Feature Design Document

Property Manager

Management Information System

Version 1.0

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# INTRODUCTION

The Feature Design Document (FDD) describes how the functional and nonfunctional requirements recorded in the Software Requirements Specification document are transformed into more technical system design specifications from which the system will be built. The FDD is used to document both high-level system design and low-level detailed design specifications.

The FDD describes design goals and considerations, provides a high-level overview of the system architecture, and describes the data design associated with the system, as well as the human-machine interface and operational scenarios. The high-level system design is further decomposed into low-level detailed design specifications for each of the system’s components, including hardware, internal communications, software, system integrity controls, and external interfaces.

## Purpose of the Feature Design Document (FDD)

The Feature Design Document (FDD) describes the features of the system translating the requirements document, technical design document and the design document into feature design specifications from which the system will be built. The FDD also provides a high-level system design and low-level detailed design specifications of the system. This is described in the following document as:

* Key fields
* Module features
* Description of each of the features.

The intended audience for the FDD is the project manager, project team and development team. Some portions of this document may on accession be shared with the client/user and other stakeholders whose input/approval is needed.

## System Architecture

The property management system has the following modules:

1. Master file
2. CRM
3. Rent management
4. Property Management
5. Maintenance and Service
6. Broadcasts
7. Reports
8. Revenue Manager
9. User Management
10. System Manager

# FEATURE DESIGN

The back-office web application facilitates management of background operations of the property management information system.

## Masterfile Module

The masterfile module provides an interface for the management of user profile data.

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| **MASTERFILE MODULE** | | | |
| **Key Fields** | 1. Add New Masterfile 2. All Masterfile 3. Search Masterfile 4. Manage Address Types | | |
| **Module Features** | Add New Masterfile | * Capture master file details: Business role (Property manager, Landlord, Tenant, Contractor, Staff), email, phone, image * Check validity of data * Filter business roles by configuration in system manager. * If core admin * Can add all business roles * If client admin * Can add Landlord, Tenant and Staff | If Business role is Tenant or landlord  *Capture Surname, first name, middle name, ID No, Occupation, Plot*  If business role is property manager  *Capture name of business, business No,*  *Capture bank details and PIN No. for landlord and property manager*  Capture House No. for tenant only |
| All masterfile | * Preload customer details on data grid * Search customer record by any field * Select customer record | |
| Search Masterfile | * Capture search string * Search masterfile by search string * Display results on data grid | |
| Manage Address types | * Add address type | * Capture address type * Check validity * update address table |
| * Edit address type | * Select address type * Check validity * update address table |
| * View all address types | * Preload all address types on data grid |

\*\* Client admin

## CRM MODULE

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| **CRM MODULE** | | | |
| **Key Features** | 1. All tenants 2. All contractors 3. All landlords 4. My tenants 5. My landlords 6. My Contractors | | |
| **Module Features** | All Tenants | * Preload all tenant details on data grid * Search tenant record by any field * Select tenant record |  |
| All contractors | * Preload all contractor details on data grid * Search contractor record by any field * Select contractor record |  |
| All Landlords | * Preload all landlord details on data grid * Search landlord record by any field * Select landlord record |  |
| My Tenants | * Preload tenant details on data grid * Search tenant record by any field * Select tenant record | If login is property manager *Show tenants only from properties being managed by this property manager*  If login is landlord  *Show tenants only from properties owned by this landlord* |
| My landlords | * Preload landlord details on data grid * Search landlord record by any field * Select landlord record | If login is property manager *Show landlords only from properties being managed by this property manager* |
| My Contractors | * Preload contractor details on data grid * Search contractor record by any field * Select contractor record | *Show contractors assigned to properties being managed by this property manager or this landlord* |

## RENT MANAGEMENT

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| **RENT MANAGEMENT MODULE** | | | |
| **Key Features** | 1. All Leases 2. My Leases 3. Manage lease 4. Create new Lease | | |
| **Module features** | All leases | * Preload all lease details on data grid * Search lease record by any field * Select lease record |  |
| My Leases | * Preload lease details on data grid * Search lease record by any field * Select lease record | If login is property manager *Show leases only from properties being managed by this property manager*  If login is landlord  *Show leases only from properties owned by this landlord*  If login is tenant  *Show leases only from units rented* |
| Manage Lease | * Show Lease details * Attach Lease Documents * Termination Process   + Show pending bills   + Show Deposit amount   + Generate Termination Documents   + House Inspection Report   + Create Maintenance Request * Edit Lease Details |  |
| Create new lease | * Assign lease to tenant * Assign house number, landlord,property,rent, service charge(where applicable), * Define lease type {Auto-Renewal or Periodic} | *Upon this event; Besides creating the billing file and bill for rent payment, check property ratecard for any services attached to the Unit; and any services attached to the property; If found, create any bills related to the service.* |

