

## ARA User Documentation

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### **User Documentation Description:**

This user documentation provides the software user with all the necessary information to effectively use our software. It outlines the features and functionality of our active-learning assistant and provides a more in depth explanation of how to use the SQ3R prompts within the software.

## User Login Screen:

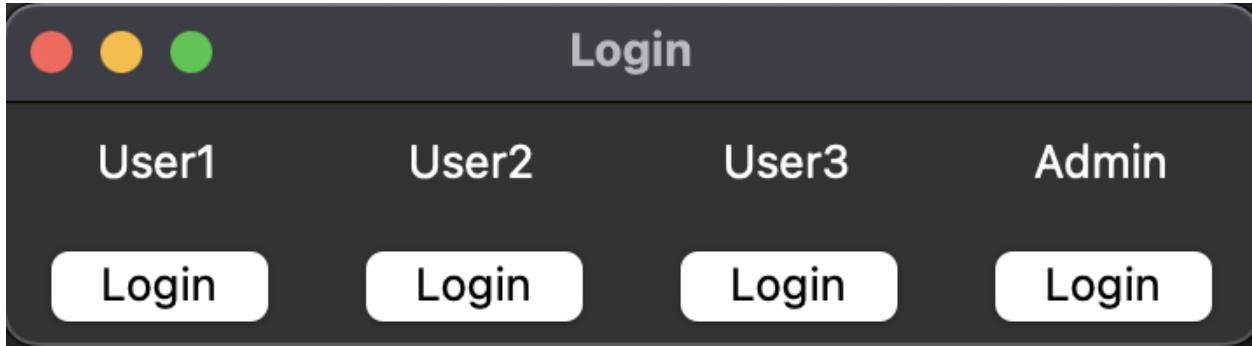


Figure 1: User Login Screen

Figure 1 shows the User Login Screen. Here the user can select what account they would like to proceed with by pressing the login button associated with their desired user.

