



Prepared by group 70

Living Ease

Community Management System

Suhas Reddy Baluvanahally Ramananda (002303626)

Vemana Anil Kumar (002475002)

Dennis Sharon CS (002304318)



Introduction ~ Problem Statement

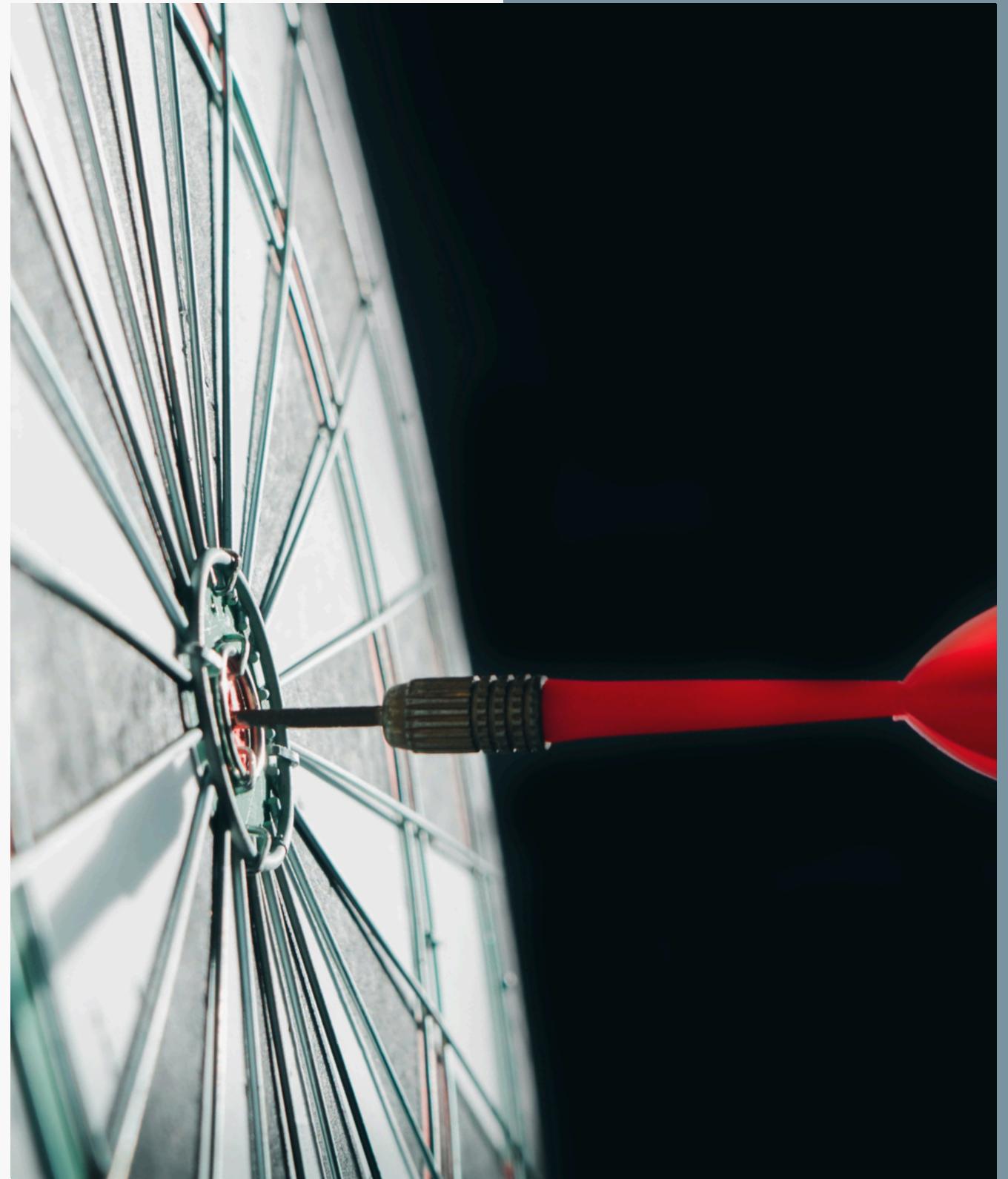


- Complex processes in gated communities (visitor verification, communication, amenity bookings, payment collections) are often handled manually or through disconnected systems, leading to inefficiencies, security vulnerabilities, and poor resident experiences.
- Lack of a unified management platform results in operational challenges for administrators, service delays for residents, difficulty in visitor access control for security personnel, increased costs, and overall stakeholder dissatisfaction.



