

CSC 540 - DATABASE MANAGEMENT CONCEPTS & SYSTEMS

FALL 2024 PROJECT 1 - DATABASE APPLICATION DESIGN & IMPLEMENTATION

E-Textbook and Assessment Platform

Application Flow

This document gives you a general idea of the application flow. Please refer to the description and handle all the requirements/constraints mentioned therein. Since there is no role overlap, the application will provide a single login screen and redirect the user to the appropriate home page. There are four different types of home pages depending on the type of user:

- 1) Admin
- 2) Faculty
- 3) Student
- 4) Teaching Assistant

Please make sure you verify the login credentials before logging in.

Application Menu

Below is the application menu for the E-Textbook and Assessment Platform system. We expect you to follow this program flow strictly. **You must validate all user input and display appropriate error messages whenever necessary, prompting the user to re-enter their input, even if it may not be explicitly stated.**

Start Pages

Home

Display	Menu	Input	Output
Display the menu.	1. Admin Login 2. Faculty Login 3. TA Login 4. Student Login 5. Exit	Enter Choice (1-5)	Validate credentials and recognize if the user is an Admin, Student, Faculty, or Teaching Assistant and Go to the appropriate page. If Exit is chosen, terminate the program.

Admin pages

Admin: Login

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu.</p> <p>A. User ID B. Password</p>	<p>1. Sign-In 2. Go Back</p>	<p>Take input from the user about their credentials.</p> <p>After entering details A-B, choose options 1-2 from the Menu</p>	<p>If the user chooses 1, it goes to the correct Landing page. Print “Login Incorrect” for invalid credentials and ask to enter again.</p> <p>If the user chooses option 2, discard the input and go back to the Home page.</p>
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Admin: Landing

Display	Menu	Input	Output
Display the menu.	<p>1. Create a Faculty Account 2. Create E-textbook 3. Modify E-textbooks 4. Create New Active Course 5. Create New Evaluation Course 6. Logout</p>	Enter choice (1-6)	<p>Display the correct page depending on choices 1-5.</p> <p>For 6, log out and return to the Home page.</p>

Admin: Create a Faculty Account

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu.</p> <p>A. First Name B. Last Name</p>	<p>1. Add User 2. Go Back</p>	<p>Take input from the user about the account.</p> <p>After entering details A-D, choose options 1-2 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2,</p>

C. E-mail D. Password			Discard the input and Go back to Admin: Landing Page
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Admin: Create E-textbook

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. The title of the new E-textbook B. Unique E-textbook ID</p>	<p>1. Add New Chapter 2. Go Back</p>	<p>Take input from the user about the e-book.</p> <p>After entering details A-B, choose options 1-2 from the Menu</p>	<p>If the user chooses 1, redirect to the Add New Chapter page</p> <p>If the user chooses 2, Discard the input and Go back to Admin: Landing Page</p>

Admin: Add New Chapter

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique Chapter ID B. Chapter Title</p>	<p>1. Add New Section 2. Go Back 3. Landing Page</p>	<p>Take input from the user about the Chapter.</p> <p>After entering details A-B, choose options 1-3 from the Menu</p>	<p>If the user chooses 1, redirect to Add New Section page.</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Modify E-textbook

Display	Menu	Input	Output
<p>Ask user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique E-textbook ID</p>	<ol style="list-style-type: none"> 1. Add New Chapter 2. Modify Chapter 3. Go Back 4. Landing Page 	<p>Take input from the user about e-textbook.</p> <p>After entering details A, choose option 1-3 from the Menu</p>	<p>If the user chooses 1-2, redirect to the appropriate page</p> <p>If the user chooses 3 or 4, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Add New Section

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Section number B. Section Title</p>	<ol style="list-style-type: none"> 1. Add New Content Block 2. Go Back 3. Landing Page 	<p>Take input from the user about Section.</p> <p>After entering details A-B, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, redirect to Add New Content Block page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Modify Chapter

