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| **Agile Software Development Group Project( Sprint 2)** |  |
|  |  |
|  | March 30, 2024Group 34 |
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# Task 1 – Business Case

**Business Case**

**ABC Rental Management Web Platform Project**

**ABC Rental Management Inc.**

**123 Any Street**

**Toronto, Ontario, Canada**

**March 9, 2024**

# Executive Summary

This business case presents the ABC Rental Management Web Platform Project, designed to overcome operational challenges stemming from disparate property management systems. By introducing a centralized web-based platform, we aim to enhance efficiency, provide a unified interface for renters, and streamline staff and maintenance scheduling across all properties. This strategic shift towards centralization and automation aligns with our goal to improve operational effectiveness and tenant satisfaction, setting the stage for future growth with potential AI integration. The project outlines a cost-effective, phased rollout, prioritizing a strong return on investment through improved system efficiencies and revenue opportunities.

## Issue

ABC Rental Management Inc. faces operational inefficiencies due to its reliance on varied and outdated information systems across its national portfolio of properties. The absence of a central management system results in data inconsistencies, inefficient manual processes for staff, and compromised service quality for tenants. These challenges hinder operational cost-effectiveness and scalability, impeding the company's capacity to adapt and grow in the dynamic Canadian real estate market.

## Anticipated Outcomes

The implementation of a centralized web-based platform aims to unify property management operations, offering a seamless interface for leases, maintenance, and payments. This consolidation is expected to enhance workflow efficiency, reduce reliance on manual processes, and ensure immediate access to critical data for staff. Tenants will benefit from a superior service experience, including digital lease applications, maintenance requests, and secure online payments. Key outcomes include substantial reductions in operational costs, higher data integrity, increased tenant satisfaction, and improved scalability for future expansion.

## Recommendation

We recommend that ABC Rental Management Inc. initiates the development and launch of the web platform, envisioned to integrate smoothly with current IT frameworks and offer intuitive interfaces for both staff and tenants. Essential features should encompass:

* A tenant portal for handling leases and maintenance issues.
* An administrative backend for comprehensive property oversight.
* Advanced analytics for informed, data-driven decisions.

A phased approach, beginning with a pilot on select properties before wider implementation, is advised to guarantee project effectiveness and scalability.

## Justification

The recommendation for the ABC Rental Management Web Platform Project is based on a strategic review of operational needs and the urgency to modernize. The proposed centralized system is a critical investment for future growth, directly addressing operational inefficiencies and improving tenant services. It is expected to yield significant returns through cost reduction, operational improvements, and enhanced tenant satisfaction. In the rapidly evolving digital landscape, failure to upgrade could result in competitive setbacks, hindered growth, and dissatisfaction among tenants.

# Business Case Analysis Team

The following individuals make up the business case analysis team, each bringing specific expertise to ensure the comprehensive development of the project business case.

| **Role** | **Description** | **Name/Title** |
| --- | --- | --- |
| Executive Sponsor | Provides executive support and decision-making authority for the project. | John Doe, CEO, ABC Rental Management Inc. |
| Technology Support | Offers technical guidance and ensures the proposed technology solutions align with the project's objectives and company's IT infrastructure. | Oscar Piedrasanta Diaz, VP Information Technology |
| Process Improvement | Advises the team on process improvement strategies to enhance efficiency and effectiveness in project execution. | Valeria Arce, Process Improvement Lead |
| Project Manager | Oversees the business case development and project management activities, ensuring timely delivery and alignment with project goals. | Melina Behzadi Nejad, Project Manager |
| Software Support | Provides software development support, ensuring that the project's software components are designed and implemented to meet the system requirements. | Mobinasadat Zargary, Software Development Team Lead |

# Problem Definition

## Problem Statement

ABC Rental Management Inc. is hindered by operational inefficiencies arising from the use of varied and outdated information systems across its Canadian property portfolio. The lack of system integration causes inefficiencies in data handling, property management, tenant communications, and maintenance planning. This situation is further complicated by the acquisition of properties with their own systems or no system at all, increasing administrative costs and complicating management oversight. Such fragmentation prevents the delivery of a cohesive tenant experience and digital management of properties, putting the company at a competitive disadvantage.

## Organizational Impact

The introduction of the ABC Rental Management Web Platform Project will significantly transform the company's operational approach, impacting its organizational processes, tools, hardware, and software, and necessitating changes in roles and responsibilities:

* **Tools:** The implementation of the new web platform will render obsolete the existing assortment of legacy systems. The transition requires not only the decommissioning of these outdated systems but also training for staff on the new platform, emphasizing its use and integration with other organizational tools.
* **Processes:** The project promises more efficient and streamlined processes for property, lease, and maintenance management. By automating and centralizing operations, the web platform will alleviate the administrative burden on staff, enabling them to focus on core activities rather than manual data management and operational coordination.
* **Roles and Responsibilities:** The new system will empower employees with greater autonomy in their respective roles, reducing the need for manual intervention and oversight. This efficiency gain may lead to a re-evaluation of staffing needs, particularly in administrative and support roles, potentially redirecting resources toward growth-oriented initiatives. The IT department will play a crucial role in managing the platform, with no anticipated increase in staffing but a shift towards more strategic IT management activities.
* **Hardware/Software:** Adoption of the web platform necessitates an evaluation of the current IT infrastructure to support the new system's requirements. This may include investments in server capacity, cybersecurity measures, and software licensing to ensure scalability, reliability, and security of the platform, catering to ABC Rental Management's needs now and in the foreseeable future.

## Technology Migration

To ensure a seamless transition from ABC Rental Management Inc.'s existing disparate and outdated systems to the new centralized web-based platform, a carefully planned phased approach will be implemented. This strategy is designed to minimize disruption to daily operations, including administration and payroll activities while ensuring that all data is securely migrated and that staff are fully trained on the new system. Here is an outline of the planned phases:

* **Phase I: Preparation and Setup**
  + Purchase necessary hardware and software to support the new web platform.
  + The IT development team will build the initial version of the web platform in a controlled environment, focusing on core functionalities that will address the most critical needs of ABC Rental Management.
  + Conduct initial tests to ensure system integrity and security.
* **Phase II: Legacy System Integration and Data Archiving**
  + Implement a temporary legacy system within the technology lab to maintain uninterrupted day-to-day operations for critical administrative and payroll functions.
  + Begin archiving all essential data from the existing legacy systems, ensuring data integrity and security.
* **Phase III: Data Migration and System Population**
  + Migrate all operational data, including property listings, tenant information, lease agreements, and maintenance schedules, to the new web platform.
  + Coordinate this migration to align with the end of a pay cycle to minimize the impact on payroll processing.
* **Phase IV: Staff Training and System Testing**
  + Organize comprehensive training sessions for all employees to familiarize them with the new system's functionalities and interface.
  + Conduct thorough testing of the web platform to identify and resolve any issues, ensuring the system is robust and user-friendly.
* **Phase V: Go-Live and Legacy System Decommission**
  + Officially launch the new web platform, making it the primary system for all property management operations.
  + Gradually phase out and decommission the legacy systems, ensuring all relevant data has been migrated and backed up.

# Project Overview

This section outlines the ABC Rental Management Web Platform Project, detailing its scope, strategy, goals, anticipated results, and key planning aspects. It addresses the operational challenges identified within ABC Rental Management Inc. with a focused approach towards a unified technological solution and streamlined process improvements.

## Project Description

The ABC Rental Management Web Platform Project aims to resolve inefficiencies caused by the current use of outdated, unconnected systems. Its primary goal is to develop and deploy a centralized, web-based system that consolidates rental management operations—property oversight, tenant engagement, lease handling, and maintenance management—into one integrated platform.

**Execution Strategy:**

* **Assessment and Planning:** Perform an in-depth review of existing systems and workflows to pinpoint improvement and integration needs.
* **Technology Selection:** Select software and technology that align with project goals, emphasizing scalability, ease of use, and full-feature integration.
* **Phased Implementation:** Introduce the new system gradually, ensuring data integrity, minimizing disruption, and facilitating thorough testing.
* **Training and Adoption:** Provide comprehensive training to all staff, promoting efficient use of the platform and smooth integration into daily operations.

