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Multiplayer Matchmaking Engine (Pong Game)

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Abstract: This project presents a comprehensive multiplayer Pong game engine designed for real-time gaming applications using serverless architecture. By leveraging Java for client-side implementation and Amazon Web Services (AWS) cloud infrastructure including Lambda functions, DynamoDB, and API Gateway, the system processes multiplayer matchmaking and game state management efficiently. The implementation emphasizes scalable architecture, real-time synchronization, and cost-effective serverless deployment. The system's design ensures automatic scaling and adaptability, making it suitable for deployment across various platforms requiring efficient multiplayer gaming capabilities with minimal infrastructure overhead.

Keywords: Multiplayer Gaming, Serverless Architecture, AWS Lambda, DynamoDB, Game Engine, Real-time Systems, Matchmaking, Java.





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