## Admin Setup Commands Screen:

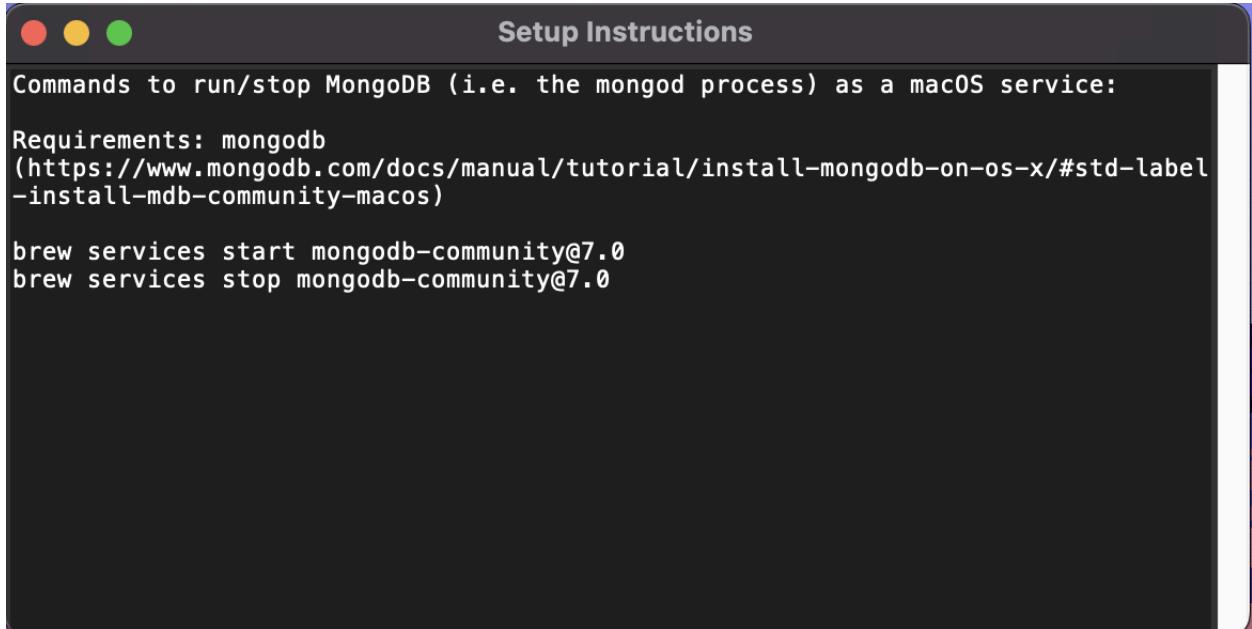


Figure 2: Admin Setup Commands Screen

Figure 2 shows the Admin Setup Commands Screen. If the user logs into the admin account they are presented with a text file displaying how to start and stop the ARA Notes server. By clicking the red circle in the top left of the window, the user can close the Admin screen and be brought back to the login screen.

## PDF Selection Screen:

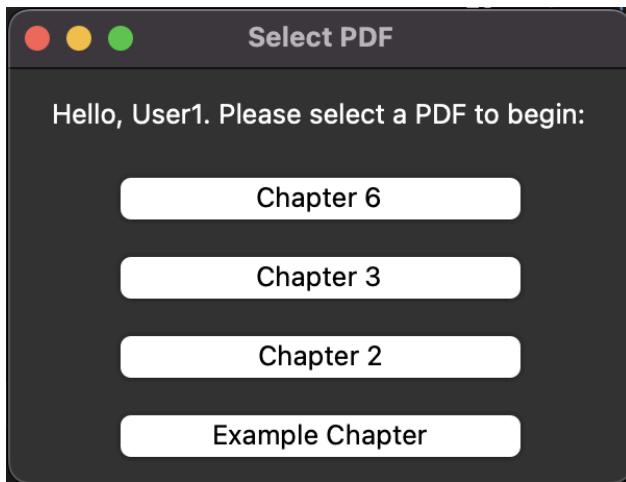
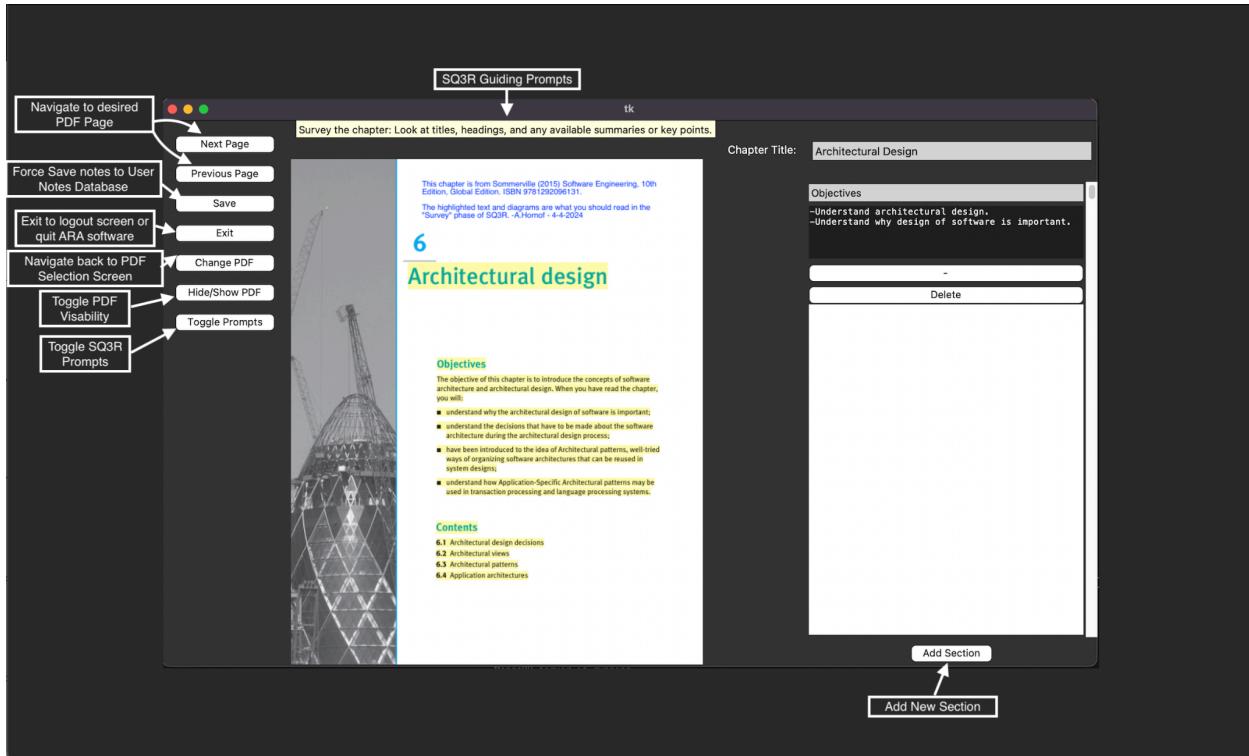


