# ■ 30-Day Learning Plan: Flutter & DevOps

### Week 1 - Foundations

### Day 1

- Flutter: Build Hello World with widgets (Text, Container).
- DevOps: Linux basic commands (ls, cd, cp, rm, chmod).

### Day 2

- Flutter: Layouts Row, Column, Stack.
- DevOps: grep, find, less, nano.

## Day 3

- Flutter: Navigation between screens (Navigator.push/pop).
- DevOps: Processes ps, top, kill, systemctl.

### Day 4

- Flutter: Forms TextField, Button, validation.
- DevOps: User management useradd, passwd, groups.

## Day 5

- Flutter: Lists ListView, GridView.
- DevOps: Permissions chown, umask, tar.

### Day 6

- Flutter: Stateful widgets, setState.
- DevOps: Networking ping, curl, ss/netstat.

## Day 7

- Flutter: Mini project ToDo List app.
- DevOps: Write a Bash script to automate backups.

## Week 2 - Intermediate

- Flutter: Themes, colors, fonts.
- DevOps: Docker basics docker run, docker ps.

### Day 9

- Flutter: Images, Assets, Icons.
- DevOps: Docker images docker build, docker images.

### **Day 10**

- Flutter: API Call with http package.
- DevOps: Docker volumes & networks.

### **Day 11**

- Flutter: Async & FutureBuilder.
- DevOps: Docker Compose run multi-container apps.

#### **Day 12**

- Flutter: State management with Provider.
- DevOps: Write a Dockerfile for NodeJS app.

### **Day 13**

- Flutter: Simple animations (AnimatedContainer).
- DevOps: Compose deploy multi-service app.

## **Day 14**

- Flutter: Mini project Weather app with API + Provider.
- DevOps: Deploy app locally with Docker Compose.

# Week 3 - Professional

## **Day 15**

- Flutter: SharedPreferences (local storage).
- DevOps: Git basics init, commit, push.

# Day 16

- Flutter: Firebase Authentication (email login).
- DevOps: GitHub Actions basics of workflows.

- Flutter: Firestore CRUD operations.
- DevOps: Create simple CI pipeline with GitHub Actions.

### **Day 18**

- Flutter: Firebase Storage upload image.
- DevOps: Add automated tests in CI/CD.

#### **Day 19**

- Flutter: Push Notifications (Firebase Messaging).
- DevOps: Deploy Docker app on free cloud (Render/Heroku).

### **Day 20**

- Flutter: Advanced UI Custom widgets.
- DevOps: Secrets & environment variables in CI/CD.

#### **Day 21**

- Flutter: Mini project Chat app (Auth + Firestore).
- DevOps: Full CI/CD pipeline with Docker + GitHub Actions.

# Week 4 – Mastery & Final Project

## **Day 22**

- Flutter: Performance optimization (const, keys).
- DevOps: Kubernetes basics (pods, deployments).

### **Day 23**

- Flutter: Integrate Google Maps or similar package.
- DevOps: Minikube run local Kubernetes cluster.

## Day 24

- Flutter: Payments (Stripe/PayPal basics).
- DevOps: Helm basics for app deployment.

### **Day 25**

- Flutter: Testing Unit & Widget tests.
- DevOps: Monitoring with Prometheus/Grafana basics.

- Flutter: Responsive UI (mobile, tablet).
- DevOps: Logging ELK stack basics.

# **Day 27**

- Flutter: Internationalization (multi-language).
- DevOps: Security basics SSH, firewalls, SSL.

### **Day 28**

- Flutter: Deployment Build APK/IPA for stores.
- DevOps: Deploy to Kubernetes cluster.

# **Day 29**

- Flutter: Final polish app icons, splash screen.
- DevOps: Write Infrastructure as Code with Terraform basics.

- Flutter: Final Project Deliver full app.
- DevOps: Deploy app with CI/CD + Docker + Kubernetes.