**Use Case**: View Listing

**Iteration**: E2 **Date**: Sept 15, 2019

**Priority:** High **Version: 3**

**Description:** A Customer or Potential customer browses through the various listings of properties. Should he/she locate a listing that interests him/her, an agent may be contacted for more information or to book a showing appointment.

**Actor(s)**: Potential Customer / Customer

**Typical Course of Events:**

1. This use case begins when a potential customer enters the real estate site with the intention to view property listings
2. the potential customer enters search criteria such as a price range, geographical area (province and city), desired number of beds, desired number of baths and the view order (ascending or descending by price)
   1. **System Response:** all matching listingsdisplay in brief view… the results being summarized in the order requested with a maximum of 10 listings displaying at one time. Each brief listing will display a thumbnail of the main image, as well as the price, square footage and listing agent name.
3. the potential customer chooses a particular listing to view for more details
   1. **System Response:** a larger view of the main image of the requested property displays, as do any other available images that were provided (as thumbnails), all the pertinent listing details such as listing id, number of beds, number of baths, area of the city (West End, North End, etc), summary of property features, square footage, price, listing agent and his/her public contact information (first name, last name, email, cell phone, and office phone number)
4. the potential customer decides to speak to the agent about this listing by email (clicking on the email link) or by phone using the phone number provided.

**Alternative Course of Events:**

Line 2: there are no results returned for the given search criteria. Indicate the problem and prompt the customer to try again

Line 2: invalid or incomplete search criteria were provided. Indicate the error and prompt the user to correct the problem

Line 3: the potential customer decides to cease searching for property and the use case ends

Line 4: the potential customer decides to not contact the agent about the listing at this time

Line 4: a potential customer decides to book a showing appointment for the listing that is of interest. He/she will first need to become a customer by having his/her personal information recorded (See Create Customer Use Case) prior to an agency staff member implementing the Book Showing use case.

Line 4: a customer decides to book a showing appointment for the listing that is of interest. He/she will contact an agency staff member who must implement the Book Showing use case.

**Use Case**: Save Showing

**Iteration**: E2 **Date**: Sept 15, 2019

**Priority:** High

**Version: 3**

**Description/Overview:** A showing is an appointment for a customer to view a listing with a particular agent at a given date and period of time. The agency staff will enter new showing details into the system, and update changes to property showings as required.

**Actors**: Agency Staff Member

**Precondition:** Agency Staff Member must be logged in to the system and authorized

**Section: Main**

**Typical Course of Events**

1. This use case begins when an agency staff member chooses to save property showing information \***014, \*015**
   1. To book a new showing see section *Book Showing*
   2. To update showing details for an existing showing see section *Update Showing*
2. the agency staff member indicates that the entry is complete
   1. **System Response:** If no scheduling conflicts exist**,** a message confirms that the showing information has been successfully entered

**Alternative Course of Events**

Line 2: scheduling conflict detected. Either the agent is already showing another listing at that date and time, or the listing is being shown by another agent at that date and time. The system does not permit the save. The issue is displayed, and the user is prompted to retry.

**Section: Book Showing**

1. the agency staff member retrieves the customer that wants to view the listing (from the pool of existing customers)
2. the agency staff member enters the information pertinent to the showing including the date, start and end time of the showing, the appropriate agent , and any comments that may be of later use \***016**

**Alternative Course of Events**

Line 1: an agent was not selected for the showing. A showing appointment cannot be booked without an agent selected. \***002**

Line 1: the customer is not an existing customer – no showing is booked until the Create Customer use case is implemented.

