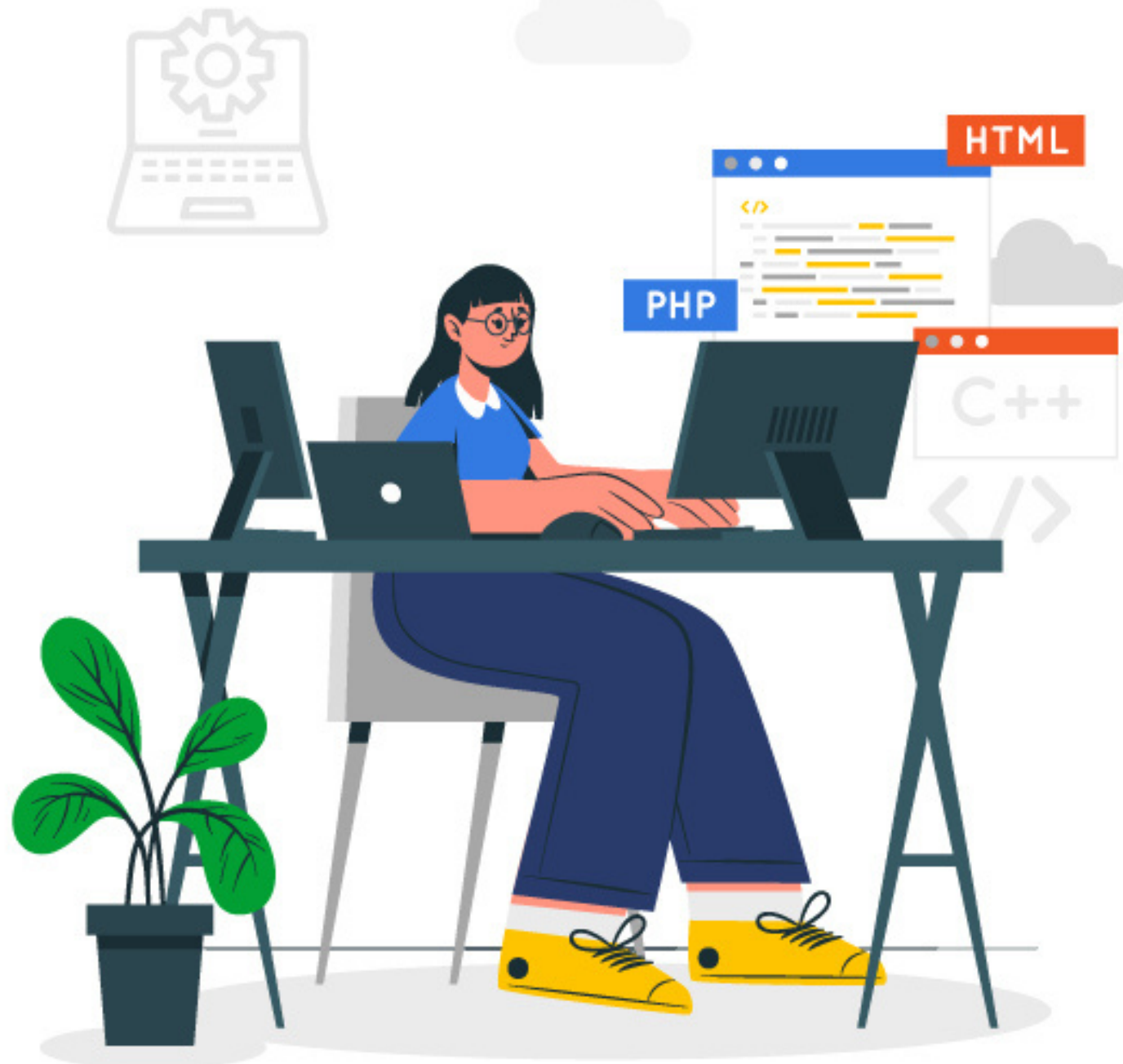
A Software that provides you with some pre-defined template and code to make your development faster.

## UI/UX

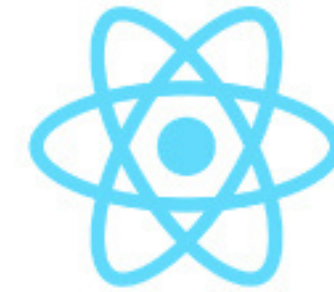
The user interface is the actual website that you see on your browser, and the experience you get while navigating through that site is known as user experience.