**Purpose:** This project is designed to boost operational efficiency, elevate tenant services, reduce administrative costs, and provide ABC Rental Management a dynamic, scalable tool for future expansion and market adaptation. Through this technological enhancement, ABC Rental Management is set to redefine property management, offering superior services to tenants and establishing itself as an industry innovator.

## Goals and Objectives

The ABC Rental Management Web Platform Project aligns with ABC Rental Management Inc.'s strategic goals and objectives, aiming to modernize and optimize operations across the board. The project's initiatives are designed not only to address current inefficiencies but also to set a foundation for sustained growth and improved service quality. Below is a detailed breakdown of how the project supports these overarching goals:

| **Business Goal/Objective** | **Description** |
| --- | --- |
| **Enhanced Operational Efficiency** | The web-based platform will centralize and streamline property management processes, reducing time spent on manual data entry and coordination, thus increasing overall operational efficiency. |
| **Improved Tenant Satisfaction and Engagement** | By providing a self-service portal for tenants, the project facilitates better communication, ease of access to services such as maintenance requests and lease management, thereby enhancing tenant satisfaction and engagement. |
| **Operational Cost Reduction** | Automating and integrating various administrative and management functions will significantly reduce the need for manual intervention and oversight, leading to a reduction in operational costs through more efficient resource allocation. |
| **Scalability and Flexibility for Future Growth** | The new system is designed with scalability in mind, ensuring ABC Rental Management can adapt to future growth, including the addition of new properties or expansion into new markets, without the need for substantial system overhauls. |
| **Data Integrity and Reporting Accuracy** | With all data consolidated into a single platform, the project ensures higher data integrity and enables accurate, real-time reporting and analytics for better decision-making. |
| **Reduction in Employee Turnover** | By alleviating the administrative burden on staff and empowering them with tools that make their jobs easier and more productive, the project aims to improve job satisfaction, which can lead to a reduction in employee turnover. |

## Project Performance

This section delineates the performance measures for the ABC Rental Management Web Platform Project, focusing on key areas where significant improvements are anticipated. These metrics will guide the evaluation of the project's impact on ABC Rental Management Inc.'s operations, demonstrating the tangible benefits of the technological upgrade and process optimization.

| **Key Resource/Process/Service** | **Performance Measure** |
| --- | --- |
| **Centralized Reporting** | The web-based platform will enable real-time, consolidated reporting across all properties, significantly reducing discrepancies and the frequency of required reconciliations from monthly to biannually. |
| **Lease and Maintenance Management** | Streamlining lease management and maintenance requests through the portal will enhance operational efficiency, allowing for faster response times to tenant requests and more effective property maintenance scheduling. |
| **Tenant Satisfaction and Engagement** | The introduction of a tenant portal for self-service will be measured through improved tenant satisfaction scores and increased engagement, aiming for a measurable increase in tenant retention rates. |
| **Operational Cost Reduction** | Through automation and process optimization, the project aims to achieve a quantifiable reduction in operational costs, targeted as a percentage decrease in administrative expenses within the first year of implementation. |
| **Data Integrity and Decision-making** | Improved data integrity and the availability of accurate, real-time analytics will support better decision-making. This will be measured by the reduction in data-related errors and the speed at which data-driven decisions can be made. |
| **Employee Efficiency and Satisfaction** | By reducing the administrative load on staff and streamlining their workflows, the project aims to improve employee satisfaction, measured through internal surveys, and to increase efficiency, quantified by the decrease in time spent on manual tasks. |

## 

## Project Assumptions

For the ABC Rental Management Web Platform Project to proceed smoothly into detailed planning and execution, several foundational assumptions are made. These assumptions form the basis of the project's initial framework and will be revisited and refined as the project progresses.

* **Staff Training:** It is assumed that all staff, including management and operational employees, will undergo comprehensive training on the new web-based platform. This training will cover data entry, timesheet submission, reporting tasks, and any other relevant functionalities to ensure proficient use of the system.
* **Funding Availability:** Adequate funding will be allocated for the crucial aspects of the project, including but not limited to staff training programs and the procurement of necessary hardware/software to support the web-based platform.
* **Support from Department Heads:** It is assumed that department heads across ABC Rental Management Inc. will actively support the project, facilitating their teams' cooperation and providing the necessary resources for a successful transition to the new system.
* **Executive Support:** The project is presumed to have the full support and backing of ABC Rental Management's executive team, ensuring priority allocation of resources and strategic alignment with the company's broader objectives.
* **IT Infrastructure Compatibility:** The existing IT infrastructure is assumed to be compatible with the requirements of the new web-based platform, or capable of being upgraded to meet these requirements without significant overhaul.
* **Vendor Cooperation:** For any third-party software or hardware solutions selected, it is assumed that vendors will provide timely support and service to meet project timelines and technical needs.
* **Change Management:** It is presumed that staff and management will be receptive to the change, with structured change management processes in place to address any resistance and ensure smooth adoption of the new system.

## Project Constraints

As we plan the ABC Rental Management Web Platform Project, we're mindful of the limitations that could shape our progress. Here’s a succinct overview:

* **IT Resource Availability:** Our IT team's capacity is stretched between this project and ongoing initiatives, potentially slowing progress.
* **Technology Solution Options:** Finding off-the-shelf software that fits all our unique payroll and administrative needs is challenging.
* **Vendor Support:** Since we're managing implementation in-house, direct support from software and hardware providers will be minimal.
* **Budget Constraints:** Our budget might not cover unforeseen expenses, such as custom development or additional training needs.
* **Adoption and Training:** Successful project adoption hinges on effective change management and thorough staff training.
* **Data Migration:** Transferring data to the new platform comes with risks like potential data loss or integration hurdles.
* **Compliance:** Ensuring the platform adheres to legal and regulatory standards is paramount but may limit our flexibility.

## Major Project Milestones

Outlined below are the key milestones for the ABC Rental Management Web Platform Project, each marking a critical point of progress. These milestones serve as checkpoints for project planning, execution, and evaluation. As the project evolves, these dates will be refined to ensure alignment with our overall project timeline and objectives.

| **Milestones/Deliverables** | **Target Date** |
| --- | --- |
| Project Charter Finalization | 03/09/2024 |
| Project Plan Review and Completion | 03/09/2024 |
| Project Kickoff Meeting | 03/10/2024 |
| Phase I Complete: Preparation and Setup | 03/13/2024 |
| Phase II Complete: Legacy System Integration | 03/15/2024 |
| Phase III Complete: Data Migration | 03/18/2024 |
| Phase IV Complete: Staff Training | 03/20/2024 |
| Phase V Complete: System Go-Live | 03/22/2024 |
| Closeout/Project Completion | 03/25/2024 |

# Task 2 – Product Vision Statement

|  |  |  |  |
| --- | --- | --- | --- |
| **For** | ABC Rental Management Inc., its tenants, and potential tenants across Canada | | |
| **The** | ABC Rental Management Web Platform | **Is a** | centralized, intuitive digital solution |
| **That** | streamlines all aspects of rental management - from property listings and lease agreements to maintenance requests and tenant communication | | |
| **Unlike** | current disparate and inefficient systems | | |
| **Our Product** | offers a unified, user-friendly experience, enhancing operational efficiency, tenant satisfaction, and attracting potential tenants, thereby fostering business scalability. | | |

