

MNSTDEV QUADTHINK – FULLY DRESSED USE CASE DIAGRAM (CitiSense)

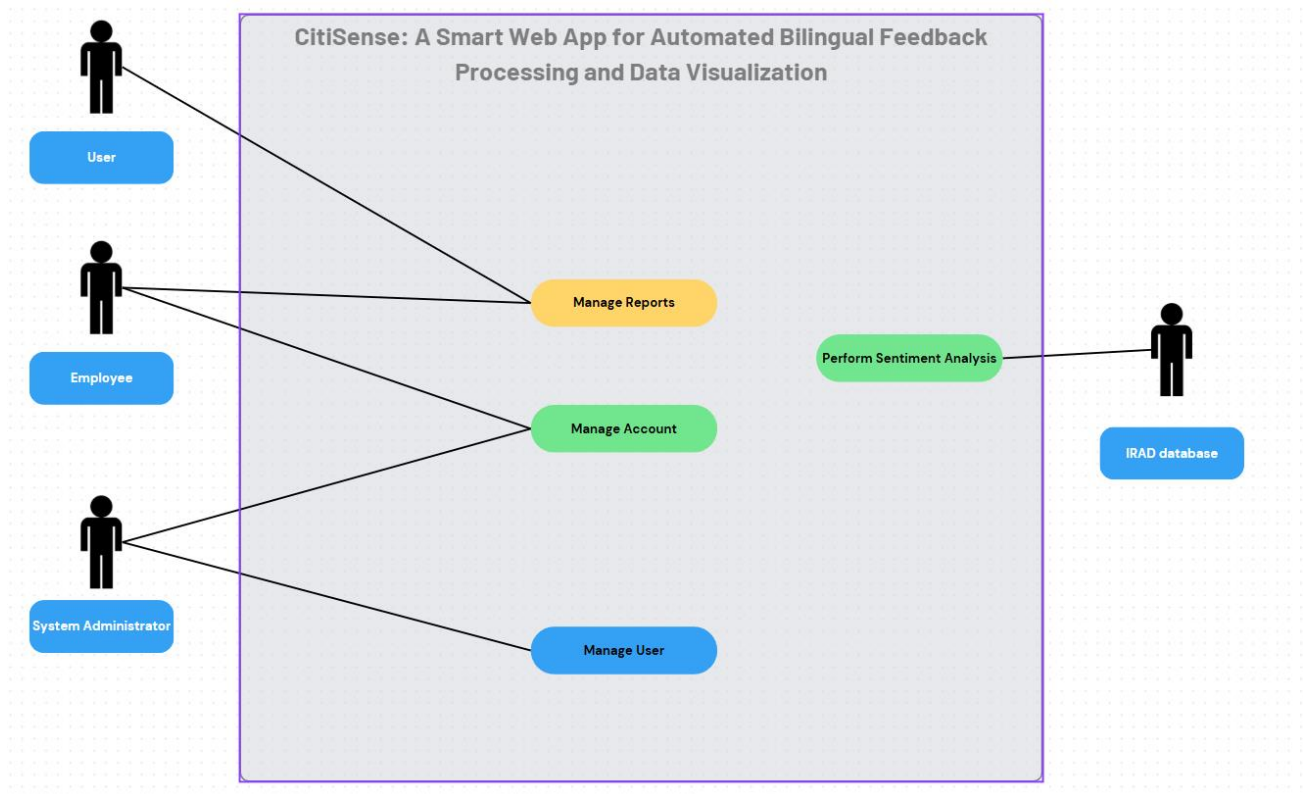
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Use Case Diagram:



Product Requirements

ID	Requirement
PR-01	Users should register an account to be able to login to the CitiSense web application
PR-02	Users should login to access the CitiSense web application
PR-03	Users should be able to change their profile credentials after logging in the CitiSense web application.
PR-04	All users should be able to view the dashboard and generate a report from there.
PR-05	Only employees can view, make changes and export the data table
PR-06	The CitiSense system will automatically process the raw feedback data from “IRAD database” and output sentiment-labeled feedback, which will be stored in the database.
PR-07	The CitiSense system shall provide an admin panel where system administrators can securely log in.
PR-08	Only System Admin can assign roles to the users of the CitiSense admin panel
PR-09	Only System Admin can update user credentials inside the CitiSense admin panel

