

VISITOR MANAGEMENT SYSTEM

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PROBLEM STATEMENT

- Streamline visiting service like check-in and check-out in corporate offices.
- Ensure the visitor is properly taken care with the entry access, wifi-details.
- Security risks due to incomplete or untracked visitor data.
- To Let know the host, IT support Team and Security Team regarding visitor details, status of his visit (checked-in or checked-out).

SYSTEM REQUIREMENTS

Visitor Check-In and Check-Out

- Reception staff captures visitor details: name, contact, purpose of visit, and ID proof.
- ID proof is securely stored for future reference.

Automated Notifications

- Upon visitor check-in, notifications are sent to:
 - Host Employee for Informing them of visitor arrival.
 - IT Support for Preparing visitor Wi-Fi access and sends credentials.
 - Security Team to Receives entry and clearance updates.

SYSTEM WORKFLOW

Check-In

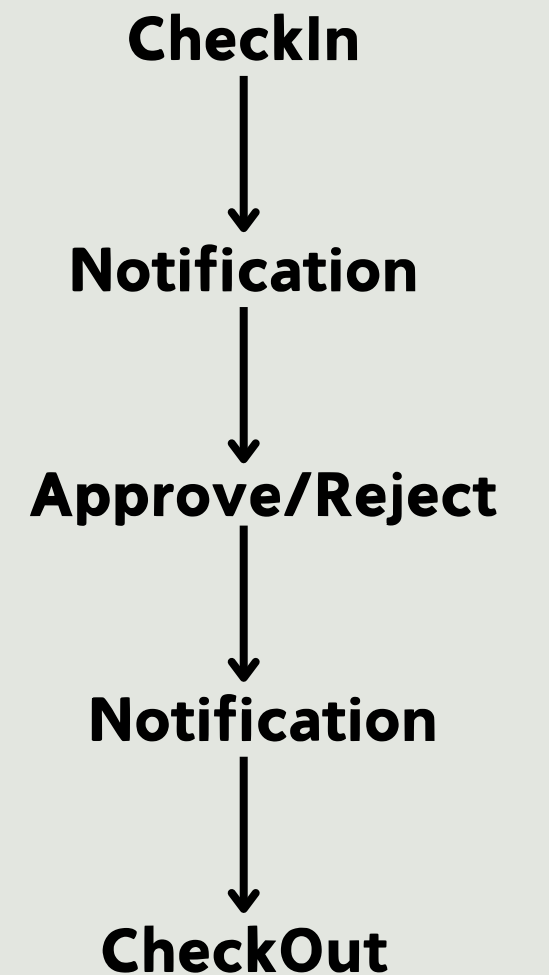
- Visitor provides details and ID proof at reception.
- System stores data securely.
- Notifications sent to Host, IT, and Security.

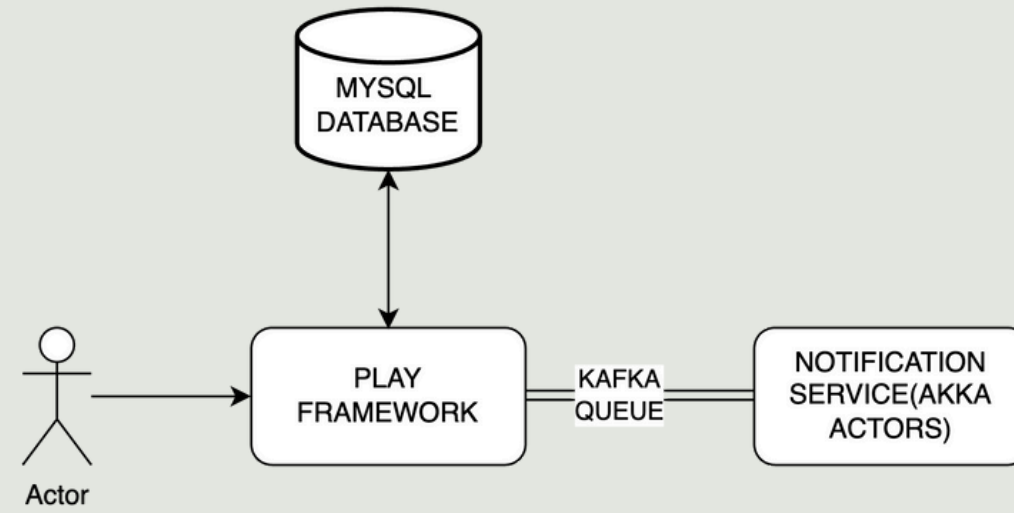
Visitor Stay

- IT support sets up Wi-Fi and shares credentials.
- Security monitors visitor clearance status.

Check-Out

- Reception records visitor exit and notifies the same with host, IT Support Team, Security Team.
- Notifications stop automatically.





Employee	
PK	<u>employeeId</u>
	employeeName
	organisation
	building
	email
	employeeType
	contactNo

Visitor	
PK	<u>visitorId</u>
	visitorName
	email
	contactNo

visitorIdentityProof	
PK	<u>id</u>
FK	<u>visitorId</u>
	identityProof

Visit Table	
PK	<u>visitId</u>
FK	<u>visitorId</u>
FK	<u>employeeId</u>
	building
	checkInTime
	checkOutTime
	status

KEY FEATURES

- API's for adding employees, fetching employee details, for visitor check-in and check-out, host API's for Approve or Reject visitor's request.
- Actors created at notification server takes messages from kafka and notifies the respective teams based on messages.
- Sends Approval mail for Host and upon Approve or Reject, mail is sent to visitor by IT regarding request approval and security team is intimated.
- The Identity Proof submitted at the time of check-in is securely stored in Database.

SYSTEM ARCHITECTURE

Components:

- Backend: REST APIs (Play Framework) for visitor operations.
- Notification Microservice: Akka-based for real-time alerts to Host, IT, and security teams.
- Database: Secure storage of visitor details and ID proof.
- Deployment: Docker containers for scalable and consistent deployment.



Thank You