Line 2: required data is missing or invalid (missing or invalid date, start or end time, missing which listing, missing a customer). Indicate the error, and prompt for retry

**Section: Update Showing**

1. the agency staff member performs a search using criteria such as date and/or agent
   * **System Response:** one or more showings matching the search criteria may display.
2. the agency staff member selects the correct showing that matches the desired criteria

* **System Response:** the showing details display

1. the agency staff member changes the information pertinent to the showing such as the agent, date, start or end time, the listing to be shown, the customer attending the showing, and any comments that may be of later use **\*002**

**Alternative Course of Events**

Line 1: invalid or missing search criteria provided. Indicate error and prompt for retry

Line 1: no showings to display that match the criteria provided. Indicate the problem and prompt for retry

Line 3: required data is missing or invalid (missing or invalid date and time, missing which listing, missing customer, missing agent**\*002**). Indicate error and prompt for retry

**Business Rule Applications:**

\*002 – Agent Required

\*014 – Showing Appointment Authority

\*015 – Showing Appointment Travel Time

\*016 – Current Agent Booking Showing

**Use Case**: Save Listing

**Iteration #**: E2 **Date**: October 10th, 2019

**Priority:** High **Version: 4**

**Description:** An agent will enter new listing details for customer properties into the system or update existing listing details as required.

**Actor(s)**: Agency Staff Member

**Pre-condition**: Agent is already logged in and authorized, and Customer record has been previously recorded in the system (see use case Save Customer)

**Section Main:**

**Typical Course of Events:**

1. This use case begins when an agency staff member must create a new listing or make changes to an existing listing
2. The Agency Staff Member searches for the appropriate customer in the system using criteria such as last name and/or first name, or phone number.
   1. **System response**: one or more customer records display
3. The Agency Staff Member selects the appropriate customer with which to associate the property listing based on the criteria entered
   1. **System Response**: should the selected customer have other listings in the system, a brief view of listing information will display such as start and end date, street address, owner and agent
4. To save a new listing: see section “**Save New Listing**”, to save modifications made to an existing listing: see section “**Save Listing Details**”
   1. System response: a confirmation message displays indicating that the details have been saved

**Alternative Course of Events:**

Line 2: there are no results returned for the given search criteria. Indicate the problem and prompt the staff member to try again

Line 2: the customer may not have been entered into the system yet. The Agency Staff Member must implement the Create Customer use case prior to saving the listing.

Line 2: invalid or incomplete search criteria were provided. Indicate the error and prompt the staff member to correct the problem

**Section: Save New Listing**

1. the Agency Staff Member enters the new property listing details to associate with the selected customer such as: the street address, municipality (village/town/city), province and postal code of the property, the square footage, the number of beds and baths, area of the city (West End, North End, etc.) summary of property features (water view, close to schools, close to park, on bus route etc.), type of heating, if the property has a fireplace, garage, etc., as well as the price, the listing agent and an indication that the listing contract has been signed with the customer. **\*002 \*003 \*007**. If images for the given listing already have been uploaded, they can be selected for display at this time. **\*006**
2. the Agency Staff Member indicates that the listing data should be saved **\*002 \*003 \*007**
   1. **System Response:** the listing is saved, and a new listing id is generated
   2. **System Response:** the listing start, and end date are saved with the current date as start date and a date 3 months in the future as end date **\*002**
   3. **System Response:** when the presence of a signed contract has been indicated, the agent becomes associated with the property listing and his/her contact information (first name, last name, email, cell phone, and office phone number) will be displayed when potential buyers view the listing online
   4. **System Response:** the listing status is set to ‘available’
   5. **System Response:** the listing becomes viewable online

**Alternative Courses:**

Line 1: The contract hasn’t been signed or is not present, so although listing details save, the Agent cannot be associated with the listing and the listing will not appear on the Agency website. The listing status is set to ‘not available’.

Line 1: There are no pre-existing images in the system for this listing. The listing will display an image that says ‘picture not yet available’ until such time as images can be uploaded and associated to this listing. For uploading of images see Use Case “Upload Images”. **\*006**

Line 2: the listing was created in error or associated with the wrong customer record. As long as an agent has not been assigned the listing may be cancelled by any agency staff member. If an agent was assigned, only the broker has the permission to cancel the listing. **\*008**

**Section: Save Listing Details**

1. The agency staff member selects the property listing that requires modification
2. makes modifications to the existing property address and/or property description details or associates additional pictures of the property that are available within the system. **\*002**
3. The agent indicates that the listing data should be saved