Use Case Name: Register

<i>Use case ID:</i>	UC-01
<i>Author:</i>	Luis Lorenzo Lazaro, Lorenzo Emil Bernal
<i>Purpose:</i>	Users should be able to register an account to the CitiSense system.
<i>Requirement Traceability:</i>	PR-01
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – User opens the CitiSense web app
<i>Postconditions:</i>	<ul style="list-style-type: none"> – User inputs valid credentials in registration – User/s information is saved in the system – User/s should be able to login successfully
<i>Actors:</i>	Employee
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. User Registration</p> <ul style="list-style-type: none"> – Open the CitiSense web app – The user goes to “Register” page – Register account using valid credentials (Email, Username, and Password) – Click “Submit” – The user will now be redirected to the Login Page of the app <p>Alternative Flow</p> <p>1a. Missing field</p>

	<ul style="list-style-type: none"> – <i>User navigates to the registration page</i> – User leaves a required field (e.g., email or password) blank – User clicks the Register / Submit button System validates the input fields – System detects missing required fields – System displays an error message (e.g., “Please fill out this field”) next to the blank field(s) – Registration is not submitted, and the user remains on the registration page <p>2a. Existing Credentials</p> <ul style="list-style-type: none"> – User fills out all required fields using an email or username already in the system – User clicks the Register / Submit button – System validates the input fields – System checks the database and finds the email and/or is already taken – System displays an error message (e.g., “Email already registered”) – Registration is not submitted, and the user remains on the registration page
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Use Case Name: Login

<i>Use case ID:</i>	UC-02
<i>Author:</i>	Luis Lorenzo Lazaro, Lorenzo Emil Bernal
<i>Purpose:</i>	All users should have the ability to login to the CitiSense system.
<i>Requirement Traceability:</i>	PR-02
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – User opens the Citisense web app – User is registered
<i>Postconditions:</i>	<ul style="list-style-type: none"> – User should be able to login successfully with valid credentials. – User can access the home page of the CitiSense web application
<i>Actors:</i>	Employee, System Admin
<i>Extends:</i>	

<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. Login</p> <ul style="list-style-type: none"> – Open the CitiSense web app – User goes to the Login page – Input proper username and password – Click “Login” – The user will be redirected to the homepage of the app <p>Alternative Flow</p> <p>1a. Unregistered user</p> <ul style="list-style-type: none"> – Click Login to the web app – User inputs invalid credentials – The system validates and matches the credentials entered – The user is prompted with the message “User is not registered” – The user stays in the Login page <p>1b. Invalid Credentials for Login</p> <ul style="list-style-type: none"> – Click Login to the web app – User inputs invalid credentials – The system validates and matches the credentials entered – The user is prompted with the message “The username or password you entered is incorrect.” – The user stays on the Login page
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Use Case Name: Edit user profile

<i>Use case ID:</i>	UC-03
<i>Author:</i>	Luis Lorenzo Lazaro
<i>Purpose:</i>	All registered users should be able to edit their own information through profile page
<i>Requirement Traceability:</i>	PR-03
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – User is logged in – User has an existing profile in the system
<i>Postconditions:</i>	<ul style="list-style-type: none"> – The user’s profile information is updated in the system/database – The updated information is reflected when the profile is viewed – A confirmation message has been displayed to the user

<i>Actors:</i>	Employee, System Admin
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. Edit User Profile</p> <ul style="list-style-type: none"> – The user navigates to their profile page – The system displays the current profile information – The user clicks the “Edit Profile” button – The system displays editable fields (e.g., name, email, password) – The user updates the desired profile information – The user clicks the “Save” button – The system validates the entered data – The system updates the user’s profile information in the database – The system shows a confirmation message that the profile has been successfully updated <p>Alternative Flow</p> <p>1a. Invalid Data Entered</p> <ul style="list-style-type: none"> – The system detects that one or more fields contain invalid data (e.g., incorrect email format, required field left blank) – The system displays error messages indicating the invalid fields – The user corrects the errors and clicks “Save” again – The use case resumes at “the system validates the entered data” onwards <p>2a. User Cancels Editing</p> <ul style="list-style-type: none"> – The user clicks “Cancel” instead of “Save” – The system discards any changes made – The system returns the user to the profile view page – The use case ends without changing any data

