





The Journey of an App: From Idea to Users' Hands

Ravi Vishwakarma





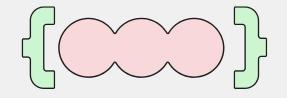








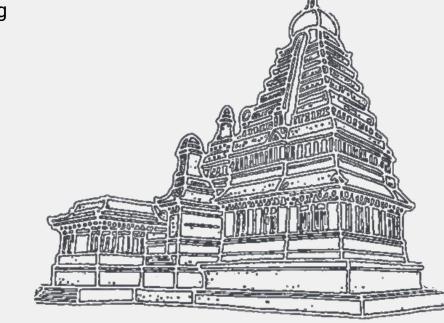






About Me

- Working as OpenShift Engineer
- Silver medalist IndiaSkills 2024 Cloud Computing
- CKA, CCA, CLA, RHCSA..many more



















Devfest 2022 - Attendee



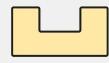




















Devfest 2023 - Volunteer





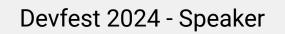


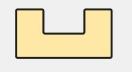
























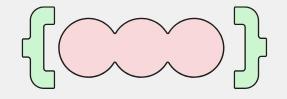








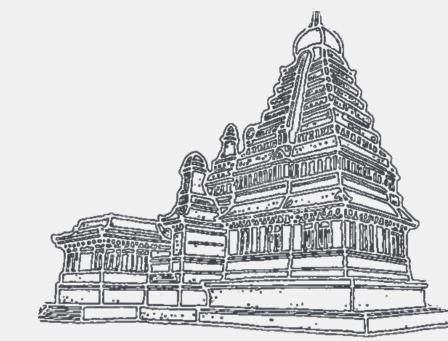






Agenda

- Introduction
- Ideation
- Right Application Architecture
- The Power of APIs
- Tools to Simplify the Process
- Cloud Platforms
- Resources to Continue Learning



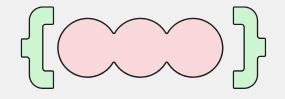






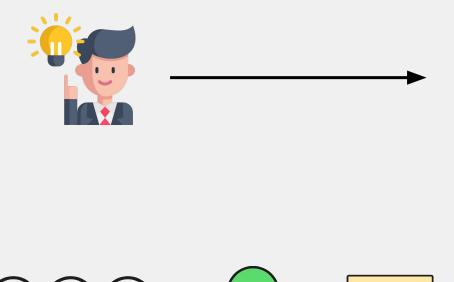




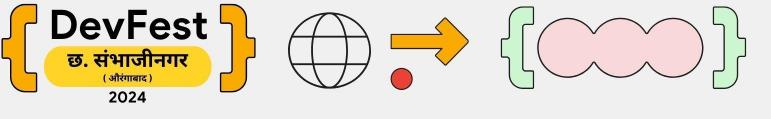


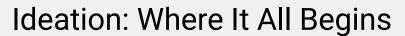


Introduction



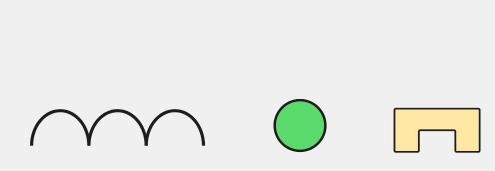


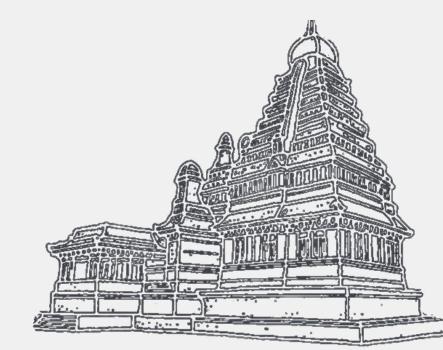




Let's make a Todo list application:

