



MODERN SOFTWARE INFRASTRUCTURE

10 Key Tools & Concepts

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AGENDA

- AI Inference API
- Vector Databases
- Version Control
- Fullstack App Hosting
- Container Hosting
- CI/CD Platforms
- Application Performance Monitoring (APM)
- Payment APIs
- Admin Panel Builders (Non-Technical)
- Product Analytics (Non-Technical)
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AI INFERENCE API

- **What it is:** Ready-made AI tools that analyze text, images, etc.
- **Why it's used:** No need to build your own model – easy to integrate.
- **Uses:** Chatbots, Google Lens, social media filters.



VECTOR DATABASES

- **What it is:** Stores smart data (vectors) for AI search.
- **Why it's used:** Helps apps find similar images, text, etc.
- **Uses:** Semantic search, recommendation systems.



VERSION CONTROL

- **What it is:** System to track code changes (like Git).
- **Why it's used:** Helps teams collaborate and manage history.
- **Uses:** All coding projects and software teams.



FULLSTACK APP HOSTING

- **What it is:** Hosting that supports frontend + backend + database.
- **Why it's used:** Makes full apps live on the web.
- **Uses:** Web apps, SaaS tools, portfolio websites.



CONTAINER HOSTING

- **What it is:** Runs apps in isolated containers (e.g., Docker).
- **Why it's used:** Makes app deployment portable and scalable.
- **Uses:** Cloud platforms, microservices.



CI/CD PLATFORMS

- **What it is:** Automation for code testing, building, and deployment.
- **Why it's used:** Saves time and reduces bugs during development.
- **Uses:** DevOps pipelines, team projects.



APPLICATION PERFORMANCE MONITORING (APM)

- **What it is:** Tools to monitor app speed, errors, and health.
- **Why it's used:** To improve user experience and reduce crashes.
- **Uses:** Web apps, APIs, mobile apps.



PAYMENT APIS

- **What it is:** APIs to accept and manage online payments.
- **Why it's used:** Makes secure transactions possible in apps.
- **Uses:** E-commerce sites, subscription-based platforms.



ADMIN PANEL BUILDERS (NON-TECHNICAL)

- **What it is:** Visual tools to create admin dashboards.
- **Why it's used:** Saves dev time and allows non-coders to manage data.
- **Uses:** Internal tools, data dashboards.



PRODUCT ANALYTICS (NON-TECHNICAL)

- **What it is:** Tools that track user actions and behavior.
- **Why it's used:** Helps teams improve features based on real data.
- **Uses:** SaaS apps, mobile apps, websites.



SUMMARY

- 10 key topics explained in simple terms.
- Covered AI, hosting, deployment, monitoring, and more.
- Easy-to-use tools for modern development workflows.



THANK YOU