Figure 3: PDF Selection Screen

Once the user selects what account they would like to login to, they will be brought to the PDF selection screen shown in Figure 3. Here the user selects what PDF they would like to take notes for. If they have previous notes saved for the PDF they select, they will be brought to the ARA Interactive User Hub window and those notes will be displayed for them to view and edit.

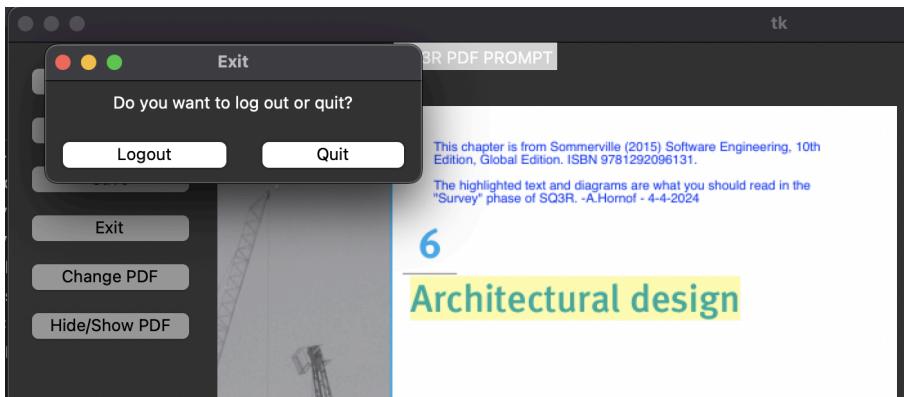
## ARA Interactive Learning Hub Screen:



*Figure 4: ARA Interactive Learning Hub Screen*

Figure 4 shows the ARA interactive learning hub and provides a visual guide for navigating the buttons and options. Below is an explanation of important features that the user should understand.