Display	Menu	Input	Output
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<p>Ask user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique Chapter ID</p>	<ol style="list-style-type: none"> 1. Add New Section 2. Modify Section 3. Go Back 4. Landing Page 	<p>Take input from the user about the Chapter.</p> <p>After entering details A, choose option 1-4 from the Menu</p>	<p>If the user chooses 1-2, redirect to the appropriate page</p> <p>If the user chooses 3 or 4, Discard the input and go back to the previous page or User Landing Page, respectively</p>
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Admin: Add New Content Block

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Content Block ID</p>	<ol style="list-style-type: none"> 1. Add Text 2. Add Picture 3. Add Activity 4. Go Back 5. Landing Page 	<p>Take input from the user about the Content Block.</p> <p>After entering details A, choose option 1-5 from the Menu</p>	<p>If the user chooses 1-3, redirect to the appropriate page</p> <p>If the user chooses 4 or 5, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Add Text

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Text</p>	<ol style="list-style-type: none"> 1. Add 2. Go Back 3. Landing Page 	<p>Take input from the user about Text.</p> <p>After entering details A, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>
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Admin: Add Picture

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Picture</p>	<ol style="list-style-type: none"> 1. Add 2. Go Back 3. Landing Page 	<p>Take input from the user about the Picture.</p> <p>After entering details A, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Add Activity

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique activity ID</p>	<ol style="list-style-type: none"> 1. Add Question 2. Go Back 3. Landing Page 	<p>Take input from the user about Activity.</p> <p>After entering details A, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, redirect to the Add Question page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>
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Admin: Add Question

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Question ID B. Question Text C. Option 1 D. Opt 1: Explanation E. Option 2 F. Opt 2: Explanation G. Option 3 H. Opt 3: Explanation I. Option 4 J. Opt 4: Explanation K. Answer</p>	<ol style="list-style-type: none"> 1. Save 2. Cancel 3. Landing Page 	<p>Take input from the user about question details.</p> <p>After entering details A-N, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, record all question details in the database, display a message that the question was saved, and go back to Admin: Add Activity page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Modify Section

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Section number</p>	<ol style="list-style-type: none"> 1. Add New Content Block 2. Modify Content Block 3. Go Back 4. Landing Page 	<p>Take input from the user about Section details.</p> <p>After entering details A-D, choose option 1-4 from the Menu</p>	<p>If the user chooses 1-2, redirect to the appropriate page</p> <p>If the user chooses 3 or 4, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Modify Content Block

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Content Block ID</p>	<ol style="list-style-type: none"> 1. Add Text 2. Add Picture 3. Add New Activity 4. Go Back 5. Landing Page 	<p>Take input from the user about the Content Block.</p> <p>After entering details A, choose option 1-4 from the Menu</p>	<p>If the user chooses 1-3, redirect to the appropriate page</p> <p>If the user chooses 4 or 5, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Admin: Create New Active Course

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique Course ID B. Course Name C. Unique ID of the E-textbook D. Faculty Member ID E. Course Start date F. Course End date G. Unique Token H. Course Capacity</p>	<ol style="list-style-type: none"> 1. Save 2. Cancel 3. Landing Page 	<p>Take input from the user about the Content Block.</p> <p>After entering details A-H, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>
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Admin: Create New Evaluation Course

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique Course ID B. Course Name C. Unique ID of the E-textbook D. Faculty Member ID E. Course Start date F. Course End date</p>	<ol style="list-style-type: none"> 1. Save 2. Cancel 3. Landing Page 	<p>Take input from the user about the Content Block.</p> <p>After entering details A-F, choose option 1-3 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>

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Faculty pages

Faculty: Login

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. User ID B. Password</p>	<p>1. Sign-In 2. Go Back</p>	<p>Take input from the user about their credentials.</p> <p>After entering details A-B, choose options 1-2 from the Menu</p>	<p>If the user chooses 1, it goes to the correct Landing page. Print “Login Incorrect” for invalid credentials and ask to enter again.</p> <p>If the user chooses 2, discard the input and go back to the Home page</p>

Faculty: Landing

Display	Menu	Input	Output
Display the Menu	<p>1. Go to Active course 2. Go to Evaluation course 3. View Courses 4. Change Password 5. Logout</p>	Options in the menu.	<p>Go to the linked page when the associated option number is chosen for 1-4.</p> <p>Go to Home page if option 5 is chosen.</p>