# Task 3 – Agile Team-Charter

**Agile Team Charter**

**ABC Rental Management Web Platform Project**

**ABC Rental Management Inc.**

**123 Any Street**

**Toronto, Ontario, Canada**

**March 9, 2024**

|  |  |  |
| --- | --- | --- |
| **Project Name: ABC Rental Management Web Platform Project** | | |
| **Vision**: Revolutionize the rental property management experience for ABC Rental Management Inc. and its tenants across Canada by delivering a comprehensive, intuitive, and centralized web platform. | | |
| **Mission**: To develop a state-of-the-art web platform that unifies all aspects of rental management — including property listings, lease administration, maintenance requests, and tenant communications — to enhance efficiency and service quality. | | |
| **Success Criteria**: 1. Successfully launch the web platform within the agreed project timeline. 2. Achieve a 75% reduction in operational inefficiencies within the first 6 months post-launch. 3. Attain an 80% or higher satisfaction rate among tenants and staff within 3 months post-deployment. | | |
| **Project Team** | | |
| Name | Role | Contact Info |
| Abid Rana | Product Owner | [arana@georgebrown.ca](mailto:arana@georgebrown.ca) |
| Melina Behzadi Nejad | Scrum Master | Melina.behzadinejad@georgebrown.ca |
| Valeria Arce | Lead Developer | Valeria.arce@georgebrown.ca |
| Oscar Piedrasanta Diaz | UX/UI Designer | Oscar.piedrasantadiaz@georgebrown.ca |
| Mobinasadat Zargary | Quality Assurance | Mobinasadat.zargary@georgebrown.ca |
| **Rules of Behavior**: 1) Mutual respect is the cornerstone of our collaboration. 2) Feedback is delivered constructively, with the intent to improve our work and processes. 3) Open communication is encouraged; every voice and opinion is valued. 4) Team achievements and milestones are recognized and celebrated. 5) Focus during meetings is paramount; distractions like personal cell phones are minimized. 6) Accountability for actions and commitments is expected from all team members. 7) Listening respectfully without interruptions is essential for effective communication. 8) Collaborative decision-making is preferred, striving for consensus wherever possible. | | |
| **Communications**: 1) Daily stand-ups at 9 am to align on day's tasks and address any impediments. 2) Commitment to attend all scheduled meetings, with virtual options available if necessary. 3) Task updates are to be made on the team's project management tool each morning. 4) Minutes from meetings are circulated within one business day. 5) Rotating responsibility for meeting notes to ensure engagement and shared responsibilities. 6) The Product Owner will communicate any changes to meeting schedules as soon as possible. 7) Punctuality for meetings is expected from all team members to respect everyone's time. | | |

Sponsor Acceptance

Approved by the Project Sponsor:

John Doe  
CEO, ABC Rental Management Inc. Date: March 9, 2024

# Task 4 - user personas for each category of users

**Renter Personas**:

1. **Name**: Emily Chen

* **Age**: 25
* **Occupation**: Graphic Designer
* **Background**: Emily recently graduated from college and is moving to a new city for her job. She is looking for a rental property that is affordable, safe, and conveniently located near public transportation.
* **Goals**: Emily wants to find a rental property with specific amenities, such as a pet-friendly environment and in-unit laundry. She prefers to apply for rentals online and values clear communication throughout the leasing process.
* **Challenges**: She may have limited rental history or credit history, making it challenging to secure a lease, and may require assistance understanding lease terms and rental policies.

1. **Name**: Michael Thompson

* **Age**: 30
* **Occupation**: Software Engineer
* **Background**: Michael is relocating to a new city for a job opportunity. He values flexibility and convenience and prefers to manage tasks digitally.
* **Goals**: Michael is looking for a rental property with modern amenities, such as smart home features and a fitness center. He wants to apply for rentals online, sign leases electronically, and easily access payment and lease information through a mobile app.
* **Challenges**: He may have specific preferences or requirements for his rental property, such as proximity to public transit or nearby amenities, and may require assistance navigating the application process and understanding lease agreements.

1. **Name**: Sarah Johnson

* **Age**: 28
* **Occupation**: Marketing Executive
* **Background**: Sarah is a young professional looking for a rental property in Toronto. She is tech-savvy and prefers to manage her tasks online.
* **Goals**: Sarah wants to find a suitable rental property quickly, submit her application online, and have easy access to her lease and payment information once she becomes a tenant.
* **Challenges**: She may be unfamiliar with the rental process or the specific features of the ABC Rental Management system.

**Property Manager Personas**:

1. **Name**: Lisa Nguyen

* **Age**: 40
* **Occupation**: Property Manager
* **Background**: Lisa has extensive experience in property management and oversees a diverse portfolio of rental properties. She is detail-oriented and prioritizes efficiency in managing day-to-day operations.
* **Goals**: Lisa needs a system that streamlines property management tasks, such as tracking rent payments, scheduling maintenance activities, and managing tenant communications. She values data-driven insights to make informed decisions and optimize property performance.
* **Challenges**: She may face time constraints and competing priorities, requiring a system that is intuitive and easy to use without extensive training.

1. **Name**: David Wilson

* **Age**: 50
* **Occupation**: Property Operations Manager
* **Background**: David has been working in property management for over two decades and has a wealth of experience in overseeing property operations and maximizing profitability.
* **Goals**: David is focused on optimizing property performance and ensuring tenant satisfaction. He needs a system that provides real-time visibility into property metrics, automates routine tasks, and facilitates effective communication with staff and tenants.
* **Challenges**: He may encounter resistance to change from staff accustomed to existing processes and may require support in implementing and training on new systems.

1. **Name**: Alex Patel

* **Age**: 35
* **Occupation**: Property Manager
* **Background**: Alex has been working in property management for over a decade. He oversees multiple properties and is responsible for ensuring they are well-maintained and profitable.
* **Goals**: Alex needs a system that streamlines property management tasks such as tracking rent payments, scheduling maintenance activities, and managing tenant information.
* **Challenges**: He may struggle with transitioning from manual or outdated systems to a new digital platform and adapting to new workflows.

**Maintenance Staff Personas**:

1. **Name**: Juan Lopez
   * **Age**: 35
   * **Occupation**: Maintenance Supervisor
   * **Background**: Juan has a background in construction and maintenance and oversees a team of technicians responsible for property upkeep. He is hands-on and values efficiency in completing maintenance tasks.
   * **Goals**: Juan needs a system that enables him to assign and track maintenance requests, prioritize tasks based on urgency, and ensure timely resolution of issues. He values clear communication and collaboration among maintenance staff.
   * **Challenges**: He may face high workload and tight deadlines, requiring a system that helps him manage workload effectively and respond to emergencies promptly.
2. **Name**: Rachel Smith
   * **Age**: 28
   * **Occupation**: Maintenance Technician
   * **Background**: Rachel has experience in property maintenance and enjoys working in a dynamic environment. She is proactive and attentive to detail in addressing maintenance issues.
   * **Goals**: Rachel needs a system that allows her to receive and complete maintenance requests efficiently, access relevant information about properties and equipment, and communicate effectively with colleagues and supervisors.
   * **Challenges**: She may encounter technical issues or unfamiliarity with new technology platforms, requiring support and training to adapt to the system effectively.
3. **Name**: Carlos Martinez

* **Age**: 45
* **Occupation**: Maintenance Technician
* **Background**: Carlos has been working as a maintenance technician for ABC Rental Management for several years. He is responsible for responding to maintenance requests promptly and ensuring properties are well-maintained.
* **Goals**: Carlos requires a system that allows him to receive maintenance requests efficiently, prioritize tasks based on urgency, and track the status of ongoing maintenance activities.
* **Challenges**: He may face difficulty using technology or accessing the system while on-site at properties.

# Task 5 - User Stories

**Renter User Stories**:

1. As Emily Chen, I want to search for rental properties based on specific amenities and location preferences.
2. As Michael Thompson, I want to view detailed information about available rental properties, including photos, floor plans, and pricing.
3. As Sarah Johnson, I want to submit an online rental application and provide necessary documents securely.
4. As Emily Chen, I want to receive notifications and updates on the status of my rental application.
5. As Michael Thompson, I want to sign my lease electronically and access a digital copy for my records.
6. As Sarah Johnson, I want to view my lease agreement, including terms and conditions, online.
7. As Emily Chen, I want to make rent payments online securely and conveniently.
8. As Michael Thompson, I want to set up automated rent payments and receive reminders for upcoming payments.
9. As Sarah Johnson, I want to submit maintenance requests online and track their status.
10. As Emily Chen, I want to access a tenant portal to view my payment history and lease documents.

