tech stack and architecture of successful e-commerce platforms helps in identifying best practices and potential pitfalls.

## **Frontend Technologies:**

#### Language:

- HTML
- CSS
- Javascript

#### Frame work:

- React.js
- Angular.JS

## Technologies:

• PWA (PROGRESSIVE WEB APPS)

## **Backened Technologies:**

## Language:

- python
- Java
- Node.js

#### Frameworks:

- Django
- Express.js

#### Architecture:

Microservices

## <u>Databases</u>

## Relational Databases:

- MySQL
- Oracle Database

#### NoSQL Databases:

- DynamoDB
- MongoDB

#### Data stores:

• ElastiCache (Redis)

## **Big Data & Analytics:**

- 1. Data Processing:
  - Hadoop
- 2. data streaming & warehousing:
  - Redshift
- 3. Machine Learning:
  - Apache MXNet

## **DevOps Tools:**

#### CI/CD:

• GitLab CI/CD

#### **Containerization:**

Docker

## **Monitoring and Logging:**

- Grafana
- Stack

## **Cloud Infrastructure:**

- Platform:
  - o AWS
- Infrastructure as Code:
  - o Terraform

#### **Security:**

- KMS
- ACM
- Identity and Access Management (IAM)

#### **E-commerce Platform:**

- Custom solutions
- Third-party integrations

## Customer Experience:

- Chatbots
- virtual assistants

## **Search & Recommendations:**

- Elasticsearch
- custom algorithms

## **Content Delivery:**

- CloudFront
- Fastly
- Cloudflare

## **Serverless Computing:**

- AWS Lambda
- Google Cloud Functions

# APIs & Integration:

• API Gateway