<i>Use case ID:</i>	UC-04
<i>Author:</i>	Lorenzo Emil Bernal
<i>Purpose:</i>	All users should be able to see the results displayed in the dashboard after the analysis
<i>Requirement Traceability:</i>	PR-04
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – User opens the CitiSense web application – User navigates to the Dashboard
<i>Postconditions:</i>	<ul style="list-style-type: none"> – Users can see the Dashboard – System generated reports are saved locally in the user's computer
<i>Actors:</i>	User, Employee, System Admin
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. View Dashboard</p> <ul style="list-style-type: none"> – Open CitiSense web app – Navigate to Dashboard – The CitiSense web app will show the visualization of sentiment analysis results as it updates at real-time pace <p>Alternative Flow</p> <p>1a. Generate Report</p> <ul style="list-style-type: none"> – Open CitiSense web app – Navigate to Dashboard – Click on the “Export Data” in the Dashboard page. – The generated report will be downloaded to the user's local computer

Use Case Name: Manage Data Table

<i>Use case ID:</i>	UC-05
<i>Author:</i>	Lorenzo Emil Bernal
<i>Purpose:</i>	Employees should be able to manage data table
<i>Requirement Traceability:</i>	PR-05
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – User is logged in

	<ul style="list-style-type: none"> – The user must be of the “Data Analyst” role
<i>Postconditions:</i>	<ul style="list-style-type: none"> – User views the data table – User can manage the data table – Exported table is saved locally in the user’s computer
<i>Actors:</i>	Employee
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. Manage Data Table</p> <ul style="list-style-type: none"> – Open the CitiSense web app – Log in to the CitiSense web application – Click on the “Data Table” sub-process of the Dashboard button. – Verify that the user is in the “Data Analyst” role. – The Data Analyst user can then preview all or apply filters for the Data Table – The Data Analyst user can then view the labeled feedback <p>Alternative Flow</p> <p>1a. Update Data Table</p> <ul style="list-style-type: none"> – <i>Open the CitiSense web app</i> – <i>Log in to the CitiSense web application</i> – <i>Click on the “Data Table” sub-process of the Dashboard button.</i> – <i>Verify that the user is in the “Data Analyst” role</i> – <i>The user can then preview all or apply filters for the Data table</i> – <i>Users will see the sentiment-labeled feedback</i> – <i>Users can now edit the sentiment labels for each feedback in the data table</i>

Use Case Name: Perform Sentiment Analysis

<i>Use case ID:</i>	UC-06
<i>Author:</i>	Luis Lorenzo Lazaro, Lorenzo Emil Bernal
<i>Purpose:</i>	To analyze textual data (raw feedback) and determine the sentiment expressed in positive, negative, or neutral automatically by the CitiSense system.
<i>Requirement Traceability:</i>	PR-06

<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – The CitiSense system is running and accessible. – The DOST database is connected to the CitiSense system
<i>Postconditions:</i>	<ul style="list-style-type: none"> – Processed feedback is stored in the CitiSense system's database. – Sentiment labeling and classifications are stored and available for visualization or export.
<i>Actors:</i>	IRAD database
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. Perform Sentiment Analysis</p> <ul style="list-style-type: none"> – The raw feedback from IRAD database is automatically synchronized to the CitiSense system's database. Any new, updated, or deleted data will be reflected immediately in CitiSense system's database. – The system takes in the raw feedback from the CitiSense system's database. – The system preprocesses the raw feedback. – The system then performs sentiment analysis using the AI model on the cleaned raw feedback. – The system then stores the processed feedback in CitiSense system's database.

Use Case Name: Administrator Panel Login

<i>Use case ID:</i>	UC-07
<i>Author:</i>	Lorenzo Emil Bernal
<i>Purpose:</i>	System Administrators should be able to login through an admin panel to access the admin dashboard.
<i>Requirement Traceability:</i>	PR-07
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – Admin panel is accessible
<i>Postconditions:</i>	<ul style="list-style-type: none"> - System Admin is logged in and redirected to the Admin Dashboard
<i>Actors:</i>	System Admin
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>1. Assign Roles</p>

	<ul style="list-style-type: none"> – System Administrator opens the CitiSense admin panel login page. – The system Admin enters a valid username and password. – The System Admin clicks on “Login” – The system validates the entered credentials. – The system admin will be authenticated redirected to the Admin Dashboard.
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Use Case Name: Assign Roles