**Property Manager User Stories**:

1. As Lisa Nguyen, I want to view an overview of all rental properties under my management, including occupancy rates and maintenance status.
2. As David Wilson, I want to generate detailed reports on property performance, including rent collection, vacancy rates, and maintenance expenses.
3. As Lisa Nguyen, I want to receive notifications for new rental applications and review applicant details online.
4. As David Wilson, I want to track lease expirations and send renewal notices to tenants in advance.
5. As Lisa Nguyen, I want to communicate with tenants and maintenance staff efficiently through the system.
6. As David Wilson, I want to assign maintenance tasks to staff members and track their progress.
7. As Lisa Nguyen, I want to access historical data on tenant interactions and maintenance requests for analysis.
8. As David Wilson, I want to schedule routine property inspections and track findings and follow-up actions.
9. As Alex Patel, I want to access financial reports and track rent payments and expenses for each property.
10. As Alex Patel, I want to update property listings and vacancy information on the website in real-time.

**Maintenance Staff User Stories**:

1. As Juan Lopez, I want to receive notifications for new maintenance requests and prioritize them based on urgency.
2. As Rachel Smith, I want to access detailed information about maintenance tasks, including location, description, and priority.
3. As Juan Lopez, I want to assign maintenance tasks to specific technicians and track their completion.
4. As Rachel Smith, I want to update the status of maintenance tasks in real-time and add comments or notes as needed.
5. As Juan Lopez, I want to access manuals and documentation for equipment and repair procedures.
6. As Rachel Smith, I want to report equipment failures or maintenance issues encountered during tasks.
7. As Juan Lopez, I want to track inventory levels for maintenance supplies and equipment.
8. As Rachel Smith, I want to request additional resources or support for complex maintenance tasks.
9. As Carlos Martinez, I want to receive notifications for new maintenance requests and prioritize them based on urgency.
10. As Carlos Martinez, I want to update the status of maintenance tasks in real-time and add comments or notes as needed.

# Task 6 - prioritized product backlog with Story Points

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Priority** | **Product Backlog Item** | **User Story No** | **User Story** | **Story Point** |
| 1 | Submit an online rental application and provide necessary documents securely | 3 | As a renter, I want to submit an online rental application and provide necessary documents securely. | 8 |
| 2 | Submit maintenance requests online and track their status | 9 | As a renter, I want to submit maintenance requests online and track their status. | 8 |
| 3 | Assign maintenance tasks to staff members and track their progress | 16 | As a property manager, I want to assign maintenance tasks to staff members and track their progress. | 8 |
| 4 | Generate detailed reports on property performance | 12 | As a property manager, I want to generate detailed reports on property performance. | 8 |
| 5 | Access financial reports and track rent payments and expenses for each property | 19 | As a property manager, I want to access financial reports and track rent payments and expenses for each property. | 8 |
| 6 | Communicate with tenants and maintenance staff efficiently through the system | 15 | As a property manager, I want to communicate with tenants and maintenance staff efficiently through the system. | 8 |
| 7 | View detailed information about available rental properties | 2 | As a renter, I want to view detailed information about available rental properties. | 3 |
| 8 | Make rent payments online securely and conveniently | 7 | As a renter, I want to make rent payments online securely and conveniently. | 5 |
| 9 | Sign lease electronically and access a digital copy | 5 | As a renter, I want to sign my lease electronically and access a digital copy. | 5 |
| 10 | Access tenant portal to view payment history and lease documents | 10 | As a renter, I want to access a tenant portal to view my payment history and lease documents. | 5 |
| 11 | View overview of all rental properties, including occupancy rates and maintenance status | 11 | As a property manager, I want to view an overview of all rental properties, including occupancy rates and maintenance status. | 5 |
| 12 | Access historical data on tenant interactions and maintenance requests for analysis | 17 | As a property manager, I want to access historical data on tenant interactions and maintenance requests for analysis. | 5 |
| 13 | Track lease expirations and send renewal notices to tenants | 14 | As a property manager, I want to track lease expirations and send renewal notices to tenants. | 5 |
| 14 | Receive notifications and updates on the status of rental application | 4 | As a renter, I want to receive notifications and updates on the status of my rental application. | 5 |
| 15 | Update property listings and vacancy information on the website in real-time | 30 | As a maintenance staff member, I want to update property listings and vacancy information on the website in real-time. | 5 |
| 16 | Update the status of maintenance tasks in real-time | 24 | As a maintenance staff member, I want to update the status of maintenance tasks in real-time. | 5 |
| 17 | Receive notifications for new rental applications and review applicant details online | 13 | As a property manager, I want to receive notifications for new rental applications and review applicant details online. | 5 |
| 18 | Receive notifications for new maintenance requests and prioritize them | 21 | As a maintenance staff member, I want to receive notifications for new maintenance requests and prioritize them. | 5 |
| 19 | Report equipment failures or maintenance issues | 26 | As a maintenance staff member, I want to report equipment failures or maintenance issues. | 5 |
| 20 | Request additional resources or support for complex maintenance tasks | 28 | As a maintenance staff member, I want to request additional resources or support for complex maintenance tasks. | 5 |
| 21 | Set up automated rent payments and receive reminders for upcoming payments | 8 | As a renter, I want to set up automated rent payments and receive reminders for upcoming payments. | 5 |
| 22 | Access manuals and documentation for equipment and repair procedures | 25 | As a maintenance staff member, I want to access manuals and documentation for equipment and repair procedures. | 3 |
| 23 | Access detailed information about maintenance tasks | 22 | As a maintenance staff member, I want to access detailed information about maintenance tasks. | 3 |
| 24 | Track inventory levels for maintenance supplies and equipment | 27 | As a maintenance staff member, I want to track inventory levels for maintenance supplies and equipment. | 3 |
| 25 | Search for rental properties based on specific amenities and location preferences | 1 | As a renter, I want to search for rental properties based on specific amenities and location preferences. | 5 |
| 26 | View lease agreement online | 6 | As a renter, I want to view my lease agreement online. | 3 |
| 27 | Access financial reports and track rent payments and expenses | 18 | As a property manager, I want to access financial reports and track rent payments and expenses. | 8 |
| 28 | Assign maintenance tasks to specific technicians and track their completion | 23 | As maintenance staff member, I want to assign maintenance tasks to specific technicians and track their completion. | 8 |
| 29 | Schedule routine property inspections and track findings | 18 | As a property manager, I want to schedule routine property inspections and track findings. | 5 |
| 30 | View property listings and vacancy information on the website | 20 | As property manager, I want to view property listings and vacancy information on the website. | 5 |

