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#include <stdio.h>
#include <stdlib.h>
#include <string.h>

#define MAX_CART 100
#define MAX_HISTORY 10
#define ITEM_LEN 50

typedef struct {
    char items[MAX_CART][ITEM_LEN];
    int top;
} Cart;

typedef struct {
    char history[MAX_HISTORY][MAX_CART * ITEM_LEN];
    int front, rear;
} History;

void init(Cart *cart, History *history) {
    cart->top = 0;
    history->front = history->rear = -1;
}

void addToCart(Cart *cart, const char *item) {
    strcpy(cart->items[cart->top+1], item);
} else {
    printf("Cart is full.\n");
}

void removeFromCart(&cart);
break;

case 2:
    removeFromCart(&cart);
    break;

case 3:
    viewCart(&cart);
    break;

case 4: {
    char allItems[MAX_CART * ITEM_LEN] = {};
    int count = cart.top;
    for (int i = 0; i < count; i++) {
        strcpy(allItems, cart.items[i]);
        strcat(allItems, ", ");
    }
    if (count > 0) {
        allItems[strlen(allItems) - 2] = '\0';
    }

    printf("S. View Purchase History\n");
    printf("6. Exit\n");
    printf("Enter your choice: ");
    scanf("%d", &choice);
    getchar();

    switch (choice) {
        case 1:
            printf("Enter item to add: ");
            fgets(item, ITEM_LEN, stdin);
            item[strlen(item), "\n") = '\0';
            addToCart(&cart, item);
            break;

        case 2:
            removeFromCart(&cart);
            break;

        case 3:
            viewHistory(&history);
            break;

        case 5:
            addToHistory(&history, allItems);
            cart.top = 0;
            printf("Checked out items: %s\n", allItems);
            break;
    }
}

while (1) {
    printf("\nShopping Cart Menu\n");
    printf("1. Add Item\n");
    printf("2. Remove Item\n");
    printf("3. View Cart\n");
    printf("4. Checkout\n");
}

int main() {
    Cart cart;
    History history;
    char item[ITEM_LEN];
    int choice;

    init(&cart, &history);

    while (1) {
        printf("\nShopping Cart Menu\n");
        printf("1. Add Item\n");
        printf("2. Remove Item\n");
        printf("3. View Cart\n");
        printf("4. Checkout\n");
    }
}

```