

# Sri Lanka Institute of Information Technology



## Agile Activity Report

Information Technology Project (IT2080)

2025

# Unified System for Insurance Claim Management

Group no : ITP25\_B4\_96

Campus : Malabe

Submitted by:

	<b>Reg Number</b>	<b>Name With Initials</b>	<b>Contact Number</b>	<b>Email</b>
1.	IT23834774	NATH I M N	+94 77 429 0347	it23834774@my.sliit.lk
2.	IT23836440	FERNANDO PULLE N S	+94 70 311 4390	it23836440@my.sliit.lk
3.	IT23830332	PATHIRANA P U O R	+94 71 679 2331	it23830332@my.sliit.lk
4.	IT23725010	PERERA B I V	+94 70 134 6360	it23725010@my.sliit.lk
5.	IT23828766	SENARATHNA P G R M	+94 71 777 6610	it23828766@my.sliit.lk

## Product Backlog

### 1. User Management Module

Feature Name	ID	User Story	Tasks	Priority	Estimation
User Registration	UM-001	As a new user, I want to register with my employee ID so that I can access the system	1. Create registration form UI 2. Implement backend registration API 3. Email verification setup 4. Input validation	High	8
User Authentication	UM-002	As a user, I want to securely login to access my account	1. Login form UI 2. JWT token implementation 3. Password encryption (bcrypt) 4. Session management	High	5
Role-based Access	UM-003	As an admin, I want to assign different roles to users so they access appropriate features	1. Role assignment UI 2. Permission middleware 3. Route protection 4. Role validation	High	13
Profile Management	UM-004	As a user, I want to update my profile information	1. Profile edit form 2. Profile view page 3. Update API 4. Image upload for avatar	Medium	5

### Activity 3

Password Reset	UM-005	As a user, I want to reset my password if I forget it	1. Forgot password form 2. Email reset link 3. Reset password page 4. Security token generation	Medium	8
Account Activation	UM-006	As an admin, I want to activate/deactivate user accounts	1. Account status toggle 2. Admin dashboard integration 3. Status change notifications 4. Bulk operations	Medium	3
User Activity Logs	UM-007	As an admin, I want to track user login activity for security	1. Login tracking system 2. Activity dashboard 3. Log storage 4. Export functionality	Low	5

#### 2. Policy Management Module

Feature Name	ID	User Story	Tasks	Priority	Estimation
Policy Creation	PM-001	As an admin, I want to create new insurance policies for employees	1. Policy creation form 2. Policy type definitions 3. Coverage limit settings 4. Provider assignment	High	13
Policy Assignment	PM-002	As an HR officer, I want to assign policies to employees based on their designation	1. Employee-policy mapping 2. Bulk assignment feature 3. Assignment validation 4. Assignment history	High	8
Policy Viewing	PM-003	As an employee, I want to view my active insurance policies and coverage details	1. Policy dashboard UI 2. Policy details page 3. Coverage visualization 4. Download policy documents	High	5
Policy Renewal	PM-004	As an admin, I want to manage policy renewals and expiration dates	1. Renewal notification system 2. Renewal process workflow 3. Expiration tracking 4. Automatic renewals	Medium	8

### Activity 3

Policy Modification	PM-005	As an HR officer, I want to modify policy details when needed	1. Policy edit interface 2. Change approval workflow 3. Version control 4. Change notifications	Medium	5
Policy Reports	PM-006	As an admin, I want to generate reports on policy utilization	1. Report generation engine 2. Policy analytics dashboard 3. Export capabilities 4. Filtering options	Low	8
Policy Categories	PM-007	As an admin, I want to categorize policies by type (life, medical, vehicle)	1. Category management system 2. Category assignment 3. Category-based filtering 4. Category reports	Medium	3

**Activity 3**
**3. Claims Management Module**

Feature Name	ID	User Story	Tasks	Priority	Estimation
Claim Submission	CM-001	As an employee, I want to submit insurance claims with supporting documents	1. Claim submission form 2. Document upload integration 3. Claim validation 4. Submission confirmation	High	13
Claim Tracking	CM-002	As an employee, I want to track the status of my submitted claims	1. Claim status dashboard 2. Status update system 3. Timeline visualization 4. Status notifications	High	8
Claim Review	CM-003	As an HR officer, I want to review and validate submitted claims	1. Claim review interface 2. Approval/rejection workflow 3. Comment system 4. Review history	High	13
Claim Forwarding	CM-004	As an HR officer, I want to forward validated claims to insurance agents	1. Forwarding workflow 2. Agent assignment 3. Forwarding notifications 4. Tracking integration	High	8