# Task 7 - Story Priority for each user story

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No | User Story | Priority (Business Value-Addition) | Priority (MoSCoW) |
| 1 | As a renter, I want to submit an online rental application and provide necessary documents securely. | High | Must-have |
| 2 | As a renter, I want to submit maintenance requests online and track their status. | High | Must-have |
| 3 | As a maintenance staff member, I want to assign maintenance tasks to staff members and track their progress. | High | Must-have |
| 4 | As a property manager, I want to generate detailed reports on property performance. | High | Must-have |
| 5 | As a property manager, I want to access financial reports and track rent payments and expenses for each property. | High | Must-have |
| 6 | As a property manager, I want to communicate with tenants and maintenance staff efficiently through the system. | High | Must-have |
| 7 | As a renter, I want to view detailed information about available rental properties. | Medium | Should-have |
| 8 | As a renter, I want to make rent payments online securely and conveniently. | Medium | Should-have |
| 9 | As a renter, I want to sign my lease electronically and access a digital copy. | Medium | Should-have |
| 10 | As a renter, I want to access a tenant portal to view my payment history and lease documents. | Medium | Should-have |
| 11 | As a property manager, I want to view an overview of all rental properties, including occupancy rates and maintenance status. | Medium | Should-have |
| 12 | As a property manager, I want to access historical data on tenant interactions and maintenance requests for analysis. | Medium | Should-have |
| 13 | As a property manager, I want to track lease expirations and send renewal notices to tenants. | Medium | Should-have |
| 14 | As a renter, I want to receive notifications and updates on the status of my rental application. | Medium | Should-have |
| 15 | As a property manager, I want to update property listings and vacancy information on the website in real-time. | Medium | Should-have |
| 16 | As a maintenance staff member, I want to update the status of maintenance tasks in real-time. | Medium | Should-have |
| 17 | As a property manager, I want to receive notifications for new rental applications and review applicant details online. | Medium | Should-have |
| 18 | As a property manager, I want to receive notifications for new maintenance requests and prioritize them. | Medium | Should-have |
| 19 | As a maintenance staff member, I want to report equipment failures or maintenance issues. | Medium | Should-have |
| 20 | As a maintenance staff member, I want to request additional resources or support for complex maintenance tasks. | Medium | Should-have |
| 21 | As a renter, I want to set up automated rent payments and receive reminders for upcoming payments. | Medium | Should-have |
| 22 | As a maintenance staff member, I want to access manuals and documentation for equipment and repair procedures. | Medium | Should-have |
| 23 | As a property manager, I want to access detailed information about maintenance tasks. | Medium | Should-have |
| 24 | As a maintenance staff member, I want to track inventory levels for maintenance supplies and equipment. | Medium | Should-have |
| 25 | As a renter, I want to search for rental properties based on specific amenities and location preferences. | Low | Could-have |
| 26 | As a renter, I want to view my lease agreement online. | Low | Could-have |
| 27 | As a property manager, I want to access financial reports and track rent payments and expenses. | Low | Could-have |
| 28 | As a property manager, I want to assign maintenance tasks to specific technicians and track their completion. | Low | Could-have |
| 29 | As a property manager, I want to schedule routine property inspections and track findings. | Low | Could-have |
| 30 | As a renter, I want to view property listings and vacancy information on the website. | Low | Could-have |

# Task 8 - Story Point for each story

|  |  |  |  |
| --- | --- | --- | --- |
| User Story No | User Story | SCRUM Poker (Story Points) | T Shirt Sizes |
| 1 | As a renter, I want to submit an online rental application and provide necessary documents securely. | 8 | L |
| 2 | As a renter, I want to submit maintenance requests online and track their status. | 8 | L |
| 3 | As a maintenance staff member, I want to assign maintenance tasks to staff members and track their progress. | 8 | L |
| 4 | As a property manager, I want to generate detailed reports on property performance. | 8 | L |
| 5 | As a property manager, I want to access financial reports and track rent payments and expenses for each property. | 8 | L |
| 6 | As a property manager, I want to communicate with tenants and maintenance staff efficiently through the system. | 8 | L |
| 7 | As a renter, I want to view detailed information about available rental properties. | 3 | S |
| 8 | As a renter, I want to make rent payments online securely and conveniently. | 5 | M |
| 9 | As a renter, I want to sign my lease electronically and access a digital copy. | 5 | M |
| 10 | As a renter, I want to access a tenant portal to view my payment history and lease documents. | 5 | M |
| 11 | As a property manager, I want to view an overview of all rental properties, including occupancy rates and maintenance status. | 5 | M |
| 12 | As a property manager, I want to access historical data on tenant interactions and maintenance requests for analysis. | 5 | M |
| 13 | As a property manager, I want to track lease expirations and send renewal notices to tenants. | 1 | XS |
| 14 | As a renter, I want to receive notifications and updates on the status of my rental application. | 5 | M |
| 15 | As a property manager, I want to update property listings and vacancy information on the website in real-time. | 5 | M |
| 16 | As a maintenance staff member, I want to update the status of maintenance tasks in real-time. | 5 | M |
| 17 | As a property manager, I want to receive notifications for new rental applications and review applicant details online. | 5 | M |
| 18 | As a property manager, I want to receive notifications for new maintenance requests and prioritize them. | 5 | M |
| 19 | As a maintenance staff member, I want to report equipment failures or maintenance issues. | 5 | M |
| 20 | As a maintenance staff member, I want to request additional resources or support for complex maintenance tasks. | 5 | M |
| 21 | As a renter, I want to set up automated rent payments and receive reminders for upcoming payments. | 5 | M |
| 22 | As a maintenance staff member, I want to access manuals and documentation for equipment and repair procedures. | 3 | S |
| 23 | As a property manager, I want to access detailed information about maintenance tasks. | 3 | S |
| 24 | As a maintenance staff member, I want to track inventory levels for maintenance supplies and equipment. | 3 | S |
| 25 | As a renter, I want to search for rental properties based on specific amenities and location preferences. | 5 | M |
| 26 | As a renter, I want to view my lease agreement online. | 3 | S |
| 27 | As a property manager, I want to access financial reports and track rent payments and expenses. | 8 | L |
| 28 | As a property manager, I want to assign maintenance tasks to specific technicians and track their completion. | 8 | L |
| 29 | As a property manager, I want to schedule routine property inspections and track findings. | 5 | M |
| 30 | As a renter, I want to view property listings and vacancy information on the website | 5 | M |

# Task 9 – Acceptance Criteria

**Renter User Stories:**

1. **As a prospective renter, I want to search for rental properties based on specific amenities and location preferences.**
   * User can enter desired amenities and location preferences in the search criteria.
   * Search results display properties matching entered criteria.
   * Filter options allow users to refine search results based on additional parameters.
   * Each property listing provides clear details about amenities, location, and rental terms.
2. **As a renter, I want to view detailed information about available rental properties, including photos, floor plans, and pricing.**
   * Property details page displays high-quality photos of the property.
   * Floor plans are available if provided by the landlord.
   * Rental pricing is clearly stated, including any additional fees or utilities.
   * Additional details such as square footage, number of bedrooms/bathrooms, and amenities are provided.
3. **As a renter, I want to submit an online rental application and provide necessary documents securely.**
   * Online application form includes fields for personal information, rental history, and references.
   * Secure document upload feature allows users to submit necessary documents such as ID proof, income statements, and references.
   * Confirmation message is displayed upon successful submission of the application.
   * User receives a confirmation email with the application details.
4. **As a renter, I want to receive notifications and updates on the status of my rental application.**
   * User receives email notifications for each stage of the application process (received, under review, approved, rejected).
   * Application status is also visible within the user's account dashboard.
   * Notifications include any additional actions required from the user.
5. **As a renter, I want to sign my lease electronically and access a digital copy for my records.**
   * Digital lease signing feature allows users to electronically sign the lease agreement.
   * User authentication ensures the legality of the signature.
   * Upon signing, user receives a digital copy of the signed lease agreement via email or within their account.
6. **As a renter, I want to view my lease agreement, including terms and conditions, online.**
   * Lease agreement is accessible within the user's account.
   * User can view the complete lease agreement, including all terms and conditions.
   * Lease agreement is presented in a clear and readable format.
7. **As a renter, I want to make rent payments online securely and conveniently.**
   * Online payment portal is available within the user's account.
   * Payment options include various methods such as credit/debit cards, bank transfers, or third-party payment processors.
   * Payment processing is secure and compliant with industry standards.
   * User receives a payment confirmation email after each successful transaction.
8. **As a renter, I want to set up automated rent payments and receive reminders for upcoming payments.**
   * User can set up automated recurring payments for rent.
   * Option to select payment frequency (e.g., monthly, bi-monthly) and preferred payment method is provided.
   * User receives email reminders before upcoming payment due dates.
   * User can easily manage or modify automated payment settings within their account.
9. **As a renter, I want to submit maintenance requests online and track their status.**
   * Online maintenance request form is available within the user's account.
   * User can describe maintenance issues with necessary details.
   * User receives confirmation upon submission of the request.
   * User can track the status of their maintenance request (e.g., pending, in progress, completed) within their account.
10. **As a renter, I want to access a tenant portal to view my payment history and lease documents.**
    * Tenant portal provides access to payment history, including dates, amounts, and payment methods.
    * Lease documents, including the signed agreement and any amendments, are accessible within the tenant portal.
    * User can easily navigate between different sections and documents.
    * Information is presented in a clear and organized manner for easy reference.

