
A **3-day workshop plan on SaaS (Software as a Service)** — perfect for university programs, corporates, startups, or tech training centers.

Title: “*Building, Deploying & Scaling SaaS Applications*”

Format: Hands-on + lectures + demos

Duration: 3 Days (6 hours/day)

Workshop Objectives

Participants will learn:

- SaaS fundamentals, architecture models & cloud ecosystem
- How to design, develop, deploy and scale SaaS applications
- Business models, pricing strategies & GTM
- Security, compliance and DevOps for SaaS
- Hands-on mini SaaS app (optional)

DAY 1 — Foundations of SaaS & Cloud Architecture

Session 1: Introduction to SaaS (1 hr)

- Evolution of software delivery
- SaaS vs IaaS vs PaaS
- Key characteristics: Multi-tenancy, subscription, automation
- Real-world examples: Salesforce, Zoom, Shopify, HubSpot

Session 2: SaaS Architecture (1.5 hr)

- Multi-tenant architecture (shared DB vs isolated DB)
- Microservices vs monolith for SaaS
- API-first design
- Containerization & Kubernetes for SaaS

Session 3: Cloud Platforms for SaaS (1 hr)

- AWS / Azure / GCP SaaS reference architecture
- Serverless SaaS design (Lambda + DynamoDB + API Gateway)
- Demo: Deploying a simple backend on AWS or Firebase

Session 4: Core SaaS Components (1.5 hr)

- Authentication (OAuth, JWT, SSO)
- Subscription management
- Billing & metering
- User management
- Logging & monitoring (Datadog, NewRelic)

Activity (30 mins)

Group discussion: “Analyze 3 real SaaS products.”

DAY 2 — Building & Deploying SaaS

Session 1: Designing a SaaS Product (1 hr)

- Identifying a market problem
- Feature selection & roadmap
- High-level architecture blueprint

Session 2: Hands-On Mini Project — Build a SaaS App (2 hr)

Participants build a basic SaaS module:

- Login + User roles
- Dashboard
- Sample API
- Database CRUD
- Tech Options:
 - **No-code:** Bubble, Glide, AppSheet
 - **Low-code:** Retool, PowerApps
 - **Code:** Node.js + Firebase / Python FastAPI + MongoDB

Session 3: SaaS Deployment & DevOps (1.5 hr)

- CI/CD for SaaS (GitHub Actions, GitLab CI)
- Versioning strategy for SaaS
- Auto-scaling, load balancing
- Multi-region deployment

Session 4: SaaS Security & Compliance (1 hr)

- Data privacy (GDPR, HIPAA)
- Encryption at rest & transit
- Tenant isolation challenges
- Securing APIs and billing

Activity (30 mins)

Hands-on: Enable CI/CD pipeline + deploy sample SaaS app.

DAY 3 — SaaS Business Models, Scaling & Monetization

Session 1: SaaS Business Models (1 hr)

- Subscription pricing (Freemium, Tiered, Per-user, Per-use)
- LTV, CAC & churn
- SaaS metrics: MRR, ARR, NDR, Activation Rate

Session 2: Go-to-Market Strategy for SaaS (1 hr)

- Customer segmentation
- Product-led growth (PLG)
- Free trials & onboarding
- Case studies: Slack, Notion, Canva

Session 3: Scaling SaaS Applications (1.5 hr)

- Scaling architecture
- Multi-tenancy challenges
- API rate limiting
- Event-driven architecture
- Monitoring & observability

Session 4: Hands-On: Launch Your Own SaaS Prototype (2 hr)

Teams build a SaaS concept:

- Problem statement
- App wireframe
- Architecture diagram
- Pricing strategy
- Deployment (optional)

Participants present their SaaS prototype.

Closing (30 mins)

- Certificate distribution
- Q&A
- Sharing resources & templates

Deliverables Provided

- ✓ Slides (PPT format)
- ✓ SaaS Architecture Templates
- ✓ Hands-on project source code
- ✓ Workshop certificates
- ✓ Reading materials + case studies

Instructor: Mr Suresh Tripathi is a founder of Geosun Pty Ltd an Australian company registered in year 2000 to provide AI corporate training, data center solutions and data pipeline end-to-end cloud platform. He has nearly 25+ years of work experience in digital data analytics integrated with AI and tech platforms. His education qualifications include master degree in Statistics from India, master degree in Geostatistics from Australia and master degree in Geoscience from Australia. He completed his AI certificate courses from Stanford Business School from California and High Impact Leadership from Cambridge University, UK. He has worked in Australia and US focusing his career on data strategy, tech platforms, and developing in-house training. He has worked with range of industries in Australia and US that include Deloitte, Flybuys, Ambulance Victoria, CFA (Emergencies Services), Avexa, Covance, Avance Clinical (Pharmaceuticals), Intelligen, Commonwealth Bank, Hackett Group (US), Health and Safety Sphera Solutions(US), Vic Government (Environment, water and energy), Waste Management (US), Outfront Media (US), Adani Mining (Australia) and Fura Gems Industries (Dubai).

Fee: Rs 25,000 per participant plus GST payable to GeosunAI Tech Cloud Pvt Ltd. RTGS/Cheque/ PhonePe via below link form.

Bank: Punjab National Bank

Account Name: NB, GeosunAI Tech Cloud Pvt Ltd

Account No.: 1228102100001295