### Activity 3

Insurance Processing	CM-005	As an insurance agent, I want to process forwarded claims and make decisions	1. Agent dashboard 2. Claim processing interface 3. Decision recording 4. Reimbursement calculation	High	13
Claim History	CM-006	As a user, I want to view my claim history and previous decisions	1. Claims history page 2. Search and filter options 3. Detailed claim view 4. Export functionality	Medium	5
Claim Analytics	CM-007	As an admin, I want to analyze claim patterns and processing times	1. Analytics dashboard 2. Performance metrics 3. Trend analysis 4. Report generation	Low	8
Bulk Claim Processing	CM-008	As an insurance agent, I want to process multiple claims efficiently	1. Bulk selection interface 2. Batch processing 3. Progress tracking 4. Bulk notifications	Medium	8

#### 4. Document Management Module

Feature Name	ID	User Story	Tasks	Priority	Estimation
Document Upload	DM-001	As a user, I want to upload documents securely for my claims	1. File upload component 2. File type validation 3. Size limit enforcement 4. Security scanning	High	8
Document Storage	DM-002	As a system, I want to store documents securely with proper organization	1. Cloud storage integration 2. File encryption 3. Folder structure 4. Backup system	High	13
Document Viewing	DM-003	As a user, I want to view uploaded documents associated with claims	1. Document viewer interface 2. Preview functionality 3. Download options 4. Access logging	High	5
Document Classification	DM-004	As a system, I want to automatically classify documents by type	1. Document type detection 2. Metadata extraction 3. Auto-tagging 4. Classification rules	Medium	8
Document Search	DM-005	As a user, I want to search for documents using keywords or filters	1. Search interface 2. Indexing system 3. Advanced filters 4. Search results display	Medium	8



### Activity 3

Document Versioning	DM-006	As a user, I want to maintain versions of updated documents	1. Version control system 2. Version comparison 3. Version history 4. Rollback functionality	Low	5
Document Sharing	DM-007	As an HR officer, I want to securely share documents with insurance agents	1. Sharing interface 2. Permission controls 3. Access tracking 4. Share notifications	Medium	5

**Activity 3**
**5. Messaging System**

Feature Name	ID	User Story	Tasks	Priority	Estimation
Direct Messaging	MS-001	As a user, I want to send direct messages to other stakeholders	1. Chat interface UI 2. Real-time messaging API 3. Message delivery system 4. Message history	High	13
Group Conversations	MS-002	As an HR officer, I want to create group conversations for claim discussions	1. Group chat creation 2. Member management 3. Group permissions 4. Group notifications	Medium	8
Message Notifications	MS-003	As a user, I want to receive notifications for new messages	1. Push notification system 2. Email notifications 3. Notification preferences 4. Read receipts	High	8
File Sharing	MS-004	As a user, I want to share files through messages	1. File attachment system 2. File preview in chat 3. Download functionality 4. File size limits	Medium	5
Message Search	MS-005	As a user, I want to search through my message history	1. Search interface 2. Message indexing 3. Search filters 4. Search results highlighting	Medium	5

### Activity 3

Message Archiving	MS-006	As a system, I want to archive old messages for storage optimization	1. Archiving system 2. Archive retrieval 3. Storage management 4. Archive notifications	Low	3
Claim Context Messaging	MS-007	As a user, I want messages to be contextually linked to specific claims	1. Claim-message linking 2. Context display 3. Message categorization 4. Context navigation	High	8

