

# Facial Recognition-Based Library Seat Reservation System

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## Abstract

A system utilizes face recognition to verify user identity and manage library seat occupancy. It was developed using the SSM framework, Django, Python, and MySQL.

## Key Features



Face Recognition Check-in



Real-Time SeatMonitoring

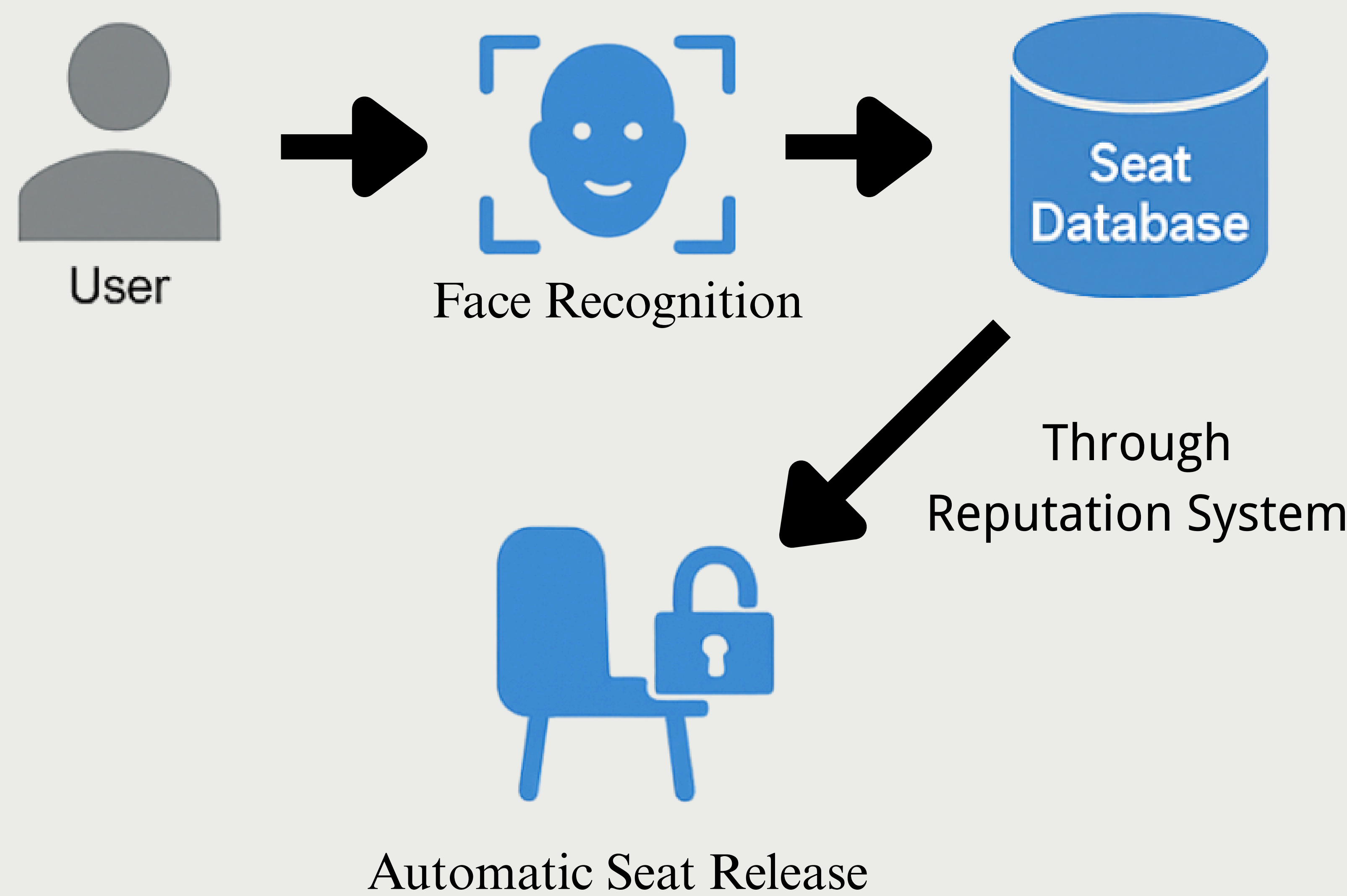


Reputation Score System



Automatic Seat Release

## System Architecture



## Results & Benefits

	User	Administrator
Improved Seat Utilization	Manual	Semi-automatic
Reduced Management	Semi-automatic	Semi-automatic
Enhanced User Experience	Semi-automatic	Automatic

## Technology Stack

- Backend:
- SSM (Spring, SpringMVC, MyBatis)
- Frontend:
- Python / Django
- Database:
- MySQL
- AI Module:
- OpenCV (face recognition API)

## Limitations & Future Work

- Varying lighting conditions affect recognition
- Django-Java integration needs optimization
- Improve user experience automation