## PROPERTY MANAGEMENT MODULE

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| **Property Management Module** | | | |
| **Key Features** | 1. Add property 2. Add units 3. My units 4. My properties 5. Manage Unit attributes 6. Manage Property Attributes 7. Property Ratecard | | |
| **Module features** | Add property | * Capture property details: property type {Commercial or Residential}, property name, LR No.,Sq. footage, landlord name,no. of units, location, property manager * Set Unit Attributes (attribute and quantity) * Check validity of data |  |
| Add unit | * Capture unit details: property name, house no. * Set Rent Type {Flat Rate or PerSqft} * Set Service Charge Type {Flat Rate or Percentage of Rent or Rate per Sqft, No Service Charge} * Set Unit Attributes (attribute and quantity) * Check validity of data |  |
| My units | * -display all units on data grid   + Property name   + Unit Name   + Lease Status   + Tenant Name   + Rent Amount |  |
| My properties | * -display all properties on data grid |  |
| Manage Unit Attributes | * Preload all unit attributes on data grid (sq footage, bedrooms,bathrooms etc) * Search unit attribute by any field * Select unit attribute to edit record | If unit is commercial |
| Manage Property Attributes | * Add attribute number, add attribute name, add attribute value | Additional Property attributes (optional) Gym, pool, backup generator, parking, proximity to amenities, SQs, Borehole, lift |
| Property Ratecard | * Define rent escalation option * Attach services to a property * Attach services to a Unit * View Services attached to a property | Any additional bills e.g. Service charge, deposit(elec+water/one off) |

\*\*rent escalation is attribute of property.

## MAINTENANCE AND SERVICES MODULE

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| **MAINTENANCE AND SERVICES MODULE** | | | |
| **Key Features** | 1. Manage Maintenance request/Complaint (CoreAdmin) 2. Manage Maintenance request/Complaint (Property Manager/Landlord) 3. All maintenance jobs (CoreAdmin) 4. My Maintenance jobs (Property Manager) 5. Available jobs(Contractor) 6. All quotations (CoreAdmin) 7. My Maintenance jobs (Contractor) 8. Manage maintenance categories | | |
| **Module features** | Manage Maintenance request/Complaint User Class (Core) | * Add maintenance request (RequestID, Tenant Name, plot, house no., category, description, image, reported by, status, reported time) * View all maintenance/complaint requests * Approve request to Maintenance Job by creating Job | Automatically send notification to contractors once request is approved |
| Manage Maintenance request/Complaint User Class (PM/Landlord) | * Add maintenance request (RequestID, Tenant Name, plot, house no., category, description, image, reported by, status, reported time) * View all maintenance/complaint requests * Approve request to Maintenance Job by creating Job | Automatically send notification to contractors once request is approved |
| All Maintenance Jobs User Class (Core) | * Preload all maintenance jobs on data grid with status |  |
| My Maintenance Jobs User Class (PM) | * Preload all maintenance jobs on data grid with status * View Quotations for a particular job   + Contractor Name   + Qualifications   + Experience   + Quote Amount   + Job Date * Approve and Close Quotations | Notify Contractor via SMS upon approval |
| Available Jobs User Class (Con) | * Preload all maintenance jobs on data grid () * Send quotation for maintenance job | If job as not been assigned to contractor  Enable Send quotation button |
| All quotations User Class (Core) | * Preload all maintenance quotations on data grid () | Allow only if log in is admin |
| My maintenance jobs  User Class (Con) | * Preload maintenance jobs on data grid * Search maintenance jobs by any field * Approve maintenance job as complete | Display only jobs assigned to the logged in contractor  Once Job is complete update request/complaint to resolve. |
| Manage maintenance categories | * Add maintenance category number, add maintenance category name (cleaning, plumbing, construction, water vendor, electrical) | If login is admin  Allow to Add,Edit or delete maintenance category |

## BROADCASTS MODULE

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| **BROADCASTS MODULE** | | | |
| **Key Features** | 1. Configure broadcast message 2. Select broadcast message recipients | | |
| **Module features** | Configure broadcast message | * Input broadcast message to be relayed |  |
| Select broadcast message recipients | * Preload existing client contacts * Select message recipients * Select notification type * Relay broadcast message | * Notification types: lease expiry, overdue rent, evacuation notice etc. |

## REPORTS MODULE

This module is used to generate reports based on user filter criteria.