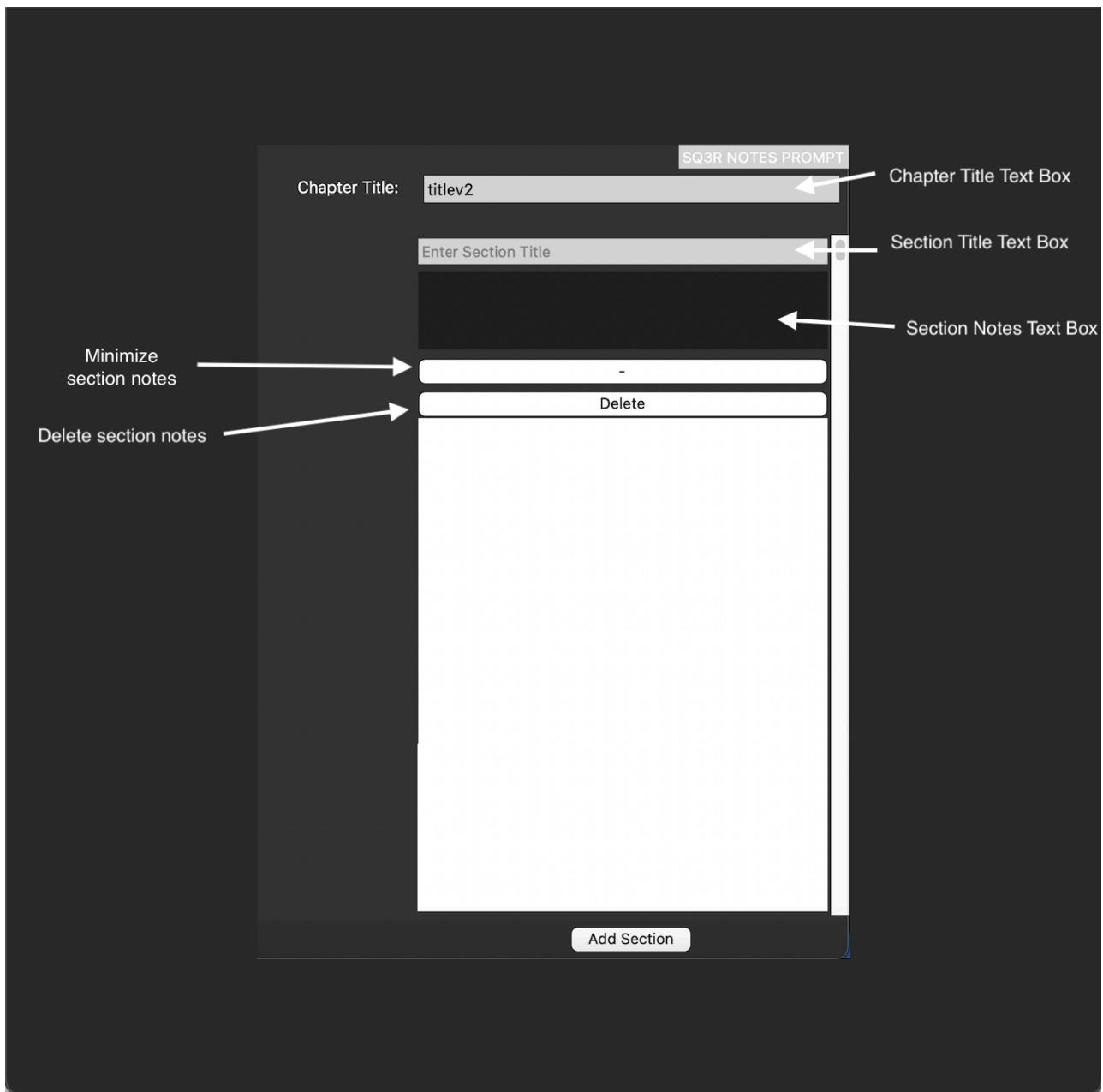
***Exit Button:***



*Figure 5: Exit Confirmation Screen*

When the user clicks the exit button, a confirmation window pops up confirming whether they would like to Logout or Quit. If they click Logout they will be brought back to the Login Screen, and if they click Quit the program will close. No matter what button they click, their note changes will be saved.

**Add Section Button:**



*Figure 5: Note Taking Section*

When the user clicks the Add Section button, a Section Title and Section Notes text box is created for the user to take notes in, along with two buttons. Those two buttons are the minimize and delete buttons which allow the user to hide or delete the Section Title and Notes respectively. If the user clicks the delete button, a window will pop up confirming if they would like to proceed with deleting the Section Title and Notes. If they confirm, the Section Title and accompanying Notes will be deleted from view, and their User Profile.