**Property Manager User Stories:**

1. **As a property manager, I want to view an overview of all rental properties under my management, including occupancy rates and maintenance status.**
   * Dashboard provides an overview of all rental properties under management.
   * Information includes occupancy rates, upcoming lease expirations, and maintenance status for each property.
   * Property manager can easily navigate to individual property details for more in-depth information.
2. **As a property manager, I want to generate detailed reports on property performance, including rent collection, vacancy rates, and maintenance expenses.**
   * Reporting tool allows selection of desired metrics and parameters for generating reports.
   * Reports include detailed information on rent collection, vacancy rates, maintenance expenses, and other relevant performance indicators.
   * Reports can be customized based on specific time periods and property portfolios.
   * Generated reports are exportable in various formats for further analysis or sharing.
3. **As a property manager, I want to receive notifications for new rental applications and review applicant details online.**
   * Property management system sends notifications for new rental applications.
   * Notifications include applicant details and a link to review the application online.
   * Property manager can access applicant information securely within the system.
   * Application review process is intuitive and allows for efficient decision-making.
4. **As a property manager, I want to track lease expirations and send renewal notices to tenants in advance.**
   * System provides a list of leases approaching expiration within a specified timeframe.
   * Property manager can review lease details and tenant information for each expiring lease.
   * Property manager can send renewal notices to tenants electronically with customizable templates.
   * Confirmation of renewal notice delivery is recorded in the system.
5. **As a property manager, I want to communicate with renters and maintenance staff efficiently through the system.**
   * Communication module allows sending messages to renters and maintenance staff within the system.
   * Messages can be categorized by type (e.g., general inquiry, maintenance request).
   * Property manager can view message history and track responses within the system.
   * Communication interface is user-friendly and supports attachments if necessary.
6. **As a property manager, I want to assign maintenance tasks to staff members and track their progress.**
   * Property manager can assign maintenance tasks to designated staff members.
   * Assignment includes task details, priority level, and deadline.
   * Staff members receive notifications upon task assignment.
   * Property manager can track task
7. **As a property manager, I want to access historical data on renter interactions and maintenance requests for analysis.**
   * System provides access to comprehensive logs of renter interactions and maintenance requests.
   * Property manager can filter and search historical data based on various criteria (e.g., date range, property).
   * Data can be exported for further analysis or reporting purposes.
   * Historical data is stored securely and is accessible only to authorized users.
8. **As a property manager, I want to schedule routine property inspections and track findings and follow-up actions.**
   * Inspection scheduling feature allows property managers to set up routine inspections.
   * Inspection schedules include property details, inspection dates, and assigned inspectors.
   * Property managers can record inspection findings and any necessary follow-up actions within the system.
   * System provides reminders for upcoming inspections and follow-up tasks.
9. **As a property manager, I want to access financial reports and track rent payments and expenses for each property.**
   * Financial reporting tool provides access to detailed reports on rent payments and expenses for each property.
   * Reports include breakdowns of income, expenses, and net profit for specified properties.
   * Property managers can drill down into financial details for individual properties.
   * Reports are exportable in common formats for further analysis or sharing.
10. **As a property manager, I want to update property listings and vacancy information on the website in real-time.**
    * Property manager can update property listings and vacancy information in real-time on the website.
    * Changes include property details, rental prices, availability status, and amenities.
    * Updates are immediately reflected on the website for prospective tenants.
    * Website interface provides intuitive tools for managing property listings.

**Maintenance Staff User Stories:**

1. **As a maintenance staff member, I want to receive notifications for new maintenance requests and prioritize them based on urgency.**
   * Maintenance staff receive notifications for new maintenance requests.
   * Requests are categorized based on urgency levels (e.g., urgent, routine).
   * Staff members can prioritize tasks accordingly and take prompt action.
2. **As a maintenance staff member, I want to access detailed information about maintenance tasks, including location, description, and priority.**
   * Maintenance staff can view detailed information about each maintenance task.
   * Information includes task location, description of the issue, and priority level.
   * Task details are easily accessible from the staff member's dashboard or task list.
3. **As a maintenance staff member, I want to assign maintenance tasks to specific technicians and track their completion.**
   * Maintenance staff can assign tasks to designated technicians.
   * Task assignments include details such as description, priority, and deadline.
   * Technicians receive notifications upon task assignment.
   * Staff members can track task progress and completion status.
4. **As a maintenance staff member, I want to update the status of maintenance tasks in real-time and add comments or notes as needed.**
   * Maintenance staff can update the status of tasks in real-time.
   * Updates include changes in status (e.g., pending, in progress, completed) and any relevant notes.
   * Comments or notes can be added to tasks for clarity or additional information.
   * System reflects real-time updates for all users involved in task management.
5. **As a maintenance staff member, I want to access manuals and documentation for equipment and repair procedures.**
   * Access to an extensive library of manuals and documentation for equipment and repair procedures is provided.
   * Documents are categorized and searchable for easy retrieval.
   * Maintenance staff can access relevant documents directly from the task management interface.
   * Documents are regularly updated and maintained for accuracy.
6. **As a maintenance staff member, I want to report equipment failures or maintenance issues encountered during tasks.**
   * Maintenance staff can report equipment failures or maintenance issues through the system.
   * Reports include details such as equipment type, issue description, and location.
   * Urgency levels can be assigned to issues based on severity.
   * Reports trigger notifications to relevant personnel for prompt action.
7. **As a maintenance staff member, I want to track inventory levels for maintenance supplies and equipment.**
   * System provides an inventory management feature for tracking supplies and equipment.
   * Inventory levels are updated in real-time as items are used or restocked.
   * Minimum stock thresholds trigger notifications for reordering supplies.
   * Inventory reports provide comprehensive insights into usage and stock levels.
8. **As a maintenance staff member, I want to request additional resources or support for complex maintenance tasks.**
   * Maintenance staff can submit requests for additional resources or support.
   * Requests include details such as required resources, task description, and urgency level.
   * Requests are routed to the appropriate personnel for review and approval.
   * Status updates on resource requests are provided to the requesting staff member.
9. **As a maintenance staff member, I want to receive notifications for new maintenance requests and prioritize them based on urgency.**
   * Maintenance staff receive notifications for new maintenance requests.
   * Requests are categorized based on urgency levels (e.g., urgent, routine).
   * Staff members can prioritize tasks accordingly and take prompt action.
10. **As a maintenance staff member, I want to update the status of maintenance tasks in real-time and add comments or notes as needed.**
    * Maintenance staff can update the status of tasks in real-time.
    * Updates include changes in status (e.g., pending, in progress, completed) and any relevant notes.
    * Comments or notes can be added to tasks for clarity or additional information.
    * System reflects real-time updates for all users involved in task management.

