



**UTT**

UNIVERSIDAD TECNOLÓGICA DE TIJUANA

**GOBIERNO DE BAJA CALIFORNIA**

**TEMA:** Architecture specification

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**GRUPO:** 10-B

**MATERIA:** Desarrollo móvil integral

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## Recommended Architecture Specification Approach: **Microservices Architecture**

### **Why Choose Microservices Architecture?**

#### 1. Scalability:

Microservices allow independent components to scale individually based on demand. For instance, if a single service like user authentication experiences heavy traffic, it can be scaled without impacting other parts of the system.

#### 2. Flexibility in Technology Stack:

Each microservice can use the most suitable technology, programming language, or database for its specific function. This flexibility enhances performance and enables the integration of specialized tools.

#### 3. Fault Isolation:

If a single service fails, the rest of the system continues to function, minimizing downtime. This isolation improves the system's reliability and resilience.

#### 4. Faster Development and Deployment:

Teams can work on different services simultaneously, enabling faster development cycles. Deployment is also more efficient, as changes to one service don't require redeploying the entire application.

## 5. Alignment with Agile Practices:

Microservices align well with Agile methodologies, as they promote modular design, enabling iterative development and frequent delivery of functional increments.

This approach is ideal for large, complex applications with diverse requirements or evolving functionalities, such as e-commerce platforms or cloud-native solutions.