6. Specifications

- **Frontend:** ReactJS (Live data visualization using charts and graphs)
- **Backend:** Java Spring Boot (Data aggregation and API management)
- **Database:** MySQL (Store historical data)
- **Monitoring Tools:** Prometheus and Grafana
- **Notification Service:** AWS SNS
- **Authentication:** JWT

7. Functional Specifications

7.1 Data Collection

- Collect metrics such as CPU usage, memory usage, and response time
- Support multiple data sources (e.g., API logs, system logs)

7.2 Dashboard Features

- Real-time chart updates with customizable time frames
- Multiple dashboard views for different metrics
- Search and filter functionality

7.3 Alerts and Notifications

- Configure alert thresholds
- Send email or SMS notifications using AWS SNS
- Provide visual indicators on the dashboard for active alerts

7.4 Reporting

- Generate reports on historical data
- Visualize trends and patterns
- Provide downloadable reports in PDF or CSV format