# Task 10 - Story to Task mapping

|  |  |  |
| --- | --- | --- |
| User Story No | User Story | Tasks |
| 1 | As a renter, I want to submit an online rental application and provide necessary documents securely. | * **Develop a dynamic online form with conditional logic:** This is crucial for creating an intuitive application process that can adapt based on user input, making it easier for renters to submit their applications and necessary documents. * **Secure document upload feature:** Ensuring that applicants can securely upload necessary documents is vital for protecting sensitive information and complying with data protection regulations. * **Automated notification system:** Setting up automated notifications confirms receipt of applications to renters and alerts property managers to new submissions, streamlining the application review process. |
| 2 | As a renter, I want to submit maintenance requests online and track their status. | * **Develop an intuitive interface for submitting maintenance requests:** A user-friendly interface is essential for encouraging tenants to report maintenance issues promptly, ensuring that properties are maintained efficiently. * **Implement a request tracking system:** A system that allows tenants to track the status of their maintenance requests in real-time fosters transparency and trust between tenants and management. * **Create a scheduling tool within the maintenance staff dashboard:** Efficiently allocating maintenance tasks among staff and scheduling repairs is critical for minimizing downtime and keeping tenants satisfied. |
| 3 | As a maintenance staff member, I want to assign maintenance tasks to staff members and track their progress. | * **Task assignment dashboard**: Develop a comprehensive dashboard for maintenance supervisors to assign tasks to team members, set deadlines, and track progress. * **Mobile app for maintenance staff**: Create a mobile application that allows maintenance staff to receive notifications of new tasks, update task status, and report completion. * **Inventory management integration**: Integrate an inventory management system that alerts staff when supplies are low and tracks usage per maintenance task. |
| 4 | As a property manager, I want to generate detailed reports on property performance. | * **Automated report generation**: Develop a system that automatically generates detailed performance reports for properties, including occupancy rates, maintenance costs, and tenant satisfaction scores. * **Customizable report filters**: Implement filters that allow managers to generate reports based on specific criteria, such as time period, property type, or geographical location. * **Visual analytics dashboard**: Create a dashboard with visual analytics, including graphs and charts, to help property managers quickly understand performance trends. |
| 5 | As a property manager, I want to access financial reports and track rent payments and expenses for each property. | * **Comprehensive financial dashboard**: Build a dashboard that provides an overview of financial metrics, including rent collection rates, outstanding balances, and expense tracking. * **Automated rent payment system**: Implement an automated system for collecting rent payments online, offering multiple payment options and automatic receipt generation. * **Expense management module**: Develop a module for tracking property-related expenses, categorizing them, and integrating them into financial reports for comprehensive financial oversight. |
| 6 | As a property manager, I want to communicate with tenants and maintenance staff efficiently through the system. | * **Development of a communication module**: Create a centralized communication module within the system for direct messaging between tenants, maintenance staff, and property managers. * **Notification system integration**: Integrate an instant notification system to alert users of new messages or updates within the platform, ensuring timely communication. * **Email and SMS functionality**: Implement functionality for sending and receiving emails and SMS messages directly through the platform for external communication needs. |
| 7 | As a renter, I want to view detailed information about available rental properties. | * **Interactive property listings**: Design and implement an interactive listing feature that allows renters to browse through available properties with detailed filters (e.g., location, size, price). * **Virtual tours integration**: Integrate virtual tour capabilities for each property, allowing potential renters to explore properties online. * **Dynamic information updates**: Ensure that property information is dynamically updated in real-time as changes occur, such as availability status or new amenities. |
| 8 | As a renter, I want to make rent payments online securely and conveniently. | * **Secure payment gateway integration**: Integrate a secure, reliable payment gateway to process online rent payments, supporting multiple payment methods. * **Payment tracking and history**: Develop features for tenants to track their payment history, view outstanding balances, and receive payment confirmations. * **Automated payment reminders**: Implement an automated system for sending payment reminders to tenants before the due date, including options for setting up automatic payments. |
| 9 | As a renter, I want to sign my lease electronically and access a digital copy. | * **Digital lease management system**: Create a system for managing lease agreements digitally, including features for electronic signing and automatic renewal options. * **Tenant portal for lease access**: Ensure that tenants have access to their lease agreements within the tenant portal, including options to download or print. * **Change tracking and version control**: Implement version control for leases to track changes over time, ensuring both parties have access to the latest version of the agreement. |
| 10 | As a renter, I want to access a tenant portal to view my payment history and lease documents. | * **Comprehensive tenant dashboard**: Develop a dashboard within the tenant portal that provides an overview of payment history, lease documents, and other relevant information. * **Document storage and access**: Integrate secure document storage for lease agreements and related documents, ensuring easy access for tenants. * **Integration with payment and lease systems**: Ensure seamless integration between the tenant portal, the payment system, and the digital lease management system for a unified user experience. |
| 11 | As a property manager, I want to view an overview of all rental properties, including occupancy rates and maintenance status. | * **Develop an analytics dashboard**: Create a dashboard for property managers to view real-time data on all rental properties, including occupancy rates, maintenance status, and financial performance. * **Implement data aggregation tools**: Integrate tools for aggregating data from various sources to feed into the dashboard, ensuring accurate and up-to-date information. * **Customizable view options**: Provide customizable dashboard views that allow property managers to select and prioritize the data most relevant to their needs. |
| 12 | As a property manager, I want to access historical data on tenant interactions and maintenance requests for analysis. | * **Tenant interaction log system**: Develop a system for logging all interactions with tenants, including communications, complaints, requests, and feedback. * **Searchable database implementation**: Implement a searchable database for historical data, allowing property managers to quickly find information on past tenant interactions. * **Data analysis tools**: Integrate data analysis tools to identify trends and patterns in tenant interactions, aiding in decision-making and strategy development. |
| 13 | As a property manager, I want to track lease expirations and send renewal notices to tenants. | * **Lease tracking system development**: Create a system that tracks the expiration dates of all leases and automatically flags those nearing expiration. * **Automated renewal notice dispatch**: Implement a feature to automatically send renewal notices to tenants and property managers ahead of lease expiration dates. * **Renewal process management**: Develop tools for managing the renewal process, including options for tenants to accept renewals online, negotiate terms, or indicate plans to vacate. |
| 14 | As a renter, I want to receive notifications and updates on the status of my rental application. | * **Application status tracking feature**: Develop a feature within the tenant portal that allows applicants to check the status of their rental application in real-time. * **Automated status update notifications**: Implement an automated system for sending notifications to applicants as their application status changes, including email and SMS options. * **Feedback and inquiry channel**: Provide a channel for applicants to give feedback on the application process or inquire about their application status directly through the portal. |
| 15 | As a property manager, I want to update property listings and vacancy information on the website in real-time. | * **Dynamic property listings page**: Create a dynamic webpage that displays up-to-date listings of available rental properties, automatically updating as properties are added or status changes. * **Property management integration**: Integrate the listings page with the property management system to ensure real-time accuracy of property information. * **User engagement tools**: Implement tools for potential renters to express interest, schedule viewings, or contact property managers directly from the listings page. |
| 16 | As a maintenance staff member, I want to update the status of maintenance tasks in real-time. | * **Develop a maintenance task tracking system**: Create a web-based platform for maintenance staff to log, track, and update the status of maintenance tasks in real-time. * **Implement push notifications for status updates**: Integrate a notification system to alert property managers and relevant tenants when the status of a maintenance request changes. * **Dashboard for maintenance overview**: Design a dashboard for property managers to view ongoing, completed, and pending maintenance tasks across all properties. |
| 17 | As a property manager, I want to receive notifications for new rental applications and review applicant details online. | * **Automated application receipt system**: Develop a system that automatically notifies property managers via email or SMS when a new rental application is submitted. * **Application review dashboard**: Create a dashboard where property managers can review, sort, and process new rental applications. * **Integration with tenant screening services**: Integrate the application process with third-party tenant screening services for background and credit checks. |
| 18 | As a property manager, I want to receive notifications for new maintenance requests and prioritize them. | * **Maintenance request evaluation tool**: Develop a feature within the maintenance management system for property managers to evaluate and prioritize new maintenance requests based on urgency and importance. * **Automated assignment to staff**: Implement an algorithm that automatically assigns prioritized maintenance tasks to the appropriate maintenance staff based on availability and skill set. * **Urgency-based notification system**: Create a notification system that alerts maintenance staff of high-priority tasks, requiring immediate action. |
| 19 | As a maintenance staff member, I want to report equipment failures or maintenance issues. | * **Maintenance issue reporting interface**: Design an easy-to-use interface for maintenance staff to report equipment failures or other maintenance issues. * **Integration with inventory management**: Link the reporting system to the inventory management system for automatic updates and ordering of replacement parts. * **Historical data analysis for preventive maintenance**: Utilize the collected data on equipment failures to develop a preventive maintenance schedule, reducing future breakdowns. |
| 20 | As a maintenance staff member, I want to request additional resources or support for complex maintenance tasks. | * **Resource request portal**: Create a portal within the maintenance management system for staff to request additional resources or support for complex tasks. * **Approval workflow**: Implement an approval workflow for resource requests, including notifications for both requesters and approvers. * **Resource allocation tracking**: Develop a tracking system for allocated resources, ensuring efficient use and return upon completion of tasks. |
| 21 | As a renter, I want to set up automated rent payments and receive reminders for upcoming payments. | * **Develop an automated payment system**: Integrate a secure, automated system for processing rent payments, allowing tenants to set up recurring payments. * **Customizable payment reminder notifications**: Implement a feature that sends customizable reminders to tenants about upcoming rent payments via email and SMS. * **Payment history and receipt generation**: Provide tenants with access to their payment history and automatically generate receipts for each payment made. |
| 22 | As a maintenance staff member, I want to access manuals and documentation for equipment and repair procedures. | * **Create a digital library of maintenance manuals**: Compile and digitize manuals and documentation for equipment and repair procedures, making them accessible to maintenance staff through the system. * **Search and bookmark capabilities**: Implement search functionality within the digital library, allowing staff to quickly find the information they need and bookmark frequently used documents. * **Training module integration**: Develop a training module that links directly to relevant manuals and documents for on-the-job guidance and support. |
| 23 | As a property manager, I want to access detailed information about maintenance tasks. | * **Maintenance task detail portal**: Design a portal where property managers can view detailed information about each maintenance task, including assigned personnel, task status, expected completion time, and any associated costs. * **Real-time update feature**: Ensure that the information in the maintenance task portal is updated in real-time as maintenance staff log progress and complete tasks. * **Historical maintenance data analysis**: Integrate tools for analyzing historical maintenance data to identify trends, potential areas for improvement, and planning for future maintenance needs. |
| 24 | As a maintenance staff member, I want to track inventory levels for maintenance supplies and equipment. | * **Implement an inventory management system**: Develop a system for tracking inventory levels of maintenance supplies and equipment, with features for low-stock alerts and automated reordering. * **Maintenance task inventory usage tracking**: Integrate the inventory system with the maintenance task portal to track the usage of supplies for specific tasks, aiding in accurate inventory management and cost allocation. * **Supplier database and order management**: Create a supplier database within the system for easy ordering of new supplies and equipment, including order tracking and history. |
| 25 | As a renter, I want to search for rental properties based on specific amenities and location preferences. | * **Develop an advanced property search feature**: Create a feature that allows potential renters to search for rental properties based on specific criteria, such as location, price range, amenities, and property type. * **User preference profile creation**: Allow users to create profiles where they can save their search preferences, view history, and receive personalized property recommendations. * **Interactive property map and comparison tool**: Integrate an interactive map displaying available properties and a comparison tool that helps users evaluate properties side by side based on their preferences. |
| 26 | As a renter, I want to view my lease agreement online. | * **Secure lease document storage**: Implement a secure, cloud-based storage solution for storing lease agreements, ensuring they are encrypted and backed up. * **Tenant portal integration for lease access**: Provide tenants with a feature within their portal to view, download, or print their lease agreements anytime. * **Version control and amendment tracking**: Include version control for lease documents to track changes or amendments over time, ensuring tenants and property managers always have access to the most current version. |
| 27 | As a property manager, I want to access financial reports and track rent payments and expenses. | * **Comprehensive financial dashboard**: Develop a detailed financial dashboard for property managers, offering insights into rent payments, overdue accounts, and overall financial health. * **Automated rent collection and reconciliation**: Integrate an automated system for rent collection that directly updates financial records, minimizing manual entry and reducing errors. * **Expense tracking and budgeting module**: Implement an expense tracking system within the financial dashboard to monitor property-related expenses and assist with budget planning. |
| 28 | As a property manager, I want to assign maintenance tasks to specific technicians and track their completion. | * **Task assignment system with technician profiles**: Create a system where maintenance tasks can be assigned to technicians based on their skills, experience, and availability, including profiles for each technician. * **Mobile app for task management**: Develop a mobile application for technicians to receive task assignments, update progress, and mark tasks as completed. * **Feedback and rating system for task completion**: Include a feedback mechanism for property managers and tenants to rate the completion of maintenance tasks, contributing to technician performance reviews. |
| 29 | As a property manager, I want to schedule routine property inspections and track findings. | * **Inspection scheduling tool**: Develop a tool for property managers to schedule routine property inspections, including recurring appointments and one-off checks. * **Digital checklist and report generation**: Implement digital checklists for inspections that can be filled out on a tablet or mobile device, automatically generating inspection reports upon completion. * **Inspection history and compliance tracking**: Maintain a history of all property inspections, including any issues identified and actions taken, to ensure compliance with housing standards and regulations. |
| 30 | As a renter, I want to view property listings and vacancy information on the website. | * **Dynamic property listing page**: Design a dynamic webpage that automatically updates with current property listings and vacancy information, featuring high-quality images and property details. * **Tenant interest and inquiry management**: Include a system for potential tenants to express interest in properties or inquire for more details directly through the listing page, streamlining communication with property managers. * **Analytics and performance tracking**: Integrate analytics to track the performance of listings, including views, inquiries, and conversion rates, to optimize the marketing of vacant properties. |

