```c
                          Source Code
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <time.h>
void unused_data2(char data160[])
{
    FILE *original_file160 = fopen("data_statistics_available.txt", "r");
    FILE *temp_file160 = fopen("data_statistics_temp.txt", "w");
    if (original_file160 == NULL)
    {
        original_file160 = fopen("data_statistics_available.txt", "w");
        fclose(original_file160);
        original_file160 = fopen("data_statistics_available.txt", "r");
    }
    char line160[10000];
    int taka160 = +1;
    while (fgets(line160, sizeof(line160), original_file160))
    {
        char money160[100];
        char no160[100];
        if (sscanf(line160, "%99s %99s", money160, no160) == 2)
        {
            if (!strcmp(money160, data160))
            {
                taka160 += atoi(no160);
                continue;
            }
            else if (!strcmp(line160, " ")) continue;
        }
        fprintf(temp_file160, line160);
    }
    char string_num160[10000];
    snprintf(string_num160, sizeof(string_num160), "%d", taka160);
    fprintf(temp_file160, "%s %s\n", data160, string_num160);
    fclose(original_file160);
    fclose(temp_file160);
    remove("data_statistics_available.txt");
    rename("data_statistics_temp.txt", "data_statistics_available.txt");
}

void unused_card(char data160[])
{
    FILE *original_file160 = fopen("data_statistics_available.txt", "r");
    