Deployment

method	deployed on a Kubernetes cluster
benefits	leveraging its auto-scaling capabilities for service instances

Auto-Scaling

type	horizontal scaling
based_on	CPU and memory usage metrics
action_when_thresholds_are_exceeded	new instances are automatically spawned
coverage	across multiple servers or cloud infrastructure

Sharding

function	distributes the load and enables the database to grow horizontally

Scalability

scaling_type	horizontal scaling
use-case	handle spikes in traffic

Availability

value	99.99% uptime

Create Profile

function	creating a new user profile
details	name, email, and preferences

User Profile Service

category	microservice
function	manage user profiles
use-case	large-scale web application