## **SQ3R Prompts:**

This section of the ARA User Guide describes each SQ3R prompt, proper use of the prompt to guide you learning experience, and what user actions cause certain prompts to be revealed.

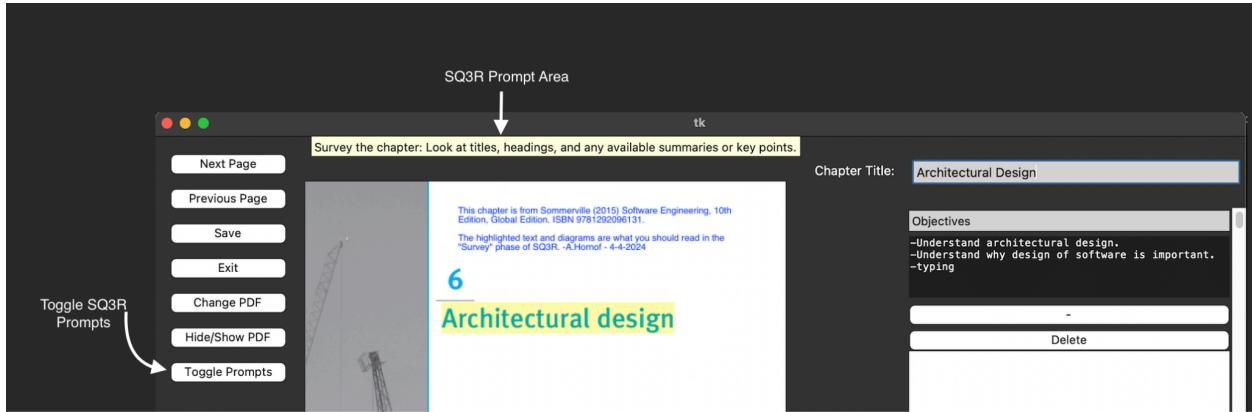


Figure 6: SQ3R prompt on starting PDF page.

If the user has toggled the SQ3R prompts on and is at the first page of a PDF, the prompt the a user will be greeted with is:

*“Recite the main points: without looking at the text, note down what you remember.”*

The goal of this prompt is to engage the user in the first act of SQ3R, Survey. The user should then scan the highlighted parts of the PDF to establish and understanding of its purpose and main ideas.