Objective ~

- Develop an intelligent, scalable Community Management System for gated communities, integrating visitor management, amenities booking, security measures, payments, and resident communication to enhance security and operational efficiency.
 - Create an intuitive interface for residents, security personnel, and administrators, focusing on user-centric design principles to ensure ease of use and improve overall resident experience.
-



Static Players ~



Residents:

Register on the system to manage their visitors, book amenities, pay maintenance, and receive community updates. Maintain individual profiles and household information

Security Guards:

Monitor and manage the entry/exit of visitors and service providers in real time. Use a simplified version of the app to confirm or deny visitor access based on resident instructions.



Community Administrators:

Configure community-level settings like resident information, amenity availability, payment schedules, and security protocols. Generate reports for operations and finances.

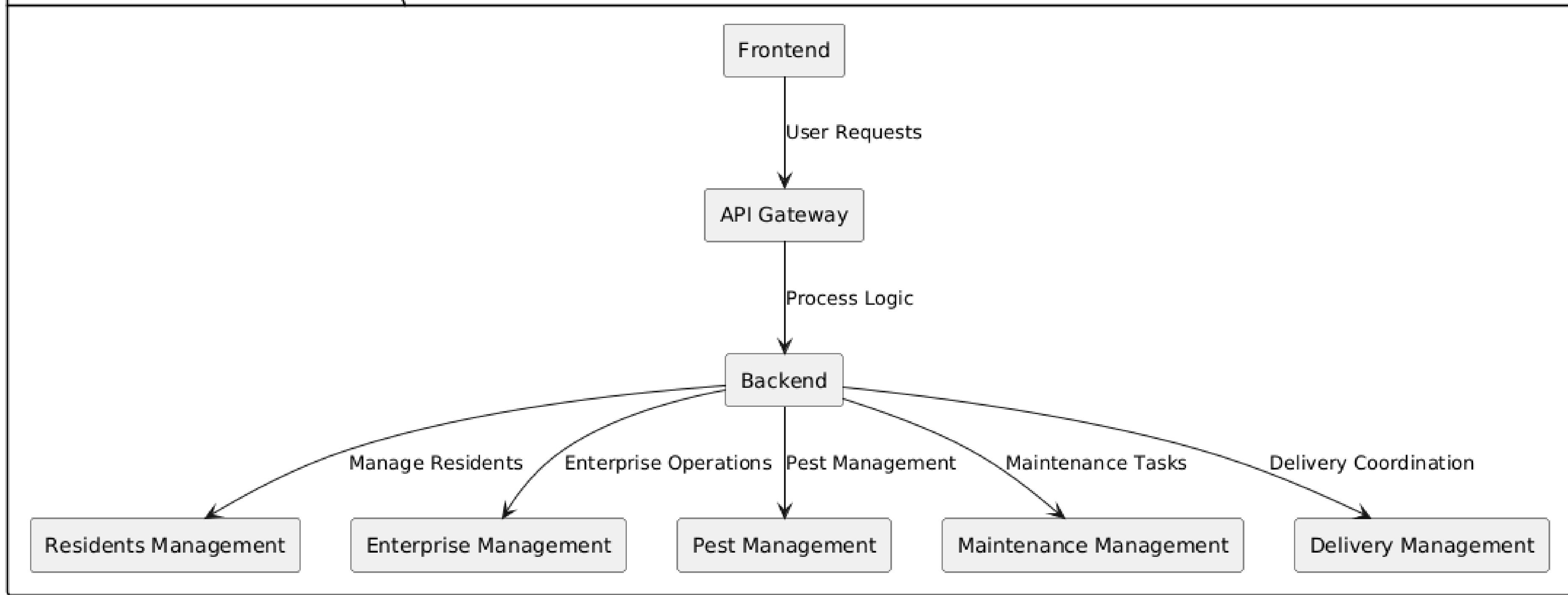
Service Delivery Personnel:

Registered vendors, service people, and delivery personnel can access the community with scheduled approvals or one-time passes for deliveries to residents or drop-offs.