Faculty: Go to Active Course

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A: Course ID</p>	<ol style="list-style-type: none"> 1. View Worklist 2. Approve Enrollment 3. View Students 4. Add New Chapter 5. Modify Chapters 6. Add TA 7. Go Back 	<p>Take input from the user about Active Course.</p> <p>After entering details A, choose option 1-7 from the Menu</p>	<p>Go to the linked page when the associated option number is chosen for options 1-6. Go to Faculty: Landing page if option 7 is chosen.</p>
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Faculty: Go to Evaluation Course

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A: Course ID</p>	<ol style="list-style-type: none"> 1. Add New Chapter 2. Modify Chapters 3. Go Back 	<p>Take input from the user about the Evaluation Course.</p> <p>After entering details A, choose option 1-3 from the Menu</p>	<p>Go to the linked page when the associated option number is chosen for options 1-2. Go to Faculty: Landing page if option 3 is chosen.</p>

Faculty: View Courses

Display	Menu	Input	Output
<p>Display assigned courses</p>	<ol style="list-style-type: none"> 1. Go Back 	<p>Options in the menu</p>	<p>Go to Faculty: Landing page if option 1 is chosen.</p>

Faculty: Change Password

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A: Enter current password</p>	<ol style="list-style-type: none"> 1. Update 2. Go Back 	<p>Take input from the user about the Password change.</p> <p>After entering details A, choose option 1-2 from the Menu</p>	<p>Display the “success” or “fail” message when option 1 is chosen, save the record to the database, and go back to the previous page</p>

B: Enter New Password C: Confirm New Password			Go to Faculty: Landing page if option 2 is chosen.
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Faculty: View Worklist

Display	Menu	Input	Output
Display the waiting list of students	1. Go back	Options in the menu.	Go to the previous page if option 1 is chosen.

Faculty: Approve Enrollment

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A: Student ID	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen, save the record to the database, and go back to the previous page. Discard the input and go back to the previous if option 2 is chosen

Faculty: View Students

Display	Menu	Input	Output
Display the list of students	1. Go back	Options in the menu.	Go to the previous page if option 1 is chosen.

Faculty: Add TA

Display	Menu	Input	Output
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Ask the user to input the following details in the order shown below, followed by the menu A. First name B. Last name C. Email D. Default password	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to the previous if option 2 is chosen
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Faculty: Add New Chapter

Display	Menu	Input	Output
Ask user to input the following details in the order shown below, followed by the menu A. Unique Chapter ID B. Chapter Title	1. Add New Section 2. Go Back	Options in the menu.	Go to the linked page when the associated option number is chosen for 1. Discard the input and go back to the previous if option 2 is chosen

Faculty: Modify Chapter

Display	Menu	Input	Output
Ask user to input the following details in the order shown below, followed by the menu A. Unique Chapter ID	1. Hide Chapter 2. Delete Chapter 3. Add New Section 4. Modify Section 5. Go Back	Options in the menu.	Go to the linked page when the associated option number is chosen for option 1-4. Go to the previous page if option 5 is chosen.

Faculty: Hide Chapter

Display	Menu	Input	Output
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Display the Menu.	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen
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Faculty: Delete Chapter

Display	Menu	Input	Output
Display the Menu	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen

Faculty: Add New Section

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Section number B. Section Title	1. Add New Content Block 2. Go Back	Options in the menu.	Go to the linked page when the associated option number is chosen for option 1. Go to the previous page if option 2 is chosen.

Faculty: Modify Section

Display	Menu	Input	Output
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Ask the user to input the following details in the order shown below, followed by the menu A. Section Number	<ol style="list-style-type: none"> 1. Hide Section 2. Delete Section 3. Add New Content Block 4. Modify Content Block 5. Go Back 	Options in the menu.	Go to the linked page when the associated option number is chosen for option 1-4. Go to the previous page if option 4 is chosen.
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Faculty: Hide Section

Display	Menu	Input	Output
Display the Menu.	<ol style="list-style-type: none"> 1. Save 2. Cancel 	Options in the menu.	<p>Display the “success” or “fail” message when option 1 is chosen.</p> <p>Discard the input and go back to previous if option 2 is chosen</p>