# Best Frontend Javascript Framework



Angular



React



Vue JS



Ember JS



Backbone JS



# Core of Frontend Development







# Backend Development

## Data Manipulation

All the incoming and outgoing data are first processed here and then sent to frontend.

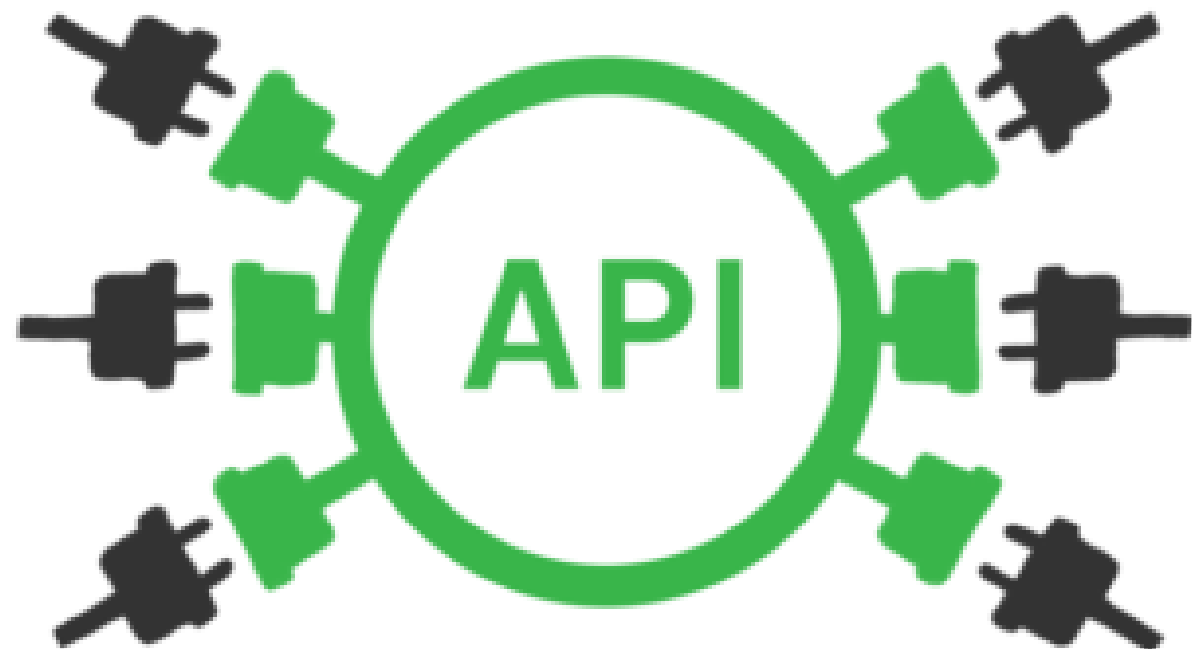
## Authentication & Security

This is the place where your crucial keys and logic lies if anyone knows the logics and keys they can easily hamper the service.




## Database Interaction

All the user data etc. needs to be stored at some safe place, and this is where databases comes in action.





```
    false);  
    , PHP_VERSION, ">")) {  
        er is required!!!");  
  
    cre")) {  
        uires the pcre extension to php in order to work  
  
require_once APP_ROOT.'/includes/autoloader.inc.php';  
  
// Load configuration  
require_once APP_ROOT.'/config.php';  
  
if (!defined('PSI_CONFIG_FILE') || !defined('PSI_DEBUG')) {  
    $tpl = new Template("/templates/html");  
    echo $tpl->fetch();  
    die();  
}
```



# BACK-END DEVELOPMENT



# Database

## Data storage

Crucial Information related to users, transactions, and other services are stored here.

## File system storage vs Database

Why can't I store it in my disc as I store my other data in my system?

## Types of Database

Broadly two types –

- 1) SQL Databases
- 2) NoSQL Databases



# Version Control System



GitHub



GitLab



Mercurial etc.



# A FULL STACK WEB DEVELOPER KIT

## FRONT END

HTML

HTML5

Java Script

J Query

CSS3

## BACKEND

Ruby on Rails

PHP

Angular2

Node.js

.Net

## DATABASE

MySQL

MongoDB

CouchDB

MS SQL

## VERSION CONTROL

GIT

Grunt

Xdebug

Subversion

## PROJECT MGMT TOOLS

Basecamp

Jira

Trello

Redmine

Teamwork





Thank you!