#### 6. Notifications System

Feature Name	ID	User Story	Tasks	Priority	Estimation
Email Notifications	NS-001	As a user, I want to receive email notifications for important updates	1. Email service integration 2. Email templates 3. Delivery system 4. Bounce handling	High	8
In-app Notifications	NS-002	As a user, I want to see notifications within the application	1. Notification UI component 2. Real-time updates 3. Notification center 4. Mark as read functionality	High	8
SMS Notifications	NS-003	As a user, I want to receive SMS notifications for critical updates	1. SMS gateway integration 2. SMS templates 3. Delivery confirmation 4. Cost optimization	Medium	5
Notification Preferences	NS-004	As a user, I want to customize my notification preferences	1. Preferences interface 2. Channel selection 3. Frequency settings 4. Category preferences	Medium	5
Scheduled Notifications	NS-005	As a system, I want to send scheduled notifications for deadlines and reminders	1. Scheduling system 2. Cron job setup 3. Reminder logic 4. Schedule management	Medium	8

### Activity 3

Notification History	NS-006	As a user, I want to view my notification history	1. History interface 2. Notification storage 3. Search functionality 4. Archive system	Low	3
Push Notifications	NS-007	As a user, I want to receive push notifications on my mobile device	1. Push service integration 2. Device registration 3. Push templates 4. Platform compatibility	Low	8

#### 7. AI Chat-bot Module

Feature Name	ID	User Story	Tasks	Priority	Estimation
Basic Q&A	CB-001	As a user, I want to ask common questions and get instant answers	1. Chatbot UI component 2. Knowledge base setup 3. NLP integration 4. Response system	High	13
Claim Guidance	CB-002	As an employee, I want the chatbot to guide me through the claim process	1. Process flow integration 2. Step-by-step guidance 3. Interactive tutorials 4. Progress tracking	High	8
Policy Information	CB-003	As a user, I want to ask about my policy details through the chatbot	1. Policy data integration 2. User context awareness 3. Policy querying 4. Formatted responses	Medium	8
Knowledge Base Management	CB-004	As an admin, I want to update the chatbot's knowledge base	1. Admin knowledge interface 2. Content management 3. Training data updates 4. Performance monitoring	Medium	5
Escalation System	CB-005	As a user, I want the chatbot to escalate complex queries to human agents	1. Escalation triggers 2. Human handoff 3. Context transfer 4. Escalation tracking	Medium	5

### Activity 3

Multi-language Support	CB-006	As a user, I want to interact with the chatbot in my preferred language	1. Language detection 2. Translation integration 3. Localized responses 4. Language switching	Low	8
Analytics & Learning	CB-007	As an admin, I want to analyze chatbot interactions to improve responses	1. Interaction analytics 2. Performance metrics 3. Learning algorithms 4. Improvement suggestions	Low	5

## **Sprint Overview**

### **Sprint 1 (Weeks 1-2): Foundation & System Setup**

#### **Build core system infrastructure with all modules getting initial setup**

This sprint establishes the foundation across all system modules. Each team member will work on their assigned modules to create the basic infrastructure. User management will provide authentication, policy management will set up basic policy structures, claims management will prepare claim submission capabilities, document management will establish file handling, messaging will create basic communication features, and notifications will implement core alert systems. All team members are actively contributing from day one.

### **Sprint 2 (Weeks 3-4): Core Business Logic**

#### **Implement primary business workflows and user interactions**

This sprint focuses on delivering the main business functionality. The claims workflow will be operational, policy management will be fully functional, document systems will handle secure uploads and viewing, messaging will enable stakeholder communication, and the AI chatbot will provide basic support. Users will be able to perform their primary tasks including policy viewing, claim submission, and basic system interactions.