Faculty: Delete Section

Display	Menu	Input	Output
Display the Menu	<ol style="list-style-type: none"> 1. Save 2. Cancel 	Options in the menu.	<p>Display the “success” or “fail” message when option 1 is chosen.</p> <p>Discard the input and go back to previous if option 2 is chosen</p>

Faculty: Add New Content Block

Display	Menu	Input	Output
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Ask the user to input the following details in the order shown below, followed by the menu A. Content Block ID	<ol style="list-style-type: none"> 1. Add Text 2. Add Picture 3. Add Activity 4. Go Back 	Options in the menu.	Go to the linked page when the associated option number is chosen for option 1-3. Go to the previous page if option 4 is chosen.
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Faculty: Modify Content Block

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Content Block ID	<ol style="list-style-type: none"> 1. Hide Content Block 2. Delete Content Block 3. Add Text 4. Add Picture 5. Hide Activity 6. Delete Activity 7. Add Activity 8. Go Back 	Options in the menu.	Go to the linked page when the associated option number is chosen for option 1-7. Go to the previous page if option 8 is chosen.

Faculty: Hide Content Block

Display	Menu	Input	Output
Display the Menu.	<ol style="list-style-type: none"> 1. Save 2. Cancel 	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen

Faculty: Delete Content Block

Display	Menu	Input	Output
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Display the Menu	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen
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Faculty: Add Text

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Text	1. Add 2. Go Back	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen

Faculty: Add Picture

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Picture	1. Add 2. Go Back	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen

Faculty: Hide Activity

Display	Menu	Input	Output
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Ask the user to input the following details in the order shown below, followed by the menu A. Unique Activity ID	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen
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Faculty: Delete Activity

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Unique Activity ID	1. Save 2. Cancel	Options in the menu.	Display the “success” or “fail” message when option 1 is chosen. Discard the input and go back to previous if option 2 is chosen

Faculty: Add Activity

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Unique Activity ID	1. Add Question 2. Go Back	Options in the menu.	Go to the linked page when the associated option number is chosen for option 1. Go to the previous page if option 2 is chosen.

Faculty: Add Question

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Question ID B. Question Text C. Option 1 D. Opt 1: Explanation E. Option 2 F. Opt 2: Explanation G. Option 3 H. Opt 3: Explanation I. Option 4 J. Opt 4: Explanation K. Answer</p>	<p>1. Save 2. Cancel</p>	<p>Options in the menu.</p>	<p>Display the “success” or “fail” message when option 1 is chosen.</p> <p>Discard the input and go back to previous if option 2 is chosen</p>
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TA pages

TA: Login

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. User ID B. Password</p>	<ol style="list-style-type: none"> 1. Sign-In 2. Go Back 	<p>Take input from the user about their credentials.</p> <p>After entering details A-B, choose options 1-2 from the Menu</p>	<p>If the user chooses 1, and to the correct Landing page. Print “Login Incorrect” for invalid credentials and ask to enter again.</p> <p>If the user chooses 2, discard the input and go back to the Home page</p>
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TA: Landing

Display	Menu	Input	Output
Display the Menu	<ol style="list-style-type: none"> 1. Go to Active course 2. View Courses 3. Change Password 4. Logout 	Choose options in the menu.	<p>If the user chooses 1-3, redirect to the appropriate page</p> <p>If the user chooses 4, go to the Home Page</p>

TA: Go to Active Course

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu	<ol style="list-style-type: none"> 1. View Students 2. Add New Chapter 3. Modify Chapters 4. Go Back 	Choose options in the menu.	<p>If the user chooses 1-3, redirect to the appropriate page</p> <p>If the user</p>

A: Course ID			chooses 4, go to the user's Landing Page
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TA: View Courses

Display	Menu	Input	Output
Display assigned courses	1. Go Back	Choose options in the menu	Go to TA:Landing page if option 1 is chosen.

