Week-2: No Class

Week-3:

Loadtest- It checks how a system performs under normal & peak loads. To ensure a website/app/API can handle expected traffic without crashing the site. Find performance bottleneck before users.
Tools are Jmeter,Gatling,K6 .

Synchronous / Blocking Call: One task at a time. Wait for a task to finish before starting new one. Ex: at the time of Database query, app stops processing other tasks .

Asynchronous Call: System doesn't wait, starts other tasks while waiting for response. It is more efficient. Used for high performance, parallel computing . Ex: Data-driven apps

Web Hooks: A way for web apps to communicate with each other in real life by sending event-driven requests. Provides real time updates, automation. Ex: In customer credit card payment system, whenever payment is done successfully, a notification sent to customer.

Event-Driven: It's a architecture where systems respond to event instead of following a sequence of activities , ex; button click, file save. Ex: MS Word takes user inputs, change files, undo,save them by keystroke.

Cloud-agnostic solution: An application that can run on any cloud provider without being dependent on one.

Elastic Computing: Dynamically scale computing resources such as RAM, Memory, Storage ec based on demand .

Database Sharding: A large database is split into a number of smaller, faster, more manageable database across multiple servers.

Technical Debt: Extra work caused by shortcuts in coding, writing codes quickly not properly. Happens when developers choose shortcut in coding instead of long-term approach. Lack of documentation, poor code, fast release. It causes affects on performance issues, maintenance cost, slow development.

Risk Register: Potential problems need to be documented & monitored. A list of problems that might occurs in a project.