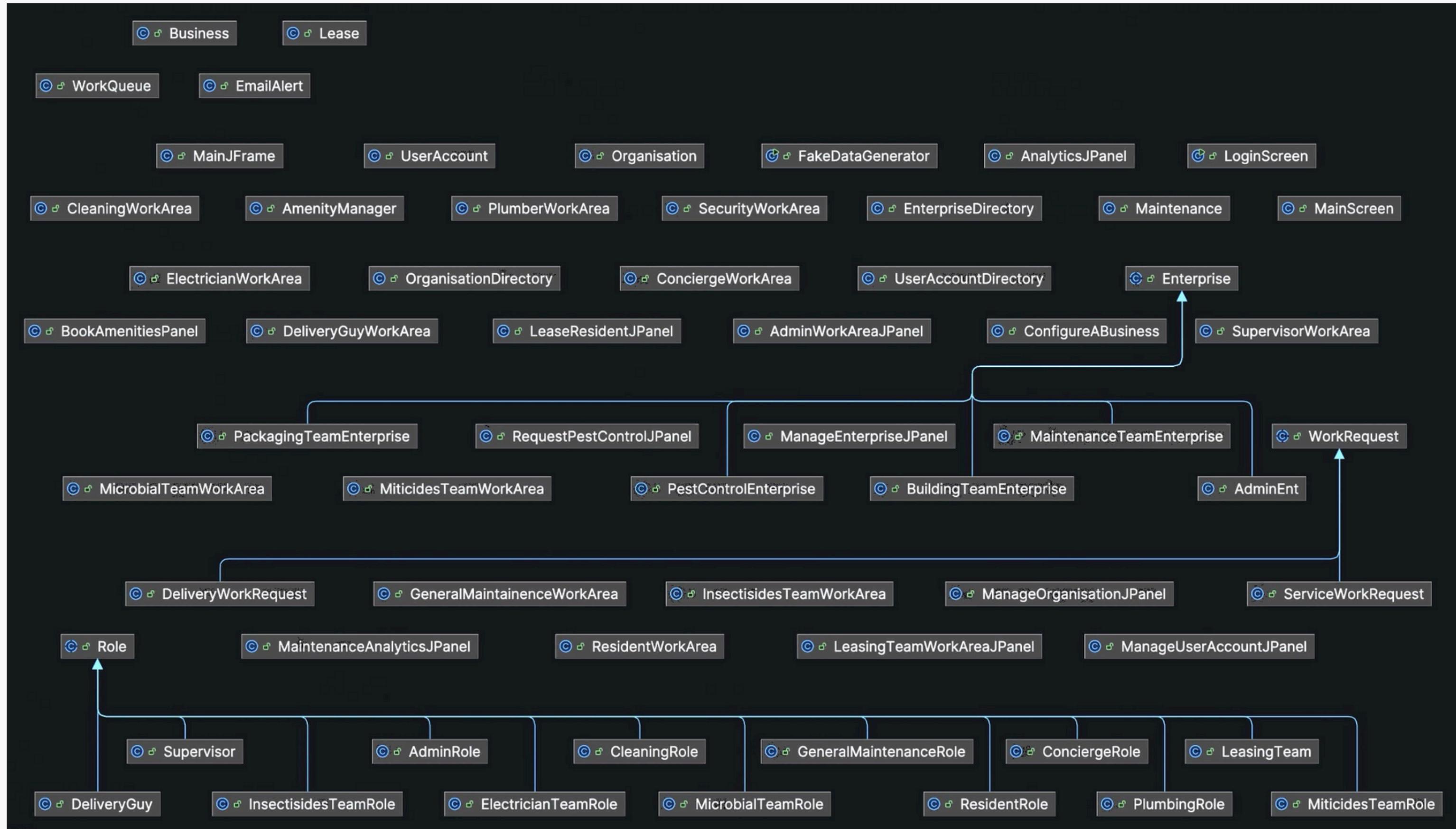


Component Diagram ~

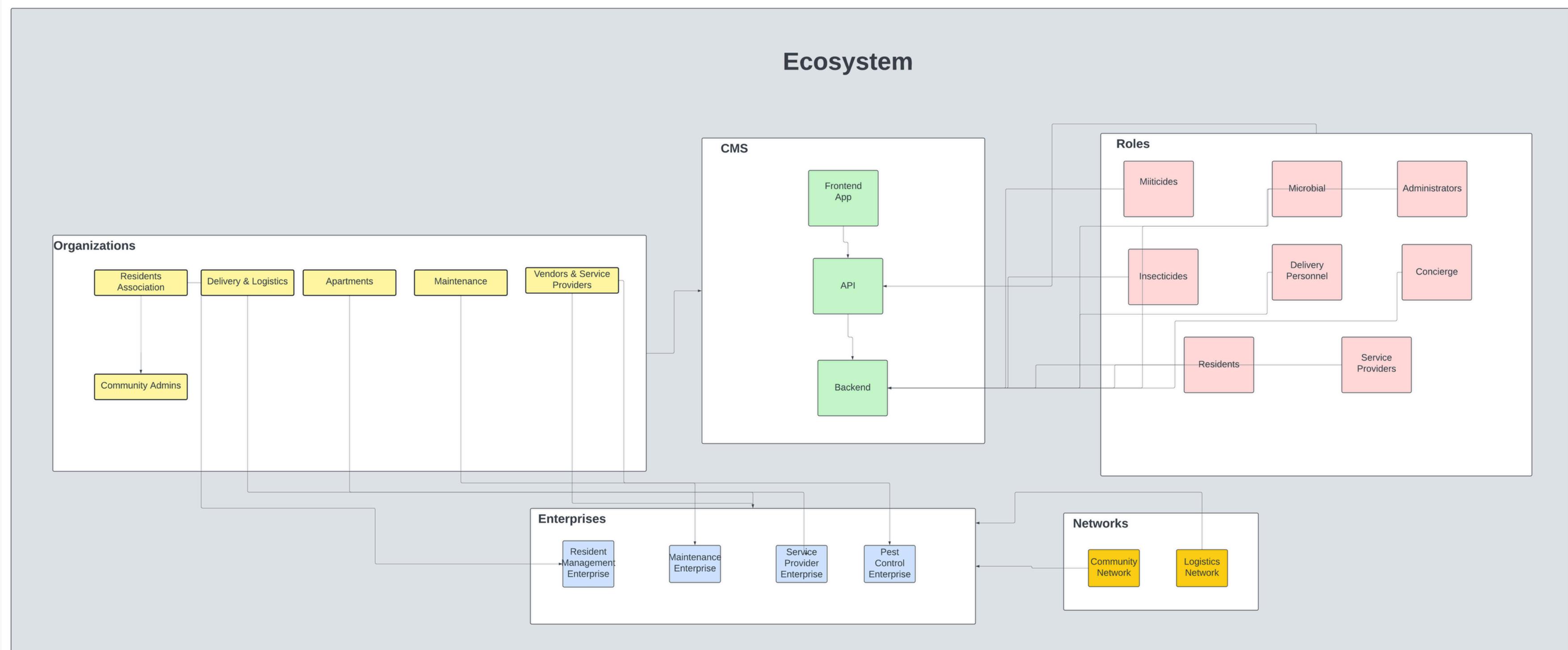
Community Management System



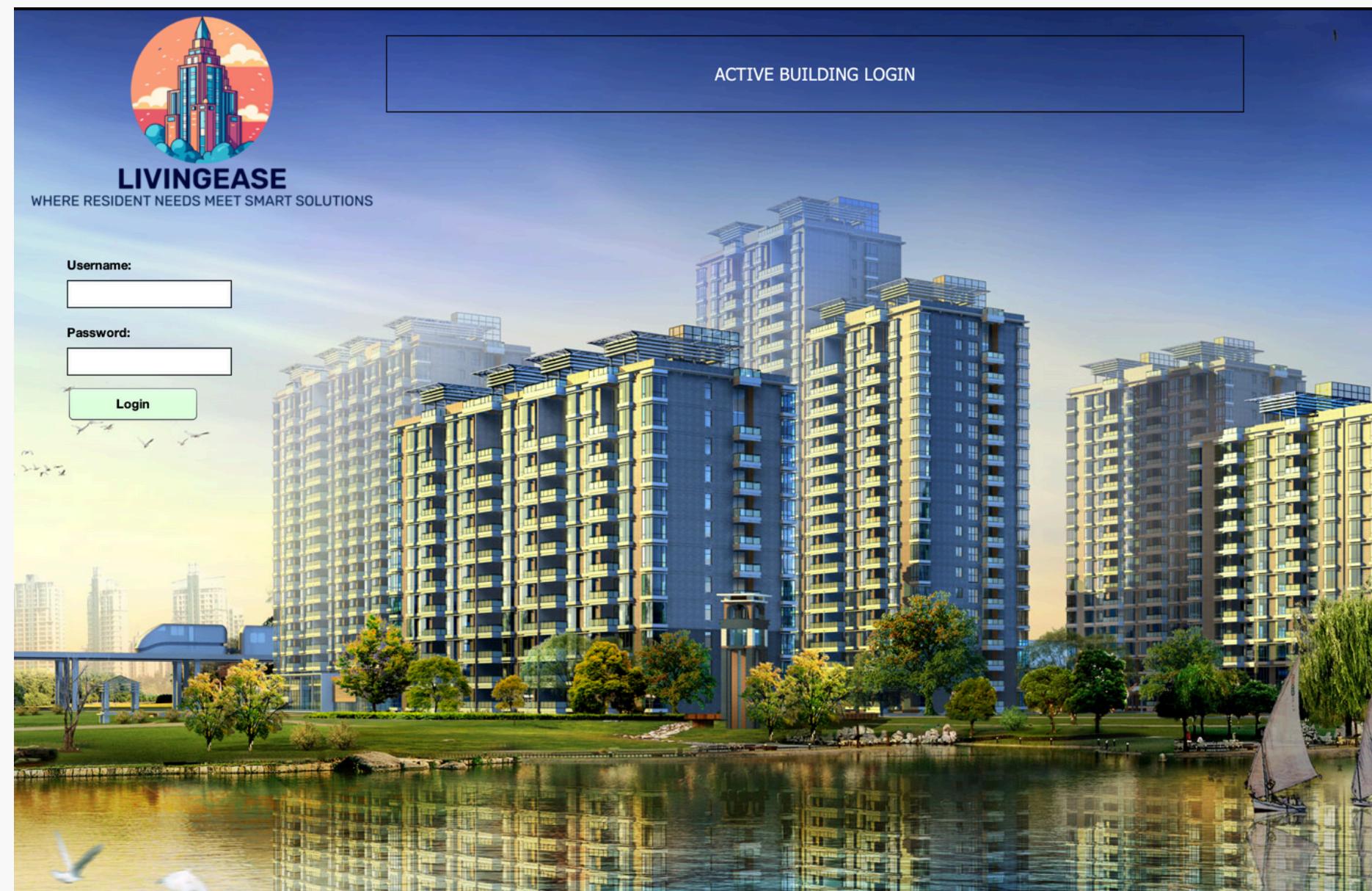
UML Diagram ~



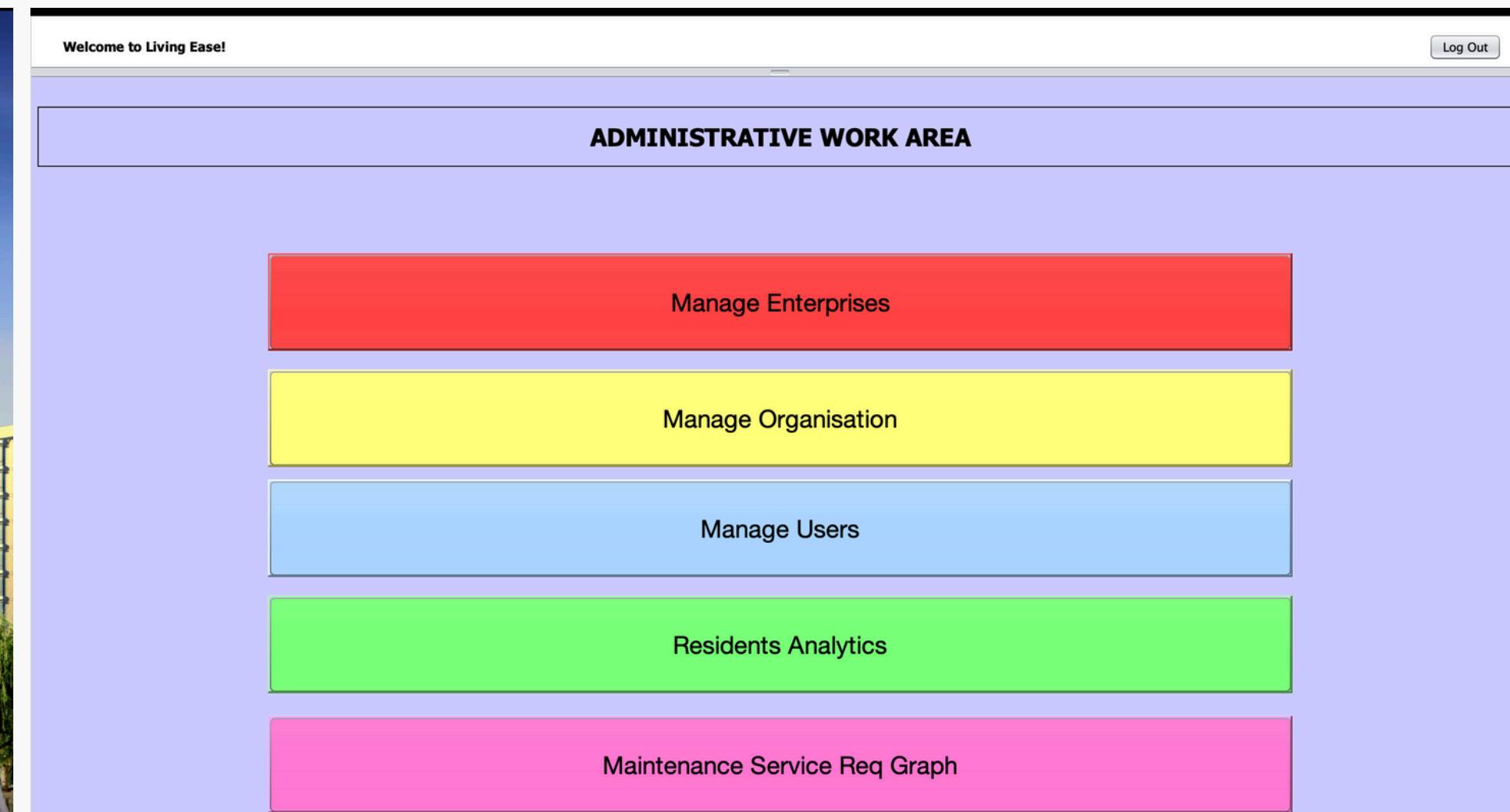
Ecosystem Structure ~



Screenshots



Login Page



The screenshot shows the administrative work area. The header displays "Welcome to Living Ease!" and a "Log Out" button. Below the header is a section titled "ADMINISTRATIVE WORK AREA". The page is divided into five colored boxes, each containing a management task: "Manage Enterprises" (red), "Manage Organisation" (yellow), "Manage Users" (light blue), "Residents Analytics" (green), and "Maintenance Service Req Graph" (pink).

Admin Page

Welcome to Living Ease!

[Log Out](#)

MANAGE ENTERPRISE

Enterprise List:

ID	Name
0	Admin Enterprise
1	Building Enterprise
2	Pest Enterprise
3	Maintainence Enterprise
4	Packaging Enterprise

Add Enterprise :

Select Enterprise Type:

[**<< Back**](#)

Manage Enterprise

Welcome to Living Ease!

