



Anfal Ansari

Software Development Engineer, IIT Roorkee'23

@ anfalansari1@gmail.com LinkedIn: www.linkedin.com/in/anfal-ansari-36b288194

Experience

Amazon Pay (Send Money Team)

2023-07-17 - Present

Redesign of Amazon Pay Transaction History Page

- The project aimed to redesign the transaction history page to prevent passing critical payment data in the URL when used for receive money push notifications through third-party services.
- Exposed a generic API to generate a transaction history page URL with a secured recipient identifier mapped to critical recipient details. Ensured the solution was **extensible** for other use cases like email, text, and other push notifications.
- Onboarded to **GraphQL** frontend service and wrote the resolver logic. This minimized latency hit as multiple server calls were combined into a single client-server request .
- **Responsible for the overall design, effort estimation, implementation track with 3 SDEs, and the launch of the project.**

Entity Remodeling

- Remodeled the existing architecture to uniquely identify the recipients with **multiple VPAs**.
- Implemented **graph data structure** to identify indirectly linked VPAs belonging to same recipient.
- **Enhanced** the multiple features: Transaction history, Recently paid section and Contacts section with the new experience.
- Delivered the project on deadline along with absorbing the adhoc product tasks in the same track itself.

Amazon(Hawk Customer Experience Team)

Hawk: A platform internally used by amazon for managing corporate owned devices

MEMS Console

- Delivered a away team project of adding an entire new module for managing software catalog within very **short duration**.
- Delivered the high quality code with **20 pull requests in 4 weeks** with average **revision rate of 1.8** and **100% unit test coverage**.
- Suggested API Optimization to backend team (**95% reduction** in API calls). Resolved 14 issues in existing code

Tech-Stack: React, Redux, Amazon Cloudscape, Jest, Axios, Redux thunk

Edit Artifact

- Created Edit Artifact Endpoint to edit the Hawk Artifacts: Documents, web clips, Application, OS Package.
- Created the smithy model for the endpoint of methodType = PATCH. Implemented **versioning to retain old records**.
- Created the UI for editing Android Application and OS Package Artifact using the typescript client produced by smithy model

Tech-Stack: Kotlin, AWS Lambda, AWS API Gateway, Smithy Model, ACBDA pattern, AWS Cloudwatch, React

Hawk Android Launcher

- Bootstrapped a new app to act as custom launcher for the managed device under Hawk which is **completely configurable** from Hawk Console. For ex IT admin can disable Wi-Fi settings if they don't want end user to turn Wi-Fi on/off.
- Configured the app to be running in **kiosk mode** by default. Exiting out of the launcher will require admin password.
- Delivered all the **20+ features** as per the phase 0 requirements which include 10 device settings, 2 quick actions icons, displaying allow listed apps on launcher, configuring startup apps and other miscellaneous features.

Tech-Stack: Android, Jetpack Compose, managed configuration, mobile device management(MDM)

Amazon
Software Development Engineer Intern

Objective - To productionize a machine learning models which predicts the quantity of a product that a customer is expected to buy.

1. Design of DynamoDB schema

- Designed a single DynamoDB Schema for storing output from two different Machine Learning Models.
- Deep dived on the use case and access pattern of the data and came up with the most **optimal design**.

2. Data Ingestion workflow:

- Designed and developed a data ingestion workflow to populate the DynamoDB table using Cloud Development Kit(CDK).
- Tested the workflow for **15 different invalid records** and **bulk data ingestion (60million records)**.

3. Vending solution:

- Designed and developed a vending mechanism using Datapath API considering the client requirements.
- Created a pipeline to deploy the API. Added caching to achieve the **desired latency**.

AWS Resources Used: SQS, SNS, Lambda, S3, DynamoDB, IAM. **Languages used:** Java, typescript, Datapath Query language.

Key achievements:

- Delivered high quality modular code with encryption, exception handling and **100 percent test coverage** of business logic.
- Created generic managers and classes to ensure easy on-boarding of any future machine learning models saving over **300 lines of code** for every new model on-boarded.

Education	
IIT Roorkee	2019-07-17 - 2023-05-10
8.5/10	Bachelor of Technology

Additional Secretary | Models and Robotics Section IIT Roorkee

- Campus society for robotics enthusiast focused on developing intensive research based project.
- Lead the team of 30+ members, organized lectures and mentored 2 projects.

Undergraduate Teaching Assistant | Academic Reinforcement program

- Assisted 20+ students to excel in the course MIN-103(Programming and data structure).