Minor Project

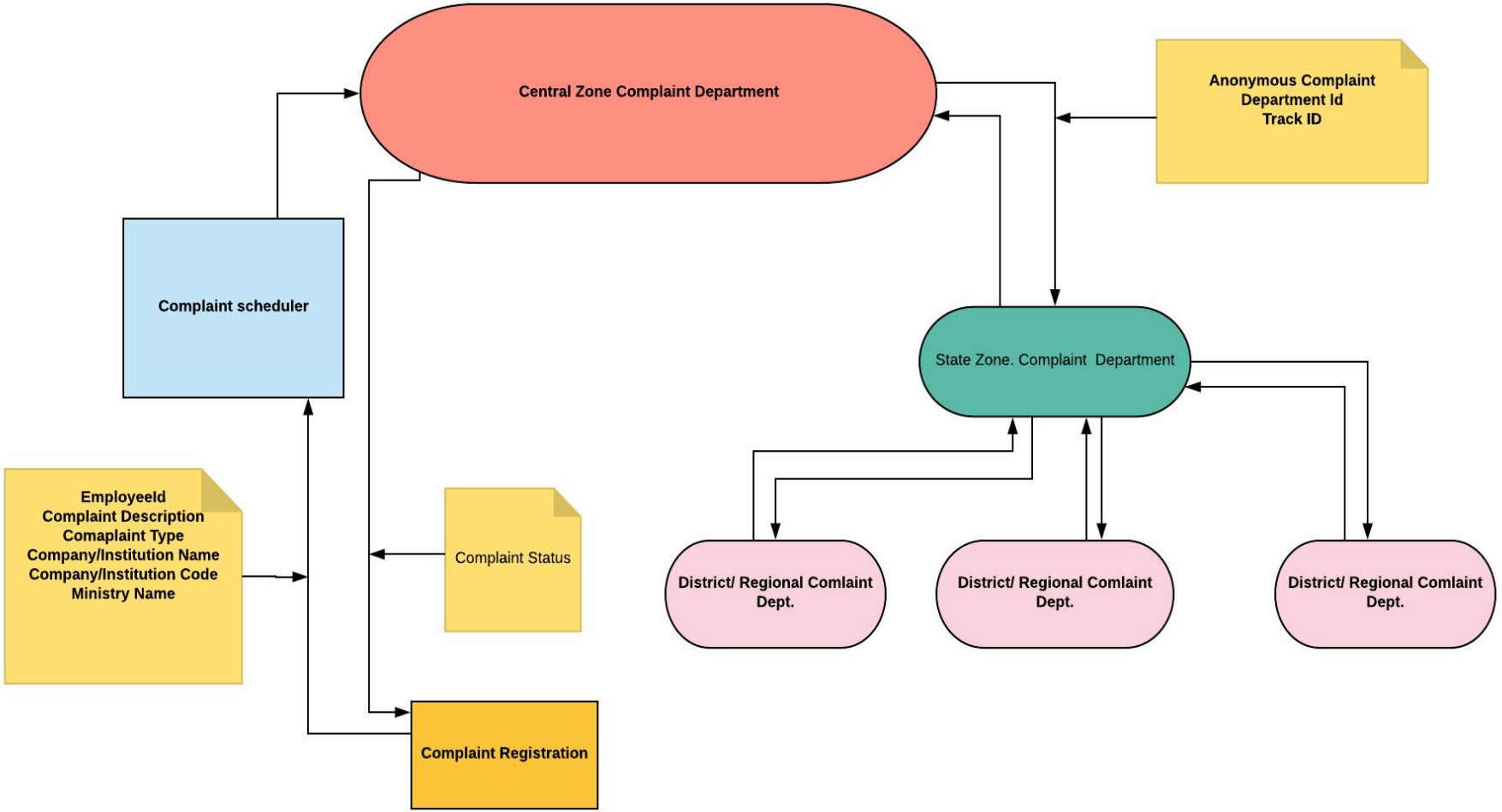
Compliance system using sentiment analysis