[Log Out](#)

MANAGE ORGANISATION

Organisation List:

Select Enterprise :

ID	Name
1	Living Ease

New Organisation :

Name:

[**<< Back**](#)

Manage Org

Welcome to Living Ease!

[Log Out](#)

MANAGE USERS

Users List

User Name	Role	Organisation ID	Email
admin	Admin	1	
Lease1	Leasing Team	2	
Lease2	Leasing Team	2	
Lease3	Leasing Team	2	
Concierge1	Concierge	2	
Concierge2	Concierge	2	
Concierge3	Concierge	2	
Resident1	Residents	2	
Resident2	Residents	2	
Resident3	Residents	2	
Insect1	Insecticides Team	3	
Insect2	Insecticides Team	3	
Insect3	Insecticides Team	3	
Mite1	Miticides Team	3	
Mite2	Miticides Team	3	
Mite3	Miticides Team	3	
Micro1	Microbial Team	3	
Micro2	Microbial Team	3	
Micro3	Microbial Team	3	
Electric1	Electrician Team	4	
Electric2	Electrician Team	4	
Electric3	Electrician Team	4	
Plumb1	Plumbing Team	4	
Plumb2	Plumbing Team	4	

[**<< Back**](#)

Manage Users

Welcome to Living Ease!

[Log Out](#)

Residents' Approval Status

Lease Approved Residents | Lease Not Approved Residents

MANAGE RESIDENTS

Organisation List:

Select Enterprise :

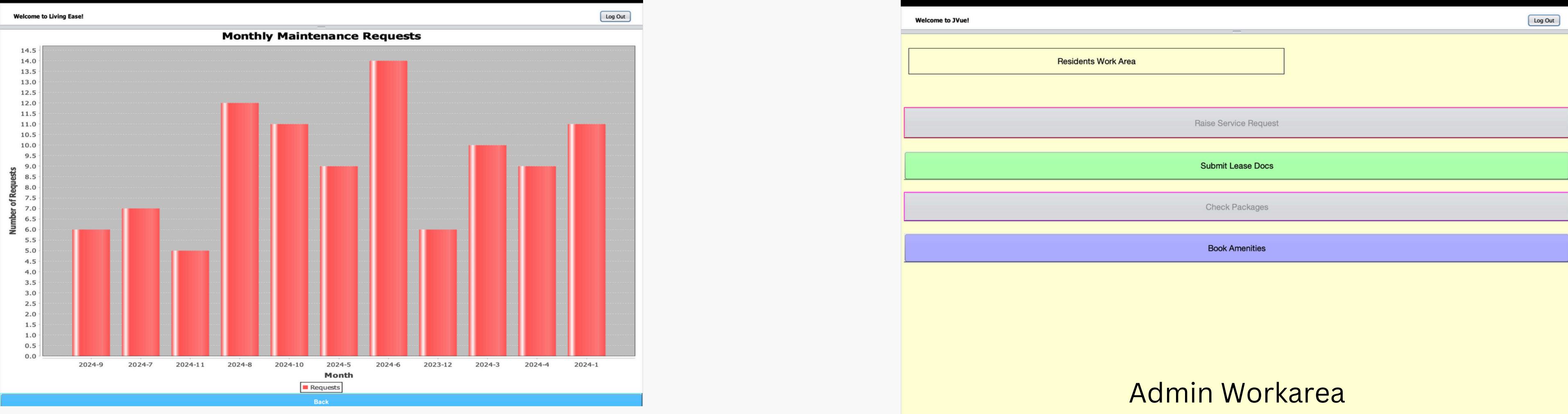
ID	Name
1	Living Ease

New Organisation :

Name:

[**<< Back**](#)

Resident analytics



Maintenance analytics

Welcome to JVue!

Log Out

Residents Work Area

Raise Service Request

Submit Lease Docs

Check Packages

Book Amenities

Admin Workarea

Welcome to JVue!

Residents Raise Service Request

BACK

Type	Message	Status	Feedback
Lease		Approved	

TYPE : Plumbing

MESSAGE :

SUBMIT

Raise A Request

Welcome to JVue!

