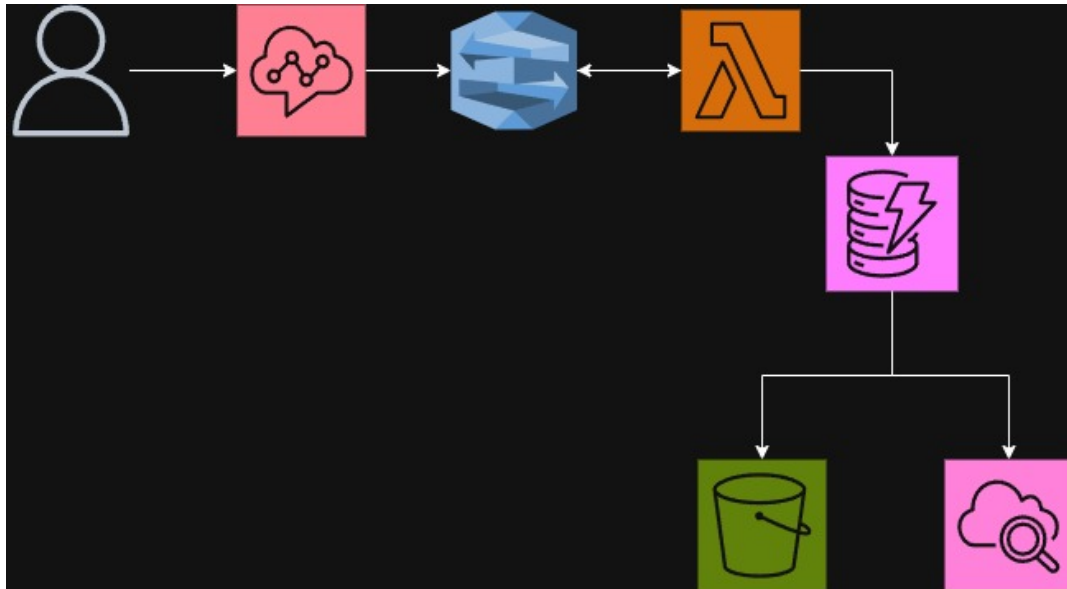


IVR System using AWS Services

An Interactive Voice Response (IVR) system built using Amazon Connect, Lex, Lambda, and DynamoDB to automate customer call routing and data storage. This project demonstrates how cloud services can be integrated to create a scalable, serverless, and intelligent voice-based customer support solution.



Architecture Overview:

1. A user initiates a call to the IVR system through **Amazon Connect**.
2. Connect invokes an **AWS Lex** bot that processes natural language input and determines the caller's intent.
3. Lex triggers an **AWS Lambda** function that executes the backend logic for the request.
4. Lambda interacts with **Amazon DynamoDB** to fetch or store customer-related data.
5. Processed data or call records are optionally stored in **Amazon S3** for long-term retention.
6. **Amazon CloudWatch** monitors system metrics and logs for performance and reliability tracking.
7. **IAM** ensures secure access control between all AWS resources.

Technologies and Tools Used:

- Amazon Connect
- AWS Lex
- AWS Lambda
- Amazon DynamoDB
- Amazon S3
- Amazon CloudWatch
- AWS IAM

Learnings and Outcomes:

This project enhanced understanding of AWS serverless architecture, real-time automation, and cloud-based voice systems. It demonstrated how to combine conversational AI, data storage, and monitoring tools to build scalable enterprise-grade IVR solutions.