### **Sprint 3 (Weeks 5-6): Advanced Features & System Completion**

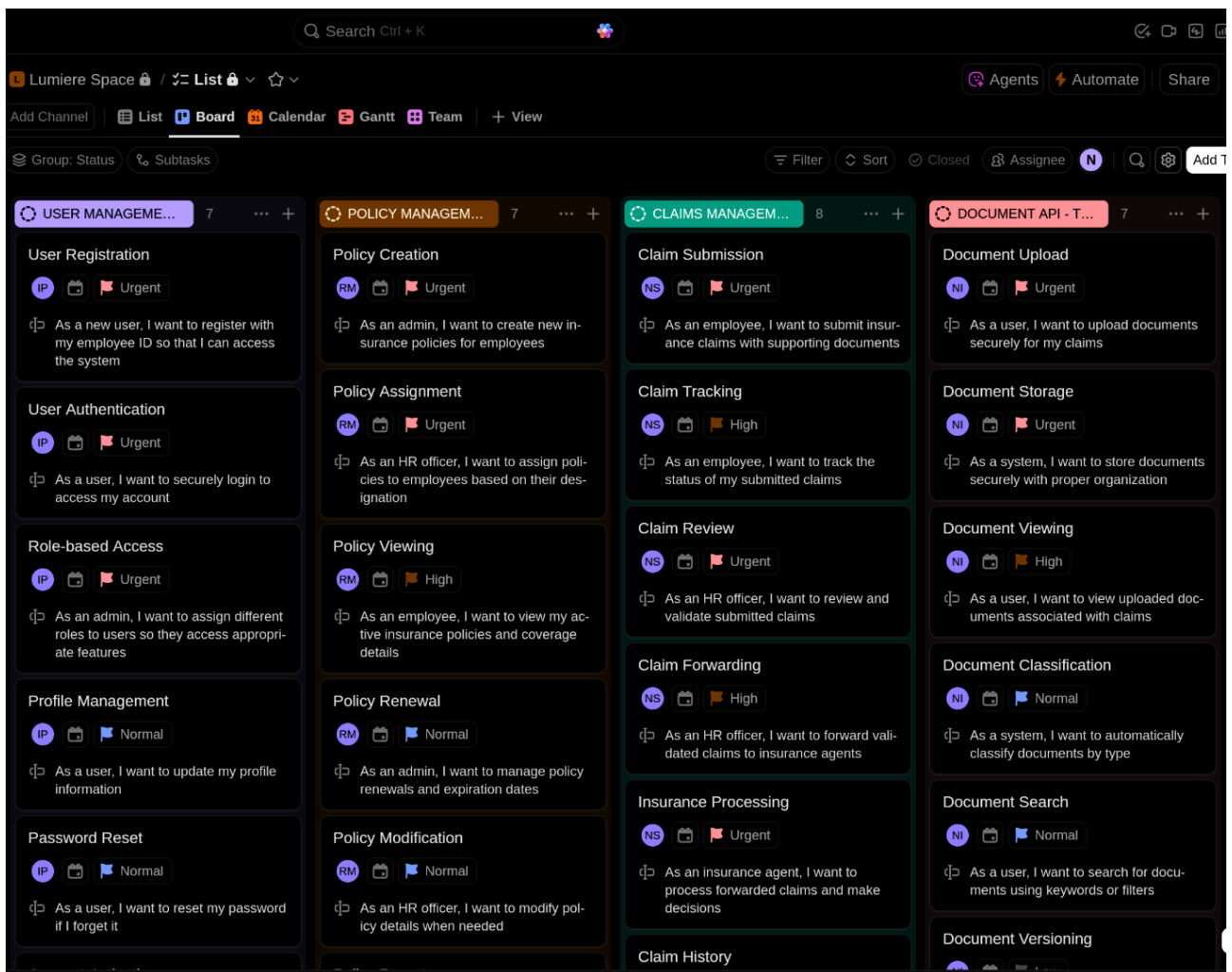
#### **Complete all remaining features and deliver production-ready system**