Abstract

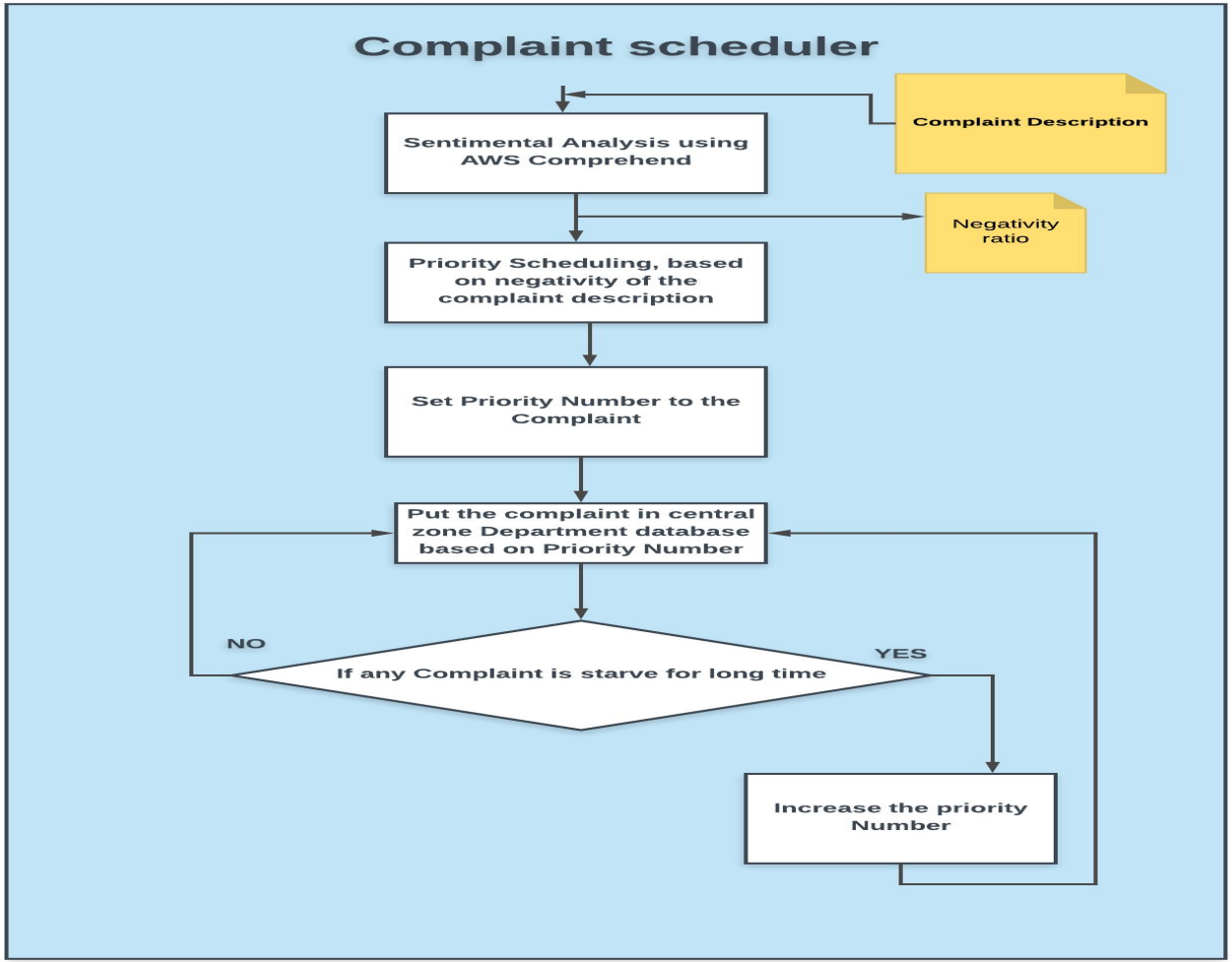
The compliance based system for 44 labour laws is schedule using **sentiment analysis**. Complaint scheduler uses sentiment analysis to set priority to the complaints having negative response ratio. The high priority complaint will be resolved first.The central authority will received the complaint first then transfers the high priority complaint to the lower departments and complaints are anonymous to the lower departments for labour security. Central authority can also track the complaints. Data flow diagrams are explained in the coming slides.

Technology Stack

- AWS Comprehend for sentiment analysis.
- AWS dynamoDB for Database.
- AWS Lambda Function for serverless application.
- AWS Cognito Pool for user authentication.


Central Zone Complaint Department
Anonymous Complaint
Department Id
Track ID
Complaint scheduler
State Zone. Complaint Department
EmployeeId
Complaint Description
Comaplaint Type
Company/Institution Name
Company/Institution Code
Ministry Name
Complaint Status
District/ Regional Comlaint Dept.
District/ Regional Comlaint Dept.
District/ Regional Comlaint Dept.
Complaint Registration

Complaints Scheduling



Show Stopper

- Complaints are schedule with **sentiment analysis** using **AWS Comprehend**
- Different user type admin panel.
    - **Central Dept. Admin Panel**
    - **State Dept. Admin Panel**
    - **District Dept. Admin Panel**
- **Master-Slave** architecture are used.
- Anonymous complaints are processed to the lower Departments for labour **security**.
- Use of **serverless framework** (AWS lambda function) to reduce the load of the server