🧩 Planning and Design

**🎯 Objective:**  
To create a detailed **Performance Test Plan** that defines the **scope, objectives, testing approach**, and **environment setup** for successful execution.

**🔑 Key Activities**

1. **Define Performance Test Scenarios**
   * Identify critical business transactions and anticipated user actions.
   * Focus on user journeys that impact performance (e.g., login, checkout, search).
2. **Develop Workload Models**
   * Simulate real-world user behavior and traffic patterns.
   * Define concurrent users, think time, pacing, and test duration.

**📘 Performance Test Plan – Essential Components**

| **Section** | **Description** |
| --- | --- |
| **Summary** | High-level overview of the performance test, including purpose and scope. |
| **Application Architecture** | Technical overview of the System Under Test (SUT): components, tiers, flow. |
| **Performance Test Requirements** | Specific performance goals and metrics: response time, throughput, scalability, and resource utilization. |
| **Performance Test Planning** | Details on test tools (e.g., JMeter, LoadRunner), resource allocation, roles, and timelines. |
| **Performance Test Execution** | Approach to executing tests, monitoring metrics, and capturing results. |