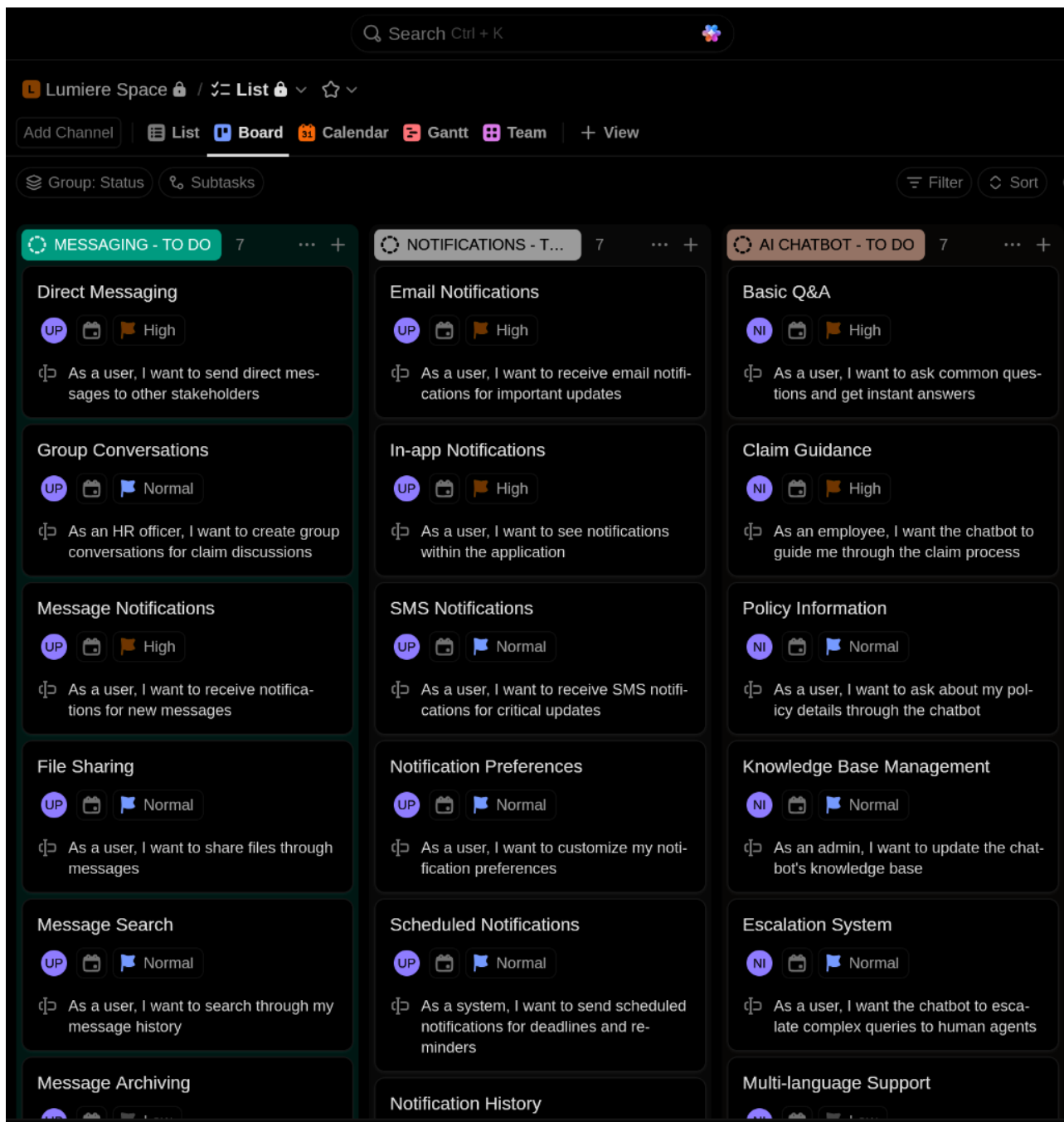
The final sprint completes all remaining features and focuses on system polish. Advanced analytics, reporting, and optimization features are implemented. All modules are fully integrated with complete workflows, comprehensive testing is performed, and the system is prepared for production deployment. This delivers a complete, enterprise-ready insurance management system.



## Kanban Board (ClickUp)

Board Link: <https://sharing.clickup.com/90181636613/b/h/4-90186386130-2/53c8d20957cbf4b>





The screenshot displays a Jira project board for 'Lumiere Space' in 'Board' view. The board is organized into three main columns: 'MESSAGING - TO DO', 'NOTIFICATIONS - T...', and 'AI CHATBOT - TO DO'. Each column contains several user stories, each with a status icon (UP for 'Up for grabs', NI for 'Not In Progress'), a priority flag (High or Normal), and a description. The board also features a search bar at the top, a filter button, and a sort button. The bottom of the board shows a 'Notification History' section.