<i>Use case ID:</i>	UC-08
<i>Author:</i>	Luis Lorenzo Lazaro, Lorenzo Emil Bernal
<i>Purpose:</i>	System Administrators should be able to assign or update user roles and permissions in the CitiSense admin panel.
<i>Requirement Traceability:</i>	PR-08
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – System Admin must be logged in. – Admin panel is accessible
<i>Postconditions:</i>	<ul style="list-style-type: none"> – User permissions are updated and saved in the system
<i>Actors:</i>	System Admin
<i>Extends:</i>	
<i>Flow of Actions:</i>	<p>Basic Flow</p> <p>2. Assign Roles</p> <ul style="list-style-type: none"> – System Administrator opens the CitiSense administrator panel. – System Administrator logs into the admin dashboard with valid credentials. – System verifies the credentials, if access granted, will be directed to admin panel – The administrator navigates to the User Management section – The system displays a list of registered users – The administrator selects a user from the list – The system displays the selected user’s current access roles and permissions – The administrator updates the

	user's roles (e.g., give a user the "Data Analyst" role). <ul style="list-style-type: none"> – The administrator saves the changes – The system validates the changes and updates the database – The system will confirm the successful update
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Use Case Name: Edit user details

<i>Use case ID:</i>	UC-09
<i>Author:</i>	Luis Lorenzo Lazaro, Lorenzo Emil Bernal
<i>Purpose:</i>	System Administrators should be able to edit or update user credentials in CitiSense admin panel.
<i>Requirement Traceability:</i>	PR-09
<i>Priority</i>	High
<i>Preconditions:</i>	<ul style="list-style-type: none"> – System Admin must be logged in. – Admin panel is accessible
<i>Postconditions:</i>	<ul style="list-style-type: none"> – Edits and updates on user details are updated and saved in the system's database
<i>Actors:</i>	System Admin
<i>Extends:</i>	
<i>Flow of Actions:</i>	Basic Flow 1. Edit user details <ul style="list-style-type: none"> – System Administrator opens the CitiSense administrator panel. – System Administrator logs into the admin dashboard with valid credentials. – System verifies the credentials, if access granted, will be directed to admin panel – The administrator navigates to the User Management section – The system displays a list of registered users – The administrator selects a user from the list – The system displays the selected user's information – The administrator updates the user's credentials (e.g., changes from their names or emails) – The administrator saves the changes – The system validates the changes

	and updates the database – The system will confirm the successful update
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Test Case Table

Test Case ID	Test Case Name	Related Use Case	Description
TC-01	Register - Valid	UC-01	Verify user can register with valid credentials and is redirected to login page.
TC-01a	Register - Missing Field	UC-01	Verify system shows an error when a required registration field is blank.
TC-01b	Register - Existing Credentials	UC-01	Verify system shows an error when the user tries to register with already used credentials e.g., username and email.
TC-02	Login - Valid	UC-02	Verify user can log in with correct credentials and is redirected to the homepage
TC-02a	Login - Unregistered User	UC-02	Verify system shows “User is not registered” for non-existing account.
TC-02b	Login - Wrong credentials	UC-02	Verify system shows “Username or password is incorrect.” and does not log in user.
TC-03	Edit Profile	UC-03	Verify user can update profile with valid information and see confirmation message.
TC-03a	Edit Profile - Invalid Data	UC-03	Verify system shows error messages for invalid input (e.g., wrong email format).
TC-03b	Edit Profile - Cancel	UC-03	Verify canceling profile edits discards

			changes and shows old profile data.
TC-04	Dashboard - View Dashboard	UC-04	Verify all users can see the dashboard visualization.
TC-04a	Dashboard - Generate Report	UC-04	Verify all users can generate and download report file.
TC-05	Manage Data Table - Invalid Role	UC-05	Verify that an authenticated user with no data analyst role cannot access the data table page.
TC-05a	Manage Data Table - Data Analyst Role	UC-05	Verify only employees (Data Analyst) can update and manage data table.
TC-06	Sentiment Analysis - Process Data	UC-06	Verify raw feedback is retrieved, normalized, processed and stored in the system database with sentiment labels.
TC-07	Assign Roles	UC-07	Verify admin can assign or change user roles.
TC-08	Edit User Details	UC-08	Verify admin can update user credentials and save changes.

RTM (Requirements Traceability Matrix)

Product Requirement No.	Use Case ID	Test Case ID
PR-01	UC-01	TC-01, TC-01a
PR-02	UC-02	TC-02
PR-03	UC-03	TC-03
PR-04	UC-04	TC-04
PR-05	UC-05	TC-05
PR-06	UC-06	TC-06
PR-07	UC-07	TC-07
PR-08	UC-08	TC-08