# Microservice Components

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The image illustrates a sophisticated Microservices Architecture framework that enables an agile, scalable, and robust software system.

This architecture is designed to handle complex applications by breaking them down into smaller, manageable, and independent services that work together seamlessly.

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   - Acts as the single-entry point for all client requests. It routes each request to the appropriate microservice and also aggregates the responses. This gateway provides essential services such as request routing, composition, and protocol translation.

2. □□□□□□□□□□□□□□□ □□□□□□□□□:
   - A dedicated infrastructure layer that facilitates service-to-service communications between microservices, ensuring that they are fast, reliable, and secure. It handles service discovery, load balancing, and recovery from failures.

3. □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ (□□□□□□□□□□□□□□□□□□□□ □□ □□□□□□ □□):
   - These are the individual services that make up the application, each running in its own process and communicating with lightweight mechanisms, often an HTTP resource API. They are independently deployable and scalable.

4. □□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□:
   - □□□□□□□□□□□□ □□□□□□□□□□: Centralized service for managing configuration files across all microservices.
   - □□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□: Manages user authentication and authorizations for secure access to services.
   - □□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□: These are the various databases, messaging systems (MOM), and other persistent storage services that microservices use to store and retrieve data.

5. □□□□□□□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□:
   - □□□□□□□□□□□□□□□□□□□: This includes monitoring, logging, and diagnostics to keep track of the health and performance of microservices.
   - □□□□□□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□: Manages the lifecycle of containers where microservices are deployed.

6. □□□□/□□□□ □□□□□□□□□□□□□□□□□□□□□□□:
   - Continuous Integration and Continuous Deployment pipelines that automate the building, testing, and deployment of microservices, ensuring that new features and updates can be released quickly and reliably.

7. □□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□□□ :
   - These are the various consumer-facing applications like mobile apps, web browsers, or third-party services that interact with the API Gateway.

The diagram also categorizes the components into 'Inner Architecture', which includes the core microservices and their immediate supporting services, and 'Outer Architecture Capability', which represents the operational and automation tools that support the microservices infrastructure.

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