Log Out

Book Amenities

Back

Select Date:

Select Amenity: Gym

Your Bookings

Amenity	Date	From	To
Gym	12/20/2024	9:00 AM	10:00 AM

Time: 9:00 AM - 9:00 AM

Book

Book Amenities

Welcome to JVue!

Concierge Service Request Area

<< Back

Log Out

Unit No.	Res. Name	Type	Message	Status	Feedback

Send Service Request To Enterprise

Maintenance Pest Control

Welcome to Maintenance Employer!

Delivery Agent Work Area Portal

Apt. No. Assigned by Delivery Guy Status Date Assigned

Refresh Update Delivery Status

Concierge WorkArea

Delivery Guy Workarea

Welcome to Maintenance Employer!

Packaging Team Supervisor Portal

Add package to Deliver Assign a Delivery

Package	Delivery to Unit No.	Resident Name	Status	DeliveryGuy

Delivery Unit	Assigned by	Assigned To	Status	Time

Packaging Supervisor

Welcome to Pest Control!

Insectisides Team Job Work Portal

Unit No.	Resident Name	Assigned	Status	Feedback

Refresh Assign to me

Unit No.	Resident Name	Assigned	Status	Message

Process My Job Close Request

Pest Work Area

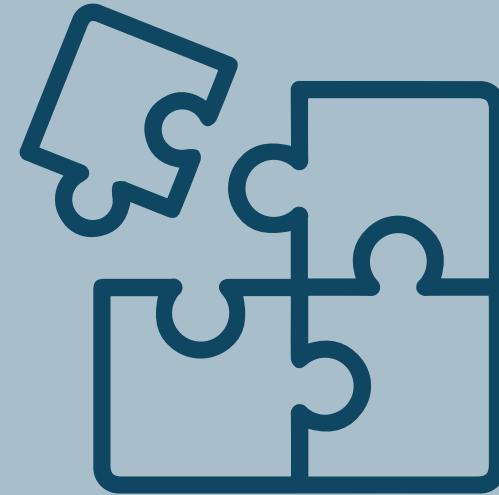
Outcomes ~

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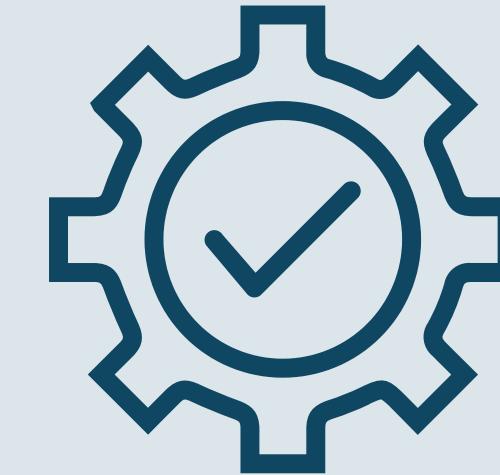
Enchantment And Efficiency

- Enhanced Security and Efficiency, the digital visitor management and automated processes improve safety, reduce costs, and minimize errors.



Resident Satisfaction

- Seamless communication, quick service requests, and convenient amenity bookings enhance the living experience and boost community engagement.



Data-Driven Decision Making

- Comprehensive reporting features provide administrators with valuable insights for community improvements and resource allocation.

Future Implementations ~

- Any Community Management System could incorporate AI-driven predictive maintenance and biometric access control, enhancing security and efficiency in gated communities through anticipatory maintenance and streamlined access
 - Real-time feedback analytics would enable data-driven decision-making, improving resident satisfaction and transforming management practices by leveraging insights from community interactions and engagement trends
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01.

AI-Powered Predictive Maintenance:

Implement machine learning algorithms to analyze community infrastructure data, predicting maintenance needs before issues arise, reducing costs, and improving resident satisfaction

02.

Biometric Access Control:

Integrate advanced biometric systems (fingerprint, facial recognition) for enhanced security, streamlining access for residents and authorized personnel while preventing unauthorized entry

03.

In-App Feedback and Analytics:

Incorporate AI-driven in-app surveys and analytics to gather real-time resident feedback, enabling data-driven decision-making for community improvements and personalized services



Thank you

