

Chanakya university

NAME: CHANDAN R

REG NUMBER: 24UG00436

INPUT:

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#include <stdio.h>

#include <stdlib.h>

#include <string.h>

typedef struct Tab {

    int pageID;

    char url[100];

    struct Tab *prev, *next;

} Tab;

Tab *head = NULL, *current = NULL;

int pageCounter = 1;

// Function to create a new tab

Tab* createTab(char url[]) {

    Tab *newTab = (Tab*)malloc(sizeof(Tab));

    newTab->pageID = pageCounter++;

    strcpy(newTab->url, url);

    newTab->prev = newTab->next = NULL;

    return newTab;

}

// Visit a new page

void visitNewPage() {

    char url[100];
```

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printf("Enter URL: ");

scanf("%s", url);

Tab *newTab = createTab(url);

if (head == NULL) {

    head = newTab;

    current = newTab;

} else {

    current->next = newTab;

    newTab->prev = current;

    current = newTab;

}

printf("Visited: %s (PageID: %d)\n", current->url, current->pageID);
}

// Move forward

void goForward() {

    if (current != NULL && current->next != NULL) {

        current = current->next;

        printf("Moved Forward → %s (PageID: %d)\n", current->url, current->pageID);

    } else {

        printf("No next tab available!\n");

    }

}

// Move backward

void goBack() {

    if (current != NULL && current->prev != NULL) {

        current = current->prev;

        printf("Moved Back ← %s (PageID: %d)\n", current->url, current->pageID);

    } else {

        printf("No previous tab available!\n");

    }

}

```

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}

// Show current tab

void showCurrentTab() {

    if (current != NULL) {

        printf("Current Tab → %s (PageID: %d)\n", current->url, current->pageID);

    } else {

        printf("No tab open!\n");

    }

}

// Close current tab

void closeCurrentTab() {

    if (current == NULL) {

        printf("No tab to close!\n");

        return;

    }

    printf("Closing tab: %s (PageID: %d)\n", current->url, current->pageID);

    if (current->prev != NULL)

        current->prev->next = current->next;

    if (current->next != NULL)

        current->next->prev = current->prev;

    Tab *temp = NULL;

    if (current->next != NULL)

        temp = current->next;

    else

        temp = current->prev;

    if (current == head)

        head = current->next;

    free(current);

    current = temp;

}

```

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// Show all history

void showHistory() {
    Tab *temp = head;

    if (temp == NULL) {
        printf("No history available!\n");
        return;
    }

    printf("Browser History:\n");
    while (temp != NULL) {
        printf("PageID: %d, URL: %s\n", temp->pageID, temp->url);
        temp = temp->next;
    }
}

int main() {
    int choice;

    while (1) {
        printf("\n===== Browser Menu =====\n");
        printf("1. Visit a New Page\n");
        printf("2. Go Back\n");
        printf("3. Go Forward\n");
        printf("4. Show Current Tab\n");
        printf("5. Close Current Tab\n");
        printf("6. Show History\n");
        printf("7. Exit\n");
        printf("Enter choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1: visitNewPage(); break;
            case 2: goBack(); break;
            case 3: goForward(); break;

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        case 4: showCurrentTab(); break;

        case 5: closeCurrentTab(); break;

        case 6: showHistory(); break;

        case 7: exit(0);

        default: printf("Invalid choice!\n");

    }

}

return 0;

}
```

OUTPUT:

===== Browser Menu =====

1. Visit a New Page
2. Go Back
3. Go Forward
4. Show Current Tab
5. Close Current Tab
6. Show History
7. Exit

Enter choice: 1

Enter URL: google.com

Visited: google.com (PageID: 1)

===== Browser Menu =====

Enter choice: 1

Enter URL: youtube.com

Visited: youtube.com (PageID: 2)

===== Browser Menu =====

Enter choice: 1

Enter URL: github.com

Visited: github.com (PageID: 3)

===== Browser Menu =====

Enter choice: 4

Current Tab → github.com (PageID: 3)

===== Browser Menu =====

Enter choice: 2

Moved Back ← youtube.com (PageID: 2)

===== Browser Menu =====

Enter choice: 2

Moved Back ← google.com (PageID: 1)

===== Browser Menu =====

Enter choice: 3

Moved Forward → youtube.com (PageID: 2)

===== Browser Menu =====

Enter choice: 6

Browser History:

PageID: 1, URL: google.com

PageID: 2, URL: youtube.com

PageID: 3, URL: github.com

===== Browser Menu =====

Enter choice: 5

Closing tab: youtube.com (PageID: 2)

===== Browser Menu =====

Enter choice: 6

Browser History:

PageID: 1, URL: google.com

PageID: 3, URL: github.com

===== Browser Menu =====

Enter choice: 7

Exiting...