- Users Authentication
- CRUD operation on Todo's

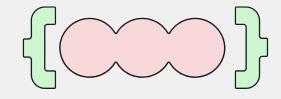




Google Developer Groups



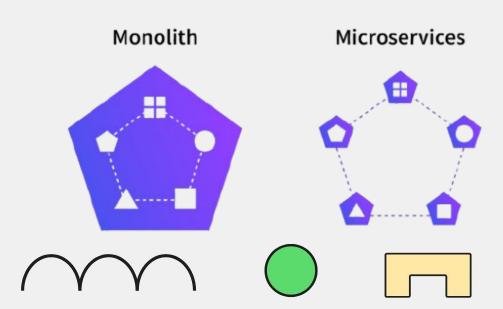


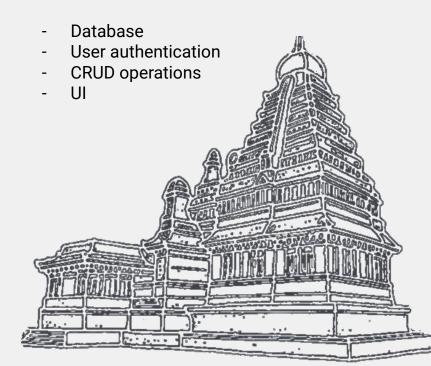




Right Application Architecture

Monolithic / Microservice















API - Application Programming Interface

Allows communication between two entity irrespective of their programming language





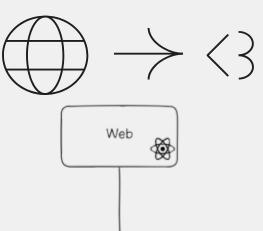




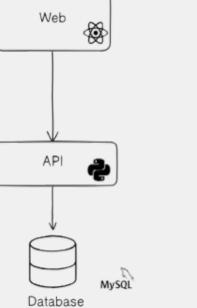




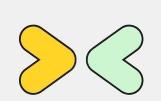




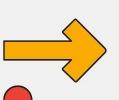






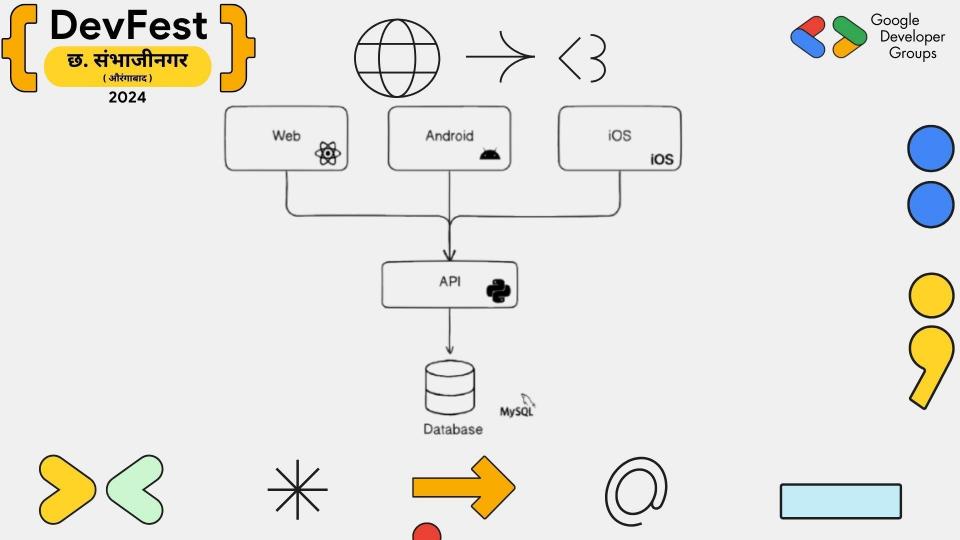




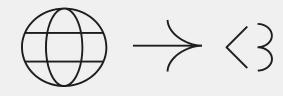














Tools to Simplify the Process



Version Control: Git, GitHub, GitLab.

Containerization: Docker, Podman.

Orchestration: Kubernetes, MiniKube, .

Project Management: Jira, Trello, or Notion.

Testing: Postman, Selenium.

CI/CD: Jenkins, GitHub Actions.



kubernetes









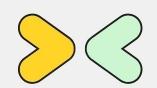








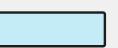




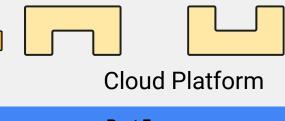


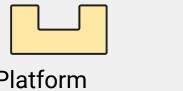














Google Developer Groups

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Cloud Platform			
Roct For	Scaling	Eaco of Uco	Cost

2024	Cloud Platfor	m
Option	Best For	Scaling
App Engine	Simplified deployments	Automatic
Cloud Run	Containerized apps	Automatic

High

Moderate

Moderate

GKE Complex, containerized Configurable

workloads

Custom setups

Pay-per-use High

Manual or

Advanced Moderate

Flexible

Compute Engine **Cloud Functions**

Event-driven services

Managed **Automatic**

High

Low



Bare Metal Solution High-performance APIs **API** Gateway API management and security

Manual NA



High Add-on













Resources:

- https://academy.jetbrains.com
- https://academy.postman.com
- https://www.freecodecamp.org/news/apis-for-beginners-full-course