# Task 11 – Wireframes

A screenshot of a rental management company

Description automatically generated

A screenshot of a web browser

Description automatically generated

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A computer screen shot of a rental application

Description automatically generated

# Task 12 - Project Retrospect Report

## 1. Project Summary

The ABC Rental Management Web Platform Project was initiated to address significant operational challenges stemming from outdated and disparate information systems. The goal was to create a centralized, web-based platform to streamline property management, tenant interactions, lease administration, and maintenance coordination.

## 2. Project Team

* **Executive Sponsor:** John Doe, CEO
  + Provided overall direction, resources, and support for the project.
* **Project Manager:** Melina Behzadi Nejad
  + Responsibilities: Managed Deliverables 1-3, focusing on the Business Case, Product Vision, and Agile Team Charter.
  + Achievements: Successfully articulated the project's business case, established a clear product vision, and formulated an agile team charter to guide project execution.
* **Technology Support:** Oscar Piedrasanta Diaz, VP Information Technology
  + Responsibilities: Oversaw Deliverables 4-6, focusing on User Personas, User Stories, and the Prioritized Product Backlog.
  + Achievements: Developed comprehensive user personas, compiled extensive user stories to capture system requirements, and prioritized the product backlog, ensuring technical feasibility and alignment with project goals.
* **Software Support Team Lead:** Mobinasadat Zargary
  + Responsibilities: Managed Deliverables 7-9, which included the Estimation of Story Priority and Points, and the Creation of Acceptance Criteria for user stories.
  + Achievements: Employed SCRUM techniques for estimating story priority and points, and meticulously crafted acceptance criteria for each user story, laying a solid foundation for product development and quality assurance.
* **Process Improvement Advisor:** Valeria Arce
  + Responsibilities: Handled Deliverables 10-12, focusing on the Implementation Plan, the User Interface Design, and spearheading the Quality Management efforts.
  + Achievements: Developed a detailed implementation plan with a comprehensive task list, designed user-friendly web application interfaces, and established robust quality management processes to ensure the project met its operational and user experience goals.

## 3. Lessons Learned

### Successful Outcomes:

* **Unified System Implementation:** Successfully transitioned to a centralized system, enhancing operational efficiency.
* **Improved Tenant Experience:** Developed a tenant portal that improved the ease of transactions and communications.
* **Operational Cost Reduction:** Streamlined processes resulted in reduced operational costs.

### Challenges Encountered:

* **Data Migration Complexities:** Migrating from multiple legacy systems to a single platform presented significant challenges.
* **User Adoption:** Initial resistance from staff in adapting to the new system.
* **Technical Limitations:** Encountered limitations with the selected technology stack requiring adjustments to project scope.

## 4. Agreed Actionable Improvements

* **Enhanced Training Programs:** Future projects should include more comprehensive training sessions to ensure smoother user adoption.
* **Pre-Project Technology Assessment:** Conduct thorough assessments of technology stacks to better align with project requirements.
* **Improved Change Management:** Invest in stronger change management strategies to mitigate resistance and enhance project buy-in.

## 5. Project Performance

Key metrics demonstrated significant improvements in operational efficiency, tenant satisfaction, and cost reduction, meeting most of the project’s initial objectives.

## 6. Conclusion

The ABC Rental Management Web Platform Project marks a significant step forward in modernizing ABC Rental Management Inc.’s operational capabilities. Despite facing challenges, the project achieved its main goals, setting a strong foundation for future growth and improvements.