### **Project Overview**

#### **Summary & Domain**

I have worked as a Senior Software Engineer at LTImindtree for the client Sabre, primarily focused on the airline sector. The goal of the project is to migrate specific functionalities from a mainframe system to a Spring Boot architecture. Additionally, I worked at Capgemini as a Software Engineer for the Royal Bank of Canada (RBC), where the focus was on the banking sector, specifically in wealth management.

#### **Key Stakeholders**

**LTImindtree:**

1. **Client (Sabre):** Primarily focused on defining requirements.
2. **LTImindtree:** Responsible for the development and testing aspects of the project.
3. **Google LLC:** Involved in maintaining the database and handling the deployment processes.

**Capgemini:**

1. **Client (RBC):** Focused on gathering requirements and communicating client needs to enhance functionality and features.
2. **FactSet:** Handles the database section, ensuring real-time data retrieval, crucial for stock exchange operations.
3. **InvestCloud:** Responsible for the front-end development of the project.
4. **Capgemini:** Focused on backend development using REST and Spring Boot technologies.

***Problem Statement***

#### **LTImindtree (Sabre Project)**

1. **Mainframe Migration:**
   1. Transitioning critical functionalities from legacy mainframe systems to a modern Spring Boot architecture
2. **API Development:**
3. Creating RESTful APIs to facilitate communication between different components of the system.
4. Ensuring secure and efficient data exchange with clients and partners.
5. **Automated Testing:**
6. Establishing automated testing frameworks to ensure high code quality and reliability.
7. Integrating unit and integration tests in the CI/CD pipeline.
8. **Database Management:**
9. Collaborating with Google LLC to maintain a robust database system.
10. Optimizing database queries for performance and scalability.

***Capgemini (RBC Project)***

1. **Real-time Data Processing:**

a. Implementing real-time data retrieval and processing for wealth management solutions

1. Ensuring timely access to critical financial information for users.
2. **User-Centric Front-End:**
3. Collaborating with InvestCloud to develop a user-friendly front-end interface.
4. Enhancing user experience through intuitive design and seamless navigation.
5. **Feature-Rich Back-End:**
6. Building a comprehensive back-end system using Spring Boot and RESTful services.
7. Supporting various banking functionalities, including account management and transaction processing.
8. **Integration with Third-Party Services:**
9. Facilitating integration with external services like FactSet for real-time market data.
10. Ensuring seamless data flow between various components of the application.

#### **UseCase:**

#### **LTImindtree (Sabre Project)**

1. **Flight Booking Process**
   1. **Actors:** Airline staff, customers
   2. **Description:** Users can search for flights, select preferences, and complete the booking process through a modern interface. The system retrieves flight availability from the new Spring Boot services.

#### **Capgemini (RBC Project)**

1. **Investment Portfolio Management**
   1. **Actors:** Financial advisors, clients
   2. **Description:** Clients and advisors can view, modify, and analyze investment portfolios in real time, ensuring that all data reflects current market conditions.

***Roles***

*Role at LTImindtree:*

* Developed and maintained microservices using Java and gRPC
* Collaborated with cross-functional teams to design RESTful APIs and integrate them with gRPC services, enhancing overall system performance
* Also worked on building a regression suite using cucumber with Api.
* Designed and executed comprehensive test plans for API integration, ensuring thorough coverage of functional and performance testing
* Identify and troubleshoot performance issues and bottlenecks in applications.
* Participate in **Agile/Scrum ceremonies** such as standups, sprint planning, and retrospectives.
* Utilized Spring Security and OAuth2 for securing Eureka services and microservice endpoints.
* Configured Eureka Server for registering services and Eureka Clients for seamless communication across microservices.
* Collaborated with cross-functional teams to troubleshoot and resolve complex issues, resulting in improved product stability and customer satisfaction

*Role at Capgemini:*

* Proficient in designing and developing high-quality software applications
* Expertise in Java, Spring Boot for building efficient and reliable backend systems
* Develop and maintain microservices-based applications using Spring Boot.
* Proficient in designing and implementing RESTful APIs to facilitate seamless communication between client, server, and third-party services.
* Collaborated with cross-functional teams to gather requirements, design solutions, and implement features that meet user needs.
* Participate in **Waterfall/Scrum ceremonies** such as standups, sprint planning, and retrospectives.

***Technical Details :***

* *Spring boot -> For backend services*
* *Spanner DB -> For Database*
* *Docker -> containerization*
* *Rest Api / GRPC-> For third party integaration*
* *Cucumber -> For automation script*
* *JWT -> for security*
* *Postman / BloomRpc -> for testing Api*
* *Eureka Services -> Microservice communitcation*
* *Jira -> defect log*
* *Rally -> project management*

***Learning Experience Skills Gained:***

Through this project, I enhanced my skills in microservices architecture, API design, and learned the importance of stakeholder communication in delivering a successful project.”

***Final Response:***

As a Senior Software Engineer at LTImindtree, I led a project for Sabre, focusing on migrating critical airline functionalities from a mainframe system to a Spring Boot architecture. My role involved developing microservices, designing RESTful APIs, and establishing automated testing frameworks to ensure high-quality code. Collaborating with stakeholders was key, as I worked closely with Google LLC for database management and deployment processes.

Previously, at Capgemini, I contributed to the RBC project, where I designed and developed backend systems for wealth management solutions. I worked on real-time data processing and integration with third-party services like FactSet, ensuring seamless data flow and enhancing user experiences through a user-friendly front end.

Technically, I have expertise in Java, Spring Boot, gRPC, and microservices architecture. I’m proficient in using tools like Docker, JWT for security, and various testing frameworks, including Cucumber for automation.

Throughout these projects, I’ve gained valuable skills in API design, stakeholder communication, and agile methodologies, all of which I believe will contribute to the success of your team.