Column	User Story	Status	Priority
MESSAGING - TO DO	Direct Messaging	UP	High
	Group Conversations	UP	Normal
	Message Notifications	UP	High
	File Sharing	UP	Normal
	Message Search	UP	Normal
	Message Archiving	UP	Normal
NOTIFICATIONS - T...	Email Notifications	UP	High
	In-app Notifications	UP	High
	SMS Notifications	UP	Normal
	Notification Preferences	UP	Normal
AI CHATBOT - TO DO	Basic Q&A	NI	High
	Claim Guidance	NI	High
	Policy Information	NI	Normal
	Knowledge Base Management	NI	Normal

## Sprint Plan

### Sprint 1: Foundation & System Setup

Member Reg Number	Feature Name	Feature ID	Module	Priority	Agile Estimate
IT23725010	User Registration	UM-001	User Management	High	8
IT23725010	User Authentication	UM-002	User Management	High	5
IT23725010	Role-based Access	UM-003	User Management	High	13
IT23828766	Policy Creation	PM-001	Policy Management	High	13
IT23836440	Claim Submission	CM-001	Claims Management	High	13
IT23834774	Document Upload	DM-001	Document Management	High	8
IT23830332	Direct Messaging	MS-001	Messaging	High	13
IT23830332	Email Notifications	NS-001	Notifications	High	8
IT23828766	Policy Assignment	PM-002	Policy Management	High	8
IT23836440	Claim Tracking	CM-002	Claims Management	High	8
IT23834774	Basic Q&A	CB-001	AI Chatbot	High	13
IT23725010	Profile Management	UM-004	User Management	Medium	5

#### Sprint 2: Core Business Logic

Member Reg Number	Feature Name	Feature ID	Module	Priority	Agile Estimate
IT23828766	Policy Viewing	PM-003	Policy Management	High	5
IT23836440	Claim Review	CM-003	Claims Management	High	13
IT23836440	Claim Forwarding	CM-004	Claims Management	High	8
IT23836440	Insurance Processing	CM-005	Claims Management	High	13
IT23834774	Document Storage	DM-002	Document Management	High	13
IT23834774	Document Viewing	DM-003	Document Management	High	5
IT23830332	Message Notifications	MS-003	Messaging	High	8
IT23830332	In-app Notifications	NS-002	Notifications	High	8
IT23830332	Claim Context Messaging	MS-007	Messaging	High	8
IT23834774	Claim Guidance	CB-002	AI Chatbot	High	8
IT23828766	Policy Renewal	PM-004	Policy Management	Medium	8
IT23828766	Policy Modification	PM-005	Policy Management	Medium	5
IT23836440	Claim History	CM-006	Claims Management	Medium	5
IT23725010	Password Reset	UM-005	User Management	Medium	8

#### Sprint 3: Advanced Features & System Completion

Member Reg Number	Feature Name	Feature ID	Module	Priority	Agile Estimate
IT23830332	Group Conversations	MS-002	Messaging	Medium	8
IT23834774	Document Classification	DM-004	Document Management	Medium	8
IT23834774	Document Search	DM-005	Document Management	Medium	8
IT23836440	Bulk Claim Processing	CM-008	Claims Management	Medium	8
IT23830332	File Sharing	MS-004	Messaging	Medium	5
IT23830332	Message Search	MS-005	Messaging	Medium	5
IT23834774	Document Sharing	DM-007	Document Management	Medium	5
IT23834774	Policy Information	CB-003	AI Chatbot	Medium	8
IT23834774	Knowledge Base Management	CB-004	AI Chatbot	Medium	5
IT23834774	Escalation System	CB-005	AI Chatbot	Medium	5
IT23830332	SMS Notifications	NS-003	Notifications	Medium	5
IT23830332	Notification Preferences	NS-004	Notifications	Medium	5
IT23830332	Scheduled Notifications	NS-005	Notifications	Medium	8
IT23725010	Account Activation	UM-006	User Management	Medium	3
IT23828766	Policy Categories	PM-007	Policy Management	Medium	3
IT23828766	Policy Reports	PM-006	Policy Management	Low	8
IT23836440	Claim Analytics	CM-007	Claims Management	Low	8

### Activity 3

IT23834774	Document Versioning	DM-006	Document Management	Low	5
IT23830332	Message Archiving	MS-006	Messaging	Low	3
IT23834774	Multi-language Support	CB-006	AI Chatbot	Low	8
IT23834774	Analytics & Learning	CB-007	AI Chatbot	Low	5
IT23830332	Notification History	NS-006	Notifications	Low	3
IT23830332	Push Notifications	NS-007	Notifications	Low	8
IT23725010	User Activity Logs	UM-007	User Management	Low	5