TA: Change Password

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A: Enter current password B: Enter New Password C: Confirm New Password</p>	<p>1. Update 2. Go Back</p>	<p>Take input from the user about the Password change.</p> <p>After entering details A, choose option 1-2 from the Menu</p>	<p>Display the "success" or "fail" message when option 1 is chosen, save the record to the database, and go back to the previous page</p> <p>Go to TA: Landing page if option 2 is chosen.</p>

TA: View Students

Display	Menu	Input	Output
Display the list of students	1. Go back	Choose options in the menu.	Go back to the previous page if option 1 is chosen.

TA: Add New Chapter

Display	Menu	Input	Output
<p>Ask user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique Chapter ID B. Chapter Title</p>	<p>1. Add New Section 2. Go Back</p>	<p>Take input from the user about service.</p> <p>After entering details A-B, choose option 1-2 from the Menu</p>	<p>Display the “success” or “fail” message if option 1 is chosen.</p> <p>Go back to the previous page if option 2 is chosen.</p>

TA: Modify Chapter

Display	Menu	Input	Output
<p>Ask user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique Chapter ID</p>	<p>1. Add New Section 2. Modify Section 3. Go Back</p>	<p>Take input from the user about the Chapter details.</p> <p>After entering details A, choose option 1-3 from the Menu</p>	<p>Go to the linked page when the associated option number is chosen for option 1-2.</p> <p>Go to the previous page if option 3 is chosen.</p>

TA: Add New Section

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Section number</p>	<p>1. Add New Content Block 2. Go Back</p>	<p>Take input from the user about the Section details.</p> <p>After entering details A-B, choose option 1-2 from the Menu</p>	<p>Go to the linked page when the associated option number is chosen for option 1.</p> <p>Go to the previous page if option 2 is chosen.</p>

B. Section Title			
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TA: Add New Content Block

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Content Block ID</p>	<ol style="list-style-type: none"> 1. Add Text 2. Add Picture 3. Add Activity 4. Hide Activity 5. Go Back 	<p>Take input from the user about the Section details.</p> <p>After entering details A, choose option 1-5 from the</p>	<p>Go to the linked page when the associated option number is chosen for option 1-4.</p> <p>Go to the previous page if option 5 is chosen.</p>

TA: Add Text

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Text</p>	<ol style="list-style-type: none"> 1. Add 2. Go Back 	<p>Take input from the user about Text.</p> <p>After entering details A, choose option 1-2 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2, Discard the input and go back to the previous page</p>

TA: Add Picture

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p>	<ol style="list-style-type: none"> 1. Add 2. Go Back 	<p>Take input from the user about Picture.</p> <p>After entering details A, choose option 1-2 from the</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user</p>

A. Picture		Menu	chooses 2, Discard the input and go back to the previous page
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TA: Add Activity

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Unique activity ID</p>	<p>1. Add Question</p> <p>2. Go Back</p>	<p>Take input from the user about activity details.</p> <p>After entering details A, choose option 1-2 from the Menu</p>	<p>If the user chooses 1, redirect to the Add Question page</p> <p>If the user chooses 2, Discard the input and go back to the previous page</p>

TA: Add Question

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Question ID B. Question Text C. Option 1 D. Option 1: Explanation E. Option 2 F. Option 2 Explanation</p>	<p>1. Save</p> <p>2. Cancel</p>	<p>Take input from the user about question details.</p> <p>After entering details A-K, choose option 1-2 from the Menu</p>	<p>If the user chooses 1 record all question in the database, display a message that the question was saved, and go back to previous page</p> <p>If the user chooses 2, discard all input and directly go to previous page</p>

G. Option 3 H. Option 3 Explanation I. Option 4 J. Option 4 Explanation K. Answer			
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TA: Modify Section

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Section number	1. Add New Content Block 2. Modify Content Block 3. Delete Content Block 4. Hide Content Block 5. Go Back	Take input from the user about Section details. After entering details A-D, choose option 1-5 from the Menu	Go to the linked page when the associated option number is chosen for option 1-4. Go to the previous page if option 5 is chosen.