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| **REPORTS MODULE** | | | |
| **Key Features** | 1. Income statement reports 2. Building expenditure summary 3. Rent collection 4. Tenants 5. Contractors | | |
| **Module Features** | Income statement reports | * Preview income statement reports on data grid. * Apply filter to show income statement reports by property or by landlord * Apply date range filter | * Enter valid date range for filer action. * Enter valid service option for filter action. |
| Building expenditure summary | * Preview building expenditure reports on data grid. * Apply filter to show building expenditure reports by property or by landlord * Apply date range filter | * Enter valid date range for filer action. * Enter valid visit type for filter action. |
| Rent collection | * Preview rent collection reports on data grid. * Apply filter to show rent collection by property or by landlord | * Enter valid date range for filer action. |
| Tenants report | * Preview summary on data grid. * Apply filter to show summary by date range | * Enter valid date range for filer action. |
| Contractors report | * Preview summary on data grid. * Apply filter to show summary by date range |  |

## REVENUE MANAGER MODULE

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| **REVENUE MANAGER MODULE** | | | |
| **Key Features** | 1. Manage Revenue Channels 2. Manage Services Options 3. Manage service bills | | |
| **Module Features** | Manage revenue channels | * Add revenue channel name * Add revenue channel code |  |
| Manage service options | * Set up new services * Select revenue channel name, service option type, service option name, option code, request typeparent ID, Price, |  |
| Manage service bills | * Set up new service bill Bill name, bill category, amount type, revenue channel, property, amount, bill description, bill code, interval, due date, attach service option, house number |  |

\*\*create service option then service bill

## USER MANAGEMENT MODULE

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| **USER MANAGEMENT MODULE** | | | |
| **Key Features** | 1. Manage User roles 2. Client Users 3. View Users 4. Audit trail | | |
| **Module Features** | Manage User Roles | * Add a new user role * Preview user roles on data grid * Order records by any field | * -Preload Role Status * - Capture Role Name * - Capture Role Status * -Edit Actions * Save – Update Table * Rest- Ignore changes |
| Client Users | * Preview client details on data grid * Edit client profile * View client profile | * -Preload Client details * -Preload client username * -Preload Status * -Preload user role * -Edit User Role * -Edit Status * - Retrieve profile details from database |
| View Users | * Preview all users on data grid * Edit User * View User profile | * Preload user details |
| Audit trail | * Preview recent system actions on audit trail | * preload audit trail details: Audit trail#, Action mane, Action time, session ID, user name |

## SYSTEM MANAGER MODULE

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| **SYSTEM MANAGER MODULE** | | | |
| **Key Features** | 1. Manage System Views 2. Manage System Actions 3. Manage Menus 4. System Parameters 5. Maintenance | | |
| **Module Features** | Manage System views | * Preview system view fields * Add system view * Preview all system views on data grid | * Add a new system view * Preload system view details :*ID#, View Name, View Index, View URL, Status* * Edit System view |
| Manage System Actions | * Preview system view fields * Add system actions * Preview all system views on data grid | * Add a new system action * Preload system view details :*ID#, Action Name, Action Code, Action description, type, class, view, status,* * Edit System action |
| Add Menu Items | * Preview menu item fields * Add menu items * Preview all menu items | * Add a new menu item * Preload menu item details :*ID#, Menu Item, Sequence, Parent* * Edit Menu item |
| System Parameters | * Preload system parameter fields | * Save changes |
| Maintenance | * Create backup file * Restore from backup | * Preload backup details on data grid: *Backup#, file name, Backed up by, Created on, Download* |

NOTES:

Business Roles

A person using the property management software can be assigned the following business roles:

1. Landlord
2. Tenant
3. Property Manager
4. Contractor

A landlord can manage his/her own properties without a property manager