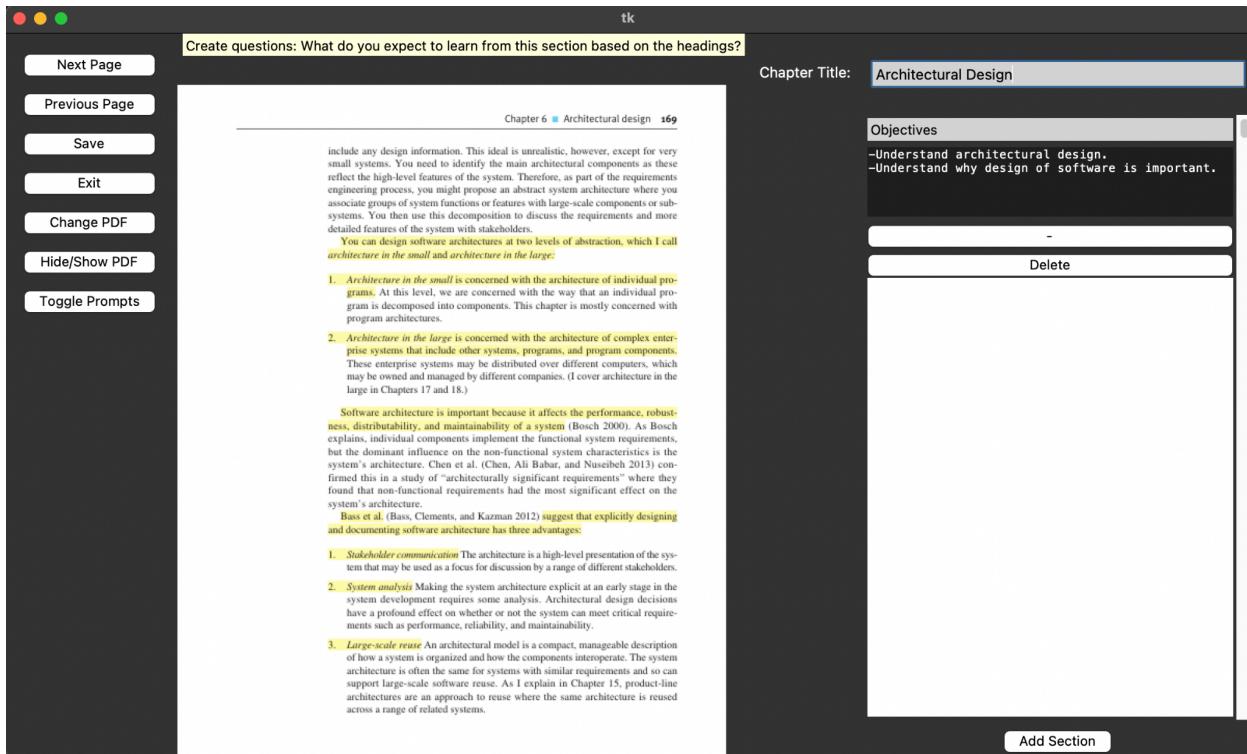


Figure 7: Secondary SQ3R Prompt on non starting PDF Page.

This prompt helps the user with the second part of SQ3R, which is generating questions before reading the text. It helps the student create an overview of the topic and prepare to look out for especially relevant information.

tk

Read to answer your questions. Pay attention to the arguments and evidence presented.

Chapter Title: Architectural Design

Objectives

- Understand architectural design.
- Understand why design of software is important.
- Typing

Figure 6.3 Architectural views

be four fundamental architectural views, which can be linked through common use cases or scenarios (Figure 6.3). He suggests the following views:

1. A **logical view**, which shows the key abstractions in the system as objects or object classes. It should be possible to relate the system requirements to entities in this logical view.
2. A **process view**, which shows how, at runtime, the system is composed of interacting processes. This view is useful for making judgments about non-functional system characteristics such as performance and availability.
3. A **development view**, which shows how the software is decomposed for development; that is, it shows the breakdown of the software into components that are implemented by a single developer or development team. This view is useful for software managers and programmers.
4. A **physical view**, which shows the system hardware and how software components are distributed across the processors in the system. This view is useful for systems engineers planning a system deployment.

Hofmeister et al. (Hofmeister, Nord, and Soni 2000) suggest the use of similar views but add to this the notion of a conceptual view. This view is an abstract view of the system that can be the basis for decomposing high-level requirements into more detailed specifications, help engineers make decisions about components that can be reused, and represent a product line (discussed in Chapter 15) rather than a single system. Figure 6.1, which describes the architecture of a packing robot, is an example of a conceptual system view.

In practice, conceptual views of a system's architecture are almost always developed during the design process. They are used to explain the system architecture to stakeholders and to inform architectural decision making. During the design process, some of the other views may also be developed when different aspects of the system are discussed, but it is rarely necessary to develop a complete description from all perspectives. It may also be possible to associate architectural patterns, discussed in the next section, with the different views of a system.

Add Section

Figure 8: Primary SQ3R Prompt on non starting PDF page.

This prompt encourages active learning by prompting the student to write down notes from memory. It helps the user track their information retention and is useful for self-quizzing as outlined in the software requirements specification. Its main goal is to help the user with reading, the third part of SQ3R.

