

Assignment 6

Use Case – Business Rules – Data

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T405 – Information Systems Business Analysis

BUS4051 – Business Analysis Case Study

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Waterfront Realty Case Study

Use Case Manage Listings – UC01 Manage Listings

Description

that allows Sellers and Seller Agents to publish the properties they are selling. The system also allows buyers and Buyer Agents to request more detailed information about the properties, request showing and set a periodic report according to preconfigured criteria.

Actors

Primary Actors

- Seller / Seller Agent

Pre-conditions

1. User Seller/Seller Agent must be logged into the system.

Basic Flow

Steps	Alternative Flow
1. Use case starts when the user request to create a new listing.	AF01 – Modify Listing AF02 – Delete Listing
2. System prompts user to input the required data to create a new listing. DE01 – Property Type DE02 – Property Description DE03 - Address DE04 - Number of Bedrooms DE05 - Number of Bathrooms DE06 - Year Built DE07 - Original Price DE09 - Gross Annual Taxes DE10 - Maintenance Fee DE11 - Listing Agent Name	

DE12 - Room Sizes	
3. User inputs required data.	
4. Systems validates data provided by user as per Data Dictionary.	AF03 – Invalid Creation Data
5. System determines if additional data is required per BR01 – Mandatory data for DE01 – Property Type.	AF06 – Mandatory Data Missing for Creation
6. Systems prompt if user wants to save a draft of the new listing or publish it.	
7. User selects status of listing.	
8. System determines listing status as per BR02 – Listing Status and set DE13 – Listing Status.	
9. System stores new listing.	

Alternative Flows

AF01 – Modify Listing

Steps	Alternative Flow
1. Use case starts in step 1 of the basic flow when the user request to modify an existing listing.	
2. System prompts user to input the search criteria for the listing intended to be modified. DE11 - Listing Agent Name DE15 - Listing Agent ID DE03 - Address DE14 - Listing ID All fields are optional but at least one must be provided.	
3. System searches for the listings that meet the search criteria provided by the user.	AF04 – No Results found for Modification
4. System determines whether the results can be modified by user as per BR03 – Check Modification/Deletion Permit with DE15 – Listing Agent ID and DE16 – Logged User.	AF05 – No Modification Allowed
5. Systems prompts to select the listing to be modified.	
6. User selects the listing to modify.	
7. Systems presents the fields of the selected property.	
8. System prompts for modifications. DE01 – Property Type DE02 – Property Description DE03 - Address	

DE04 - Number of Bedrooms DE05 - Number of Bathrooms DE06 - Year Built DE08 - Updated Price DE09 - Gross Annual Taxes DE10 - Maintenance Fee DE11 - Listing Agent Name DE12 - Room Sizes	
9. User inputs required data.	
10. Systems validates data provided by user as per Data Dictionary.	AF07 – Invalid Modification Data
11. System determines if additional data is required per BR01 – Mandatory data for DE01 – Property Type.	AF10 – Mandatory Data Missing for Modification
12. System prompts to confirm modification.	
13. User confirms modification.	
14. System stores modified listing.	

AF02 – Delete Listing

Steps	Alternative Flow
1. Use case starts in step 1 of the basic flow when the user request to delete an existing listing.	
2. System prompts user to input the search criteria for the listing intended to be modified. DE11 - Listing Agent Name DE15 - Listing Agent ID DE03 - Address DE14 - Listing ID All fields are optional but at least one must be provided	
3. System searches for the listings that meet the search criteria provided by the user	AF08 – No Results found for Deletion
4. System determines whether the results can be deleted by user as per BR03 – Check Modification/Deletion Permit with DE15 – Listing Agent ID and DE16 – Logged User	AF09 – No Deletion Allowed
5. Systems prompts to select the listing to be deleted.	
6. User selects the listing to delete.	
7. System prompts to confirm deletion.	
8. User confirms deletion.	
9. System deletes listing from storage.	

AF03 – Invalid Creation Data

Steps	Alternative Flow
1. This flow starts at step 4 of Basic Flow when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of the Basic Flow.	

AF04 – No Results Found for Modification

Steps	Alternative Flow
1. This flow starts at step 3 of AF01 – Modify Listing when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of AF01 – Modify Listing.	

AF05 – No Modification Allowed

Steps	Alternative Flow
1. This flow starts at step 4 of AF01 – Modify Listing when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of AF01 – Modify Listing.	

AF06 – Mandatory Data Missing for Creation

Steps	Alternative Flow
1. This flow starts at step 5 of Basic Flow when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of the Basic Flow.	

AF07 – Invalid Modification Data

Steps	Alternative Flow
1. This flow starts at step 4 of AF01 – Modify Listing when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 8 of AF01 – Modify Listing.	

AF08 – No Results Found for Deletion

Steps	Alternative Flow
1. This flow starts at step 3 of AF02 – Delete Listing when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of AF02 – Delete Listing.	

AF09 – No Deletion Allowed

Steps	Alternative Flow
1. This flow starts at step 4 of AF02 – Delete Listing when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of AF02 – Delete Listing.	

AF10 – Mandatory Data Missing for Modification

Steps	Alternative Flow
1. This flow starts at step 5 of AF01 – Modify Listing when system validates user provided information.	
2. System presents error message.	
3. This flow resumes at step 2 of the AF01 – Modify Listing.	

Post-conditions

2. Listing is retained in the system.
3. New Listing ID assigned to newly created record.

Business Rules

BR01 – Mandatory data for types of properties

ID	Name	Business Rule	
BR01	Mandatory data for types of properties		
		Condition	Outcome
		DE01 – Property Type	DE10 - Maintenance Fee
		Condo	Can't be null or zero (0)
		Townhouse	Can't be null or zero (0)
		Parking	Can't be null or zero (0)
		Locker	Can't be null or zero (0)

BR02 – Listing Status

ID	Name	Business Rule	
BR02	Listing Status		
		Condition	Outcome
		Input by user	DE13 – Listing Status
		Draft	Data set to "Draft"
		Publish	Data set to "Published"

BR03 – Check Modification/Deletion Permit

ID	Name	Business Rule		
BR03	Check Modification/Deletion Permit			
		Condition	Outcome	
		DE14 = DE15	Can Modify?	Can Delete?
		True	Yes	Yes
		False	No	No

Data Dictionary

ID	Business Name	Description	Valid Values	Calculation Rules	Sample
DE01	Property Type	Type of the property that is being listed to sell.	Condo House Townhouse House Parking Locker		Condo
DE02	Property Description	Brief description of the property being sold.			2 bedroom/2 washroom condo.
DE03	Address	Property's address.			1233 Street name Street
DE04	Number of Bedrooms	Number of bedrooms the property has.			2
DE05	Number of Bathrooms	Number of bathrooms the property has.			1
DE06	Year Built	Year the property was built.			2001
DE07	Original Price	Price of the property at the time of creating its listing.			\$750,000
DE08	Updated Price	Modified price of the property.			\$750,000
DE09	Gross Annual Taxes	Cost of the gross annual taxes for the property.			\$2,000
DE10	Maintenance Fee	Cost of the monthly maintenance fee.			\$100
DE11	Listing Agent Name	Name of the user creating the listing.			John Smith

DE12	Room Sizes	Room sizes in centimeters.			Bedroom 1: 400x500
DE13	Listing Status	Status of the property record in system.	Draft Published		Published
DE14	Listing ID	Unique ID for the listing.			001
D015	Listing Agent ID	Unique ID for the listing Agent			12345
D016	Logged User	Unique ID for the current logged user			12345