Best Eastern Reservation System

Public class team{}

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Project Overview

An online hotel reservation website allowing users to browse, book, and manage reservations. Features including processing reservation requests, availability checks, payment processing, and more.

Key Additional Drivers

1. Scalability: The architecture should support handling a large volume of concurrent
2. Real-time reservation updates: The system should provide real-time updates on room availability and pricing to ensure accurate and timely booking information for users.
3. Modularity: The architecture should be modular to allow for easy integration of additional features, such as loyalty programs, promotional offers, and third-party services.
4. Data Security and compliance: Ensuring data security, privacy, and compliance

Architecture Style Choices

Looked at: Microservices

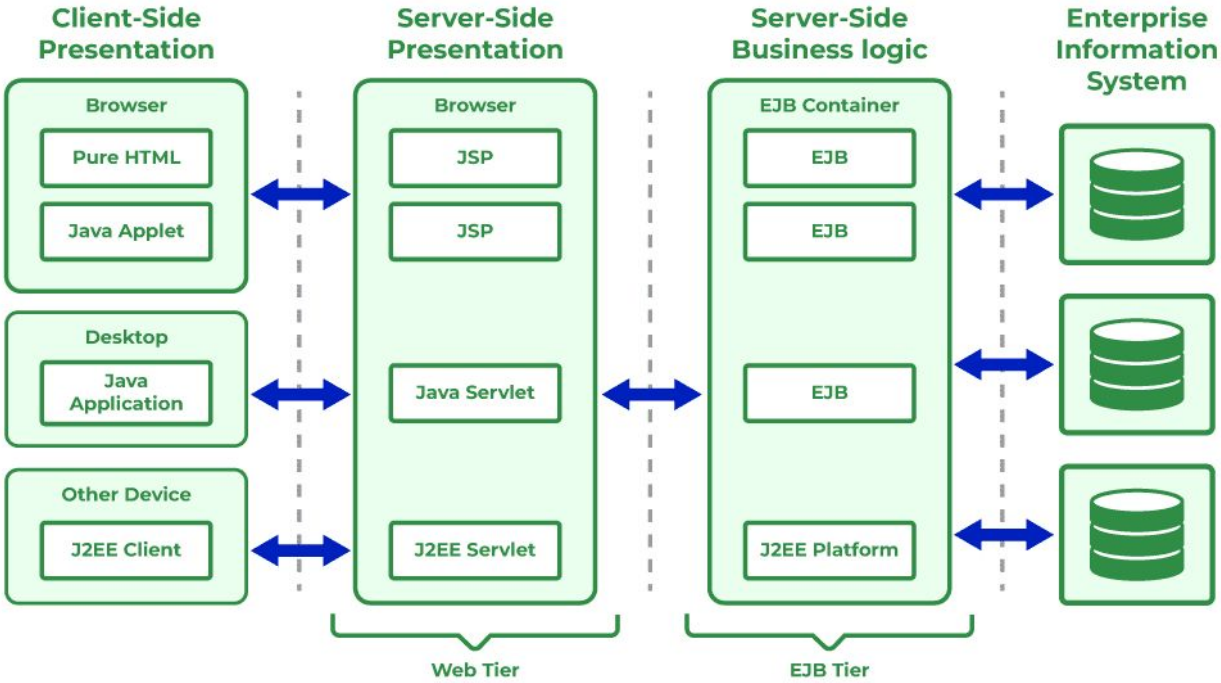
- Independent scaling- provides flexibility
- Fault tolerance- if one if one service fails, it will not affect the others
- Requires more sources- as the number of microservices increases, so will the number of sources

Chosen: Multi-tier architecture

- Organizing into different layers-(presentation, data management, and application)
- Easy to maintain - Changes to one layer does not affect the other layers
- Faster Development - Each layer can be created simultaneously by the team members, resulting in a faster development time

Sources:
Microservices vs Monolithic
Multi tier architecture

Architecture Overview



https://www.geeksforgeeks.org/j2ee-multitier-architecture/

Conclusion

Our system uses a multitier architecture it provides simple, maintainable, and scalable design.

Issues include ensuring data security, system complexity, network latency, cost efficient