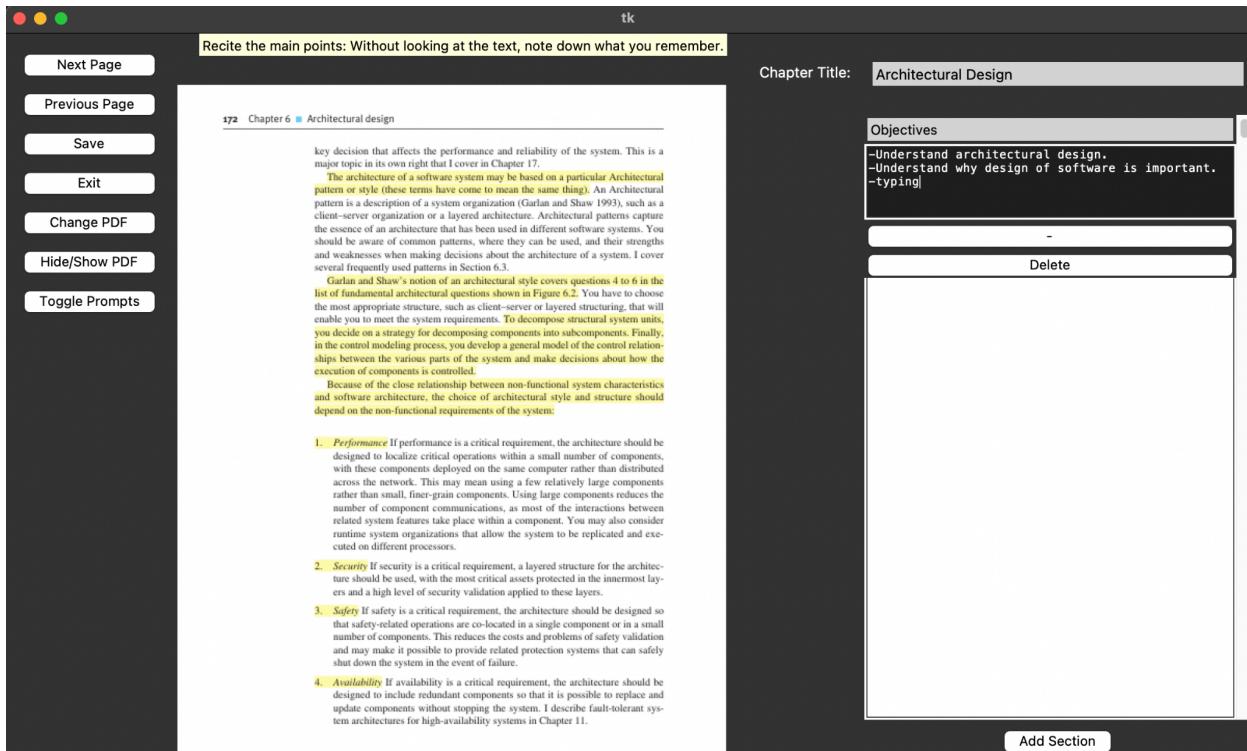


Figure 9: SQ3R Prompt to guide users when they are typing notes or when the user adds a section.

This prompt guides the user into summarizing the important information from the reading. It is important for self-quizzing and encourages active-learning. The user can hide the PDF and summarize the important section information from memory. This self-quizzing method is crucial for “deep processing” of the text.

