

Feature: Property Evaluation

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Reviewer: Sierra Harris

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Major Positives and Major Negatives

Top Qualities

- The design explicitly shows the process of the user updating their property profile per the BRD.
- The design shows how a user's property evaluation will be calculated/derived using the median historical sales data which was not clear in the BRD.
- The design shows the process of the property profile being updated with their newly calculated property evaluation as stated in the BRD.
- The design correctly follows the flow of data as describe in the High level design and includes all layers and necessary objects.

Top Flaws

- The design does not show any input validation
- The design does not show nor does it mention the precondition of the user having to be logged in although it is implied in the frontend design. It also does not show the postcondition of the user receiving information regarding what their property evaluation was based on as said on the BRD.
- The design does not show a description section for the condition of the property in order to get their property evaluation as stated in the BRD.
- The design does not explicitly show the process of sending an email notification to the user for their property evaluation.

Unmet Requirements

- The design does not include the display of what metrics/aspects of the users property that the users' estimated property value was based on as stated in the BRD it should be included with the new property evaluation.
- The design does not show the failure case of how the system would behave if the user clicks to navigate to the property evaluation view but the view does not display.
- The user is allowed 100 characters for a description of their property amenities according to the BRD, however, neither the frontend nor the backend design shows a section for the user to enter that description.

Design Recommendations

I recommend adding what fields/attributes are required to be filled in the property evaluation property profile and the metrics allowed for each in the frontend, for an efficient property evaluation calculation and input validation.

I also recommended adding the SQL query to the design so other developers know what exactly is the query that the data access object is carrying out when it reaches the data access layer.

I also recommend including how you plan to send an email notification into the design instead of implicitly stating “email the user with a notification”

- how is this carried out?
- What is the notification message? For a failed attempt? For a successful attempt?

Lastly, I recommend adding a small section for users to describe or list their unique indoor and outdoor property amenities and the condition of their home as stated in the BRD.

Test Recommendations

One recommendation is to create a front-end end-to-end test that shows the fields of the property profile being filled with correct and required information and a failed test for the wrong and incomplete property profiles to ensure that:

1. Users are only allowed to enter the correct metrics/values aligning with the US metric system.

and,

2. Users can't leave required fields blank.

I also recommend testing the process of sending out an email notification to ensure that it works and sends the correct message because:

1. The design does not include what the email notification message is for a failed or successful property evaluation.

and,

2. The design does not show how to send the email notification and it's a nonfunctional requirement

You can also test for the system only allowing 100 characters for the property amenities and conditions description to ensure input validation.

Feedback

Ultimately the design aligns with our High-level design, each layer is correctly displayed and the flow of data aligns as well. The design also covers the majority of the functional and non-functional requirements from the BRD and coding standards. I think any other developer would be able to understand the design, although there are some processes not explicitly designed. For instance, the design does not show the preconditions and postconditions as stated on the BRD or how to send an email notification. Nonetheless, I believe that the design would work if new requirements were introduced regarding the property profile fields or extra calculations for the property value estimate.

