**+Contributors:**

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**1.Overall:** This document contains additional ideas for the Top Navigation Bar’s dropdown menu tab on the Main Page that I was thinking about on 04/04/2025.

**2.Ideas:**

**a)Tools:**

**a.1)Dropdown menu buttons tab:**

In general, there are 6 main purposes that lead an user to visit a real estate website or software: They want to buy, rent, sell, loan, find agents or they already have an agent and want to bring the agent with them to check other real estate services, and they want to read news about real estate. So, the menu button at the top navigation bar should open a dropdown tab contains: 1) 6 main buttons such as Buy, Rent, Sell, Home Loans, Agents, and News buttons. 2)Other buttons that only appear when the users click any button from the 5 main buttons. Because our app integrate with AI, so We're just going to help the AI to know how to help users based on the kind of button that they choose from the 6 main buttons.

**a.1.1)Algorithm – Logic:**

Let's say an user clicks Buy, then the AI chatbot will help them with tasks like asking them if they want to find Homes for sale, Lot/Land, New Homes/Construction, Coming soon, Recent home sales or they need Home Buying Guide.

If they click Rent, the AI chatbot will help them with tasks like asking them if they want to find Homes for rent, or they need Home Renting Guide.

If they click Sell, the AI chatbot will help them with tasks like asking them information about their home(s) or land(s) to estimate or negotiate the price, or asking them to know if they need Home Selling Guide.

If they click Home Loans, the AI chatbot will help them with tasks like asking them information about their budget to estimate or negotiate the loans or mortgage payments, or asking them to know if they need Home Loans Guide.

If they click Agents, the AI chatbot will help them with tasks like asking them if they are looking for Real estate agents, Home inspectors, Home builders, Real estate photographers, or they are agents and they are looking for advertisement, or jobs.

If they click News, then a News container content will appear below the first poster container with information aligned through 3 columns of content

**a.1.2)Technologies:**

**+About the buttons on the top navigation bar’s dropdown menu tab**, I may use HBox container(I want 6 buttons to be at the center of the HBox). I’ll place it beneath the AnchorPane’s BorderPane to see how it’ll look like.

Because I need a close button that is placed at the top right of the HBox container to close this dropdown menu tab, I need to wrap the HBox container (contains 6 buttons) inside another HBox container, let’s call it as the parent HBox container. I’ll put the close button into it too. I’m not going to write the tasks about how to adjust the buttons to place them at the right place around the parent HBox here, but it actually worked well on 04/05/2025 3:28pm

After created this tab successfully, I was thinking about how to make this dropdown menu tab appear in front of other contents of the main page.

Because the design of the Scene from the main page contains BorderPane that contains VBox which contains contents from Top Navigation Bar, First Poster Container, and other features from top to bottom of the page, here are some new issue happened:

+I had to updated the codes for the VBox to wrap it inside ScrollPane so that I can scroll it’s contents up and down

+The Top Navigation Bar is always placed at the top of the page, so I may not need to use StackPane and AnchorPane container. I’ll need to remove StackPane from AnchorPane. I think I’ll use AnchorPane for this project for practice purposes then.

+I need to make the dropdown menu tab disappear and only appear when the users click Menu button. In addition, if the users click the close button, this dropdown menu tab will disappear too. I may need to use animation effect to make the tab slide up or down here when the users click Menu button or close button (because of the animation effect, I need to use StackPane again to make the dropdown menu tab slide down and up smoothly from behind the Top Navigation Bar)

On 04/06/2025 I adjusted the content for the whole Top Navigation Bar and the Dropdown Menu Tab so that I used only VBox (HBox[for Top Navigation Bar], HBox[for Dropdown Menu Tab]) because I realized that I didn’t need StackPane and AnchorPane to help the Dropdown Menu Tab have slide down animation effect.

\*I noticed that everything worked fine except that the Dropdown Menu Tab just appear below the Top Navigation Bar immediately after I clicked Menu button. Luckily, if I clicked the Menu button other times, the Dropdown Menu Tab actually slided up and down like expected. I think I’m going to come back to fix this issue later after I finished designing the main page for our project because I have no more time for this. I may need other contributors’ helps too\*

**+About how to interact with AI Chatbot**, I don’t want to focus on the kind of technology that I’ll use to integrate the buttons on the top navigation bar’s dropdown menu tab to AI Chatbot because I want other contributors who are good at AI to think about the technologies for this field