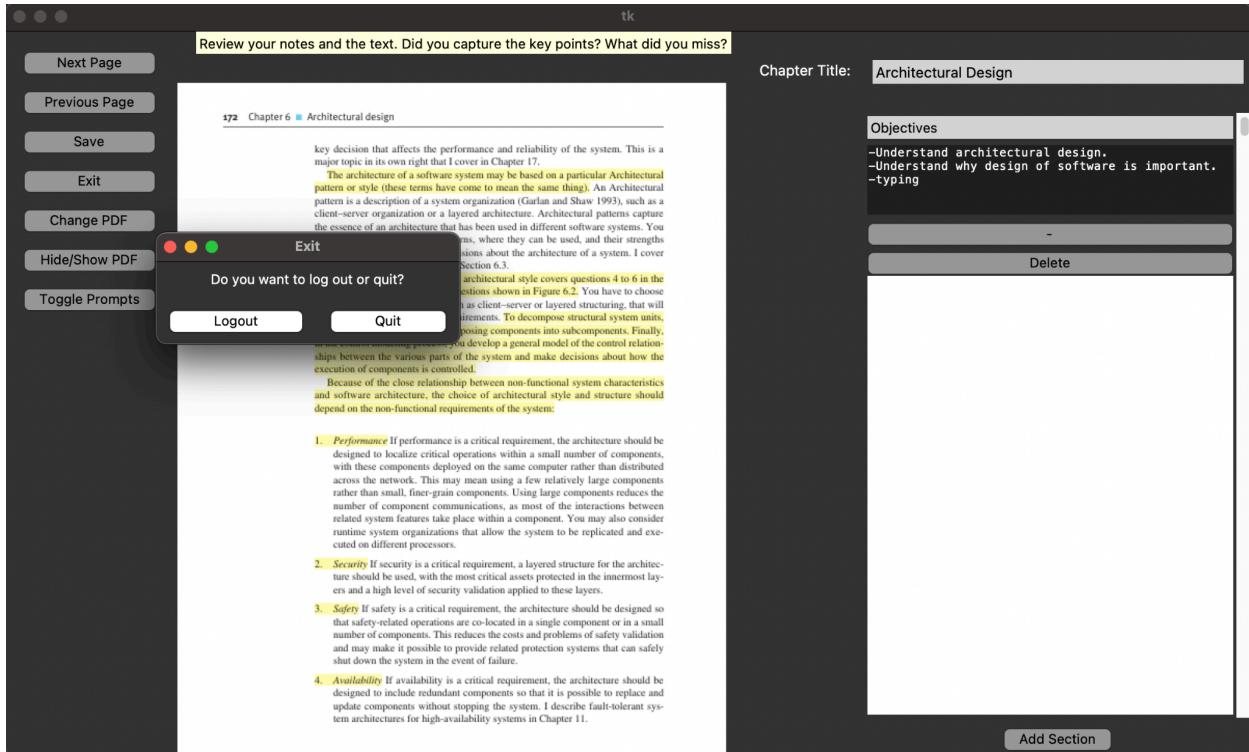


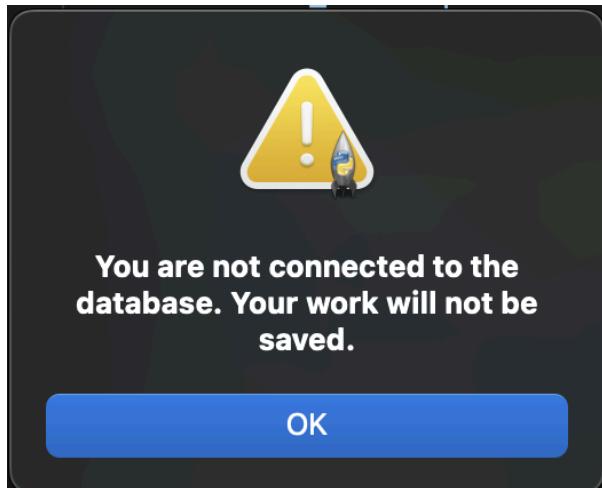
Figure 10: SQ3R Prompt when user attempts to exit the program.

The final prompt the user will see is when they click the exit button, it tells the user to review their notes, the last step of SQ3R.

## **Common Errors:**

This section of the User Documentation describes common errors the user might encounter and possible solutions.

***Error: You are not connected to the database***



## ***Solution:***

If you encounter this error as a User, it means that the ARA Software was unable to connect to the User Notes Database. The most common reason for this error occurring is that the User Notes Database is not running. Make sure your Admin User account has followed the Setup Instructions in the Admin User Command Screen and started the database.