TA: Modify Content Block

Display	Menu	Input	Output
Ask the user to input the following details in the order shown below, followed by the menu A. Content Block ID	1. Add Text 2. Add Picture 3. Add Activity 4. Go Back 5. Landing Page	Take input from the user about the Content Block. After entering details A, choose option 1-4 from the Menu	If the user chooses 1-3, redirect to the appropriate page If the user chooses 4 or 5, Discard the input and go back to the previous page or User Landing Page, respectively

TA: Delete Content Block

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Content Block ID</p>	<p>1. Delete 2. Go Back</p>	<p>Take input from the user about Content Block details.</p> <p>After entering details A, choose option 1-2 from the Menu</p>	<p>If the user chooses 1, delete the information associated with that Content Block, display a message that the content was deleted, and go back to the previous page</p> <p>Go to the previous page if option 2 is chosen.</p>

TA: Hide Content Block

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Content Block ID</p>	<p>1. Hide 2. Go Back</p>	<p>Take input from the user about Content Block details.</p> <p>After entering details A, choose option 1-2 from the Menu</p>	<p>If the user chooses 1, hide the information associated with that Content Block, display a message that the content was hidden, and go back to the previous page</p> <p>Go to the previous page if option 2 is chosen</p>

Student pages

Student: Login

Display	Menu	Input	Output
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Display Menu	1. Enroll in a course 2. Sign-In 3. Go Back	Choose options 1-3 from the Menu	<p>If the user chooses 1-2, redirect to the appropriate page</p> <p>If the user chooses 3, Discard the input and go back to the Home page</p>
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Student: Enroll in a course

Display	Menu	Input	Output
<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. First Name B. Last Name C. Email D. Course Token</p>	1. Enroll 2. Go Back	Choose options 1-2 from the Menu	<p>If the user chooses 1, record the enrollment request, create an account (if it is the first request by the student), and add the student to the waiting list.</p> <p>If the user chooses 2, Discard the input and go back to the Login page</p>

Student: Sign-In

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. User ID B. Password</p>	<p>1. Sign-In 2. Go Back</p>	<p>Take input from the user about their credentials.</p> <p>After entering details A-B, choose options 1-2 from the Menu</p>	<p>If the user chooses 1, and to the correct Landing page. Print “Login Incorrect” for invalid credentials and ask to enter again.</p> <p>If the user chooses 2, discard the input and go back to the Home page</p>
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Student: Landing

Display	Menu	Input	Output
<p>Display the contents in the following format followed by the Menu:</p> <p>E-book 1 Chapter 1 Section 1 Block 1 Section 2 Block 2 Chapter 2 Section 1 Block 1</p>	<p>1. View a section 2. View participation activity point 3. Logout</p>	<p>Choose option 1-3 from the Menu</p>	<p>If the user chooses 1, save the record to the database and go back to the previous page</p> <p>If the user chooses 2 or 3, Discard the input and go back to the previous page or User Landing Page, respectively</p>

Student: View Section

Display	Menu	Input	Output
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<p>Ask the user to input the following details in the order shown below, followed by the menu</p> <p>A. Chapter ID B. Section ID</p>	<ol style="list-style-type: none"> 1. View Block 2. Go Back 	<p>Take input from the user about Section details.</p> <p>After entering details A-B, choose option 1-2 from the Menu</p>	<p>If the user chooses 1, go to appropriate page</p> <p>If the user chooses 2, Discard the input and go back to landing page</p>
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Student: View Block

Display	Menu	Input	Output
<p>If the block is content, just display the contents and proceed by choosing "Next" from the Menu</p> <p>OR</p> <p>If the block is an activity, ask the user to input the following details in the order shown followed by the menu:</p> <p>A. the id of the correct answer out of the 4 displayed options.</p>	<ol style="list-style-type: none"> 1. Next/Submit 2. Go back 	<p>If the block is content, no input is needed, and choose option 1 or 2.</p> <p>If the block is a question, input A is needed, and choose option 1 or 2.</p>	<p>If option 1 is chosen, go to the next block if it is not the last block. If the current block is the last, return to the landing page. Besides, if the current block is a question, a score and explanation will be shown (refer to the description).</p> <p>If option 2 is chosen, return to the previous page.</p>

Student: View participation activity point

Display	Menu	Input	Output
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Display the current participation activity point of the student	1. Go back	No input	Go to the landing page if option 1 is chosen.
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