

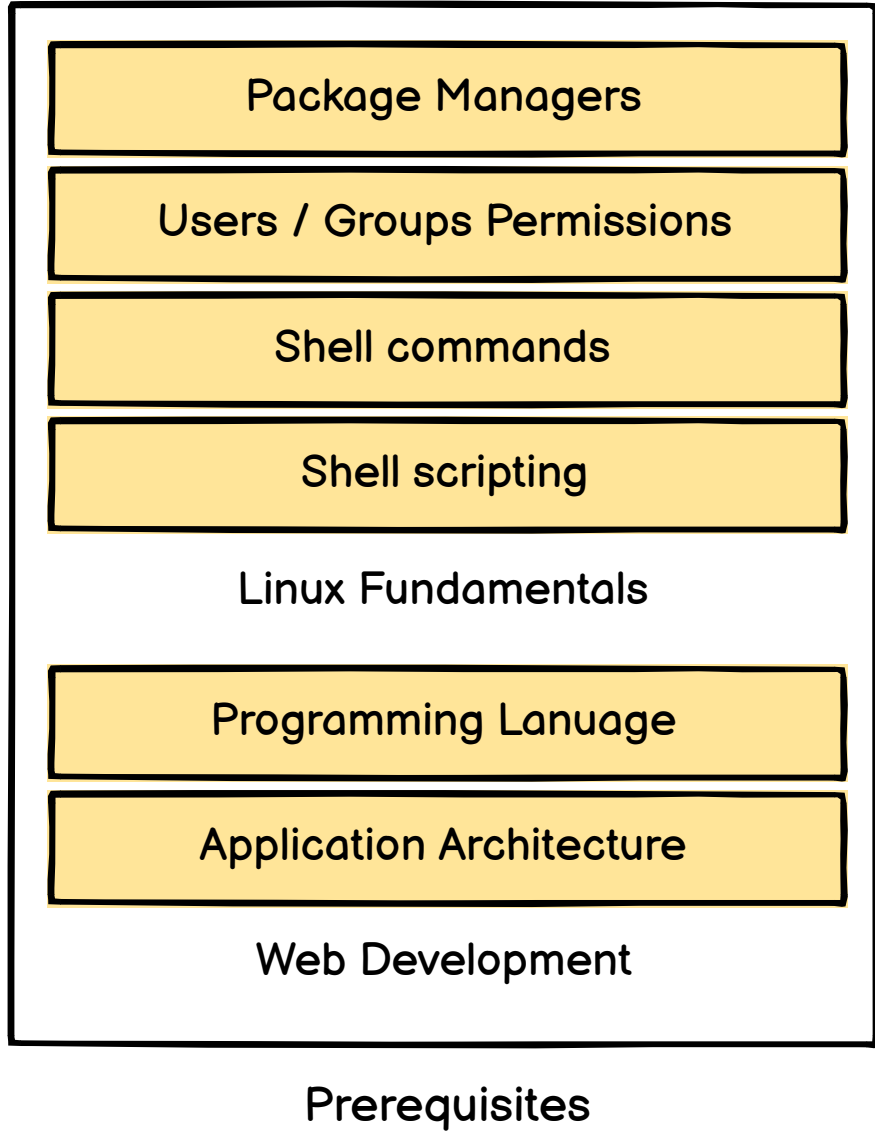
Docker

Roadmap was made in partnership with [Sid Palas](#). Checkout his free [course covering this topic in depth](#).

- ✔ Kubernetes Roadmap
- ✔ DevOps Roadmap
- ✔ Backend Roadmap

Find the detailed version of this roadmap along with resources and other roadmaps

<https://roadmap.sh>



Introduction

- What are Containers?
- Why do we need Containers?
- Bare Metal vs VMs vs Containers
- Docker and OCI

Underlying Technologies

- Namespaces
 - cgroups
 - Union Filesystems
- Just get the basic idea of these.

Installation / Setup

- Docker Desktop (Win / Mac / Linux)
- Docker Engine (Linux)

Basics of Docker

Using 3rd Party Container Images

- Databases
- Interactive Test Environments
- Command Line Utilities

Data Persistence

- Ephemeral container filesystem
- Volume Mounts
- Bind Mounts

- Image Tagging Best Practices
- Others (ghcr, ecr, gcr, act, etc)
- Dockerhub

Building Container Images

- Dockerfiles
- Efficient layer caching
- Image size and security

Container Registries

- Runtime Configuration Options
- docker compose
- docker run

- Runtime Security
- Image Security

Running Containers

- Images
- Containers

Docker CLI

- Volumes
- Networks

Container Security

Developer Experience

- Hot Reloading
- Debuggers
- Tests
- Continuous Integration

Deploying Containers

- PaaS Options
- Kubernetes
- Docker Swarm
- Nomad

Continue Learning with following relevant tracks

- Backend Roadmap
- DevOps Roadmap