
Ahsan Kamal

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SKILLS

Programming Languages : Java, Python, Ruby, JavaScript

Web Development Frameworks : Spring Boot, Django, Rails, NodeJs, ReactJs

Databases : MySQL, MongoDB, Redis

Cloud Technologies : AWS (Lambda, S3, CloudWatch, RDS, EC2, Lex), GCP (Cloud function, Cloud Run, Cloud Storage, Firebase, Firestore, Pub/Sub)

Others : Git, Docker, Elasticsearch, Kibana, Redash, New Relic, Kafka, JIRA, Pandas, Microsoft Office

EDUCATION

Master of Applied Computer Science

Dalhousie University, Halifax, Canada

Jan 2020 – Aug 2021

B.Tech in Computer Engineering

Jamia Millia Islamia University, Delhi, India

June 2012 – May 2016

ACHIEVEMENTS

- Received a \$1500 MACS scholarship recognition from Dalhousie University for September 2020 term for excelling in the MACS program.

WORK EXPERIENCE

Senior Software Engineer – 1

Goibibo, Gurgaon, India

June 2018 – Dec 2019

Online travel booking company

- Improved customer response rate and scalability of the NPS module (it sends daily mails to the customers to collect their feedback and ratings for their recent bookings) by migrating it from a legacy monolithic project into a microservice built using NodeJs and Python.
- Designed and developed a helpdesk middleware project using Django Rest Framework and Mongo database that provides an interface through RESTful APIs to other teams for managing tickets on Freshdesk CRM software; reducing the number of Freshdesk API calls and its cost.
- Written a command based config and generic methods in Python to generate the mobile web screenshots of hotels of multiple vendors such as OYO, GIB using Selenium driver that helped in writing the command based config for new vendors quick and easy.
- Reduced the daily BDM hierarchy sync task from five hours to around 30 minutes by migrating it from a legacy Java/Spring application to a Celery task in a Django app.
- Written an AWS Lambda task in Python to push the length of all Celery queues used in our projects to the New Relic server every 2 seconds in order to monitor the critical Celery queues.

Software Engineer

PayU Payments, Gurgaon, India

June 2016 – May 2018

Payment gateway solutions for online merchants

- Designed and developed a more efficient search mechanism by replacing Solr with Elasticsearch in an in-house CRM project built using Ruby on Rails that also helped in building real-time member productivity report and dashboard.

- Integrated Calendly webhooks in CRM project for creating & cancelling tickets corresponding to each Calendly event.
- Implemented role-based access control using Rails' Cancancan gem and searching & sorting feature using Ransack gem.
- Developed an API using Spring/Java in Settlement Project that provides consolidated settlement and the refund amount to the Reseller team for incentive calculation.
- Wrote unit tests using Junit for the controller and service layer of the merchant onboarding flow.

ACADEMIC PROJECT

Web-based Group Formation tool based on survey questions

May 2020 – July 2020

<https://github.com/ahsankamal/Group-Formation-Tool>

- Worked in a group of four; followed Test-Driven Development, GitFlow branching, SOLID principles; used creational, structural, and behavioral design patterns; helped in database design, configurable password policy design, and setting up CI/CD.
- Developed an Admin page and RESTful APIs using Java and Spring boot web framework for allowing admin users to perform CRUD operation on courses.
- Developed a Course Admin page and an API that allows authorized Instructor or TA user to import a CSV of student list; automatically creating new users with student role if not already exist, enrolling them in the course, and sending them their login credentials via email.
- Implemented a survey question manager feature using Abstract Factory creational design pattern that allows authorized instructors to perform sort and CRUD operations on four different types of survey questions.
- Implemented a simple database connection pool so that JDBC connections can be reused.
- Added Logback xml config for appending application logs on console and rolling file appender.

Serverless Multi-Cloud LMS system

June 2020 – August 2020

- Worked in group of four to implement several requirements given to us such as User Registration using AWS Cognito, Two-factor User authentication, Online Support Chatbot using AWS Lex, Online Chat using GCP pub/sub, Sentiment Analysis of Chat messages using AWS Comprehend.
- Implemented two APIs on GCP Cloud Function for two-factor authentication of user – first API for fetching one random security question from Firestore and second API for validating the question response submitted by the user.
- Developed two APIs on GCP Cloud function in Python for publishing and pulling chat messages from a GCP pub/sub topic and also storing chat messages in the GCP Cloud Storage.
- Created an API using AWS API Gateway that triggers an AWS Lambda function written in Python to fetch chat message from AWS S3, find sentiment of it using AWS Comprehend, and store the chat sentiments in another AWS S3 bucket.

PERSONAL PROJECT

Airport Announcement WebApp Prototype (Aviation Hackathon)

Oct 2020 – Oct 2020

- Designed and build a WebApp using React JS that allows passengers to receive airport announcements as push notifications (using Firebase Cloud Messaging) and translate and listen them in multiple languages.
- Designed an Admin panel that allows airport admin/staff to create, edit, and publish live announcements and also allows them to save and play announcements at regular intervals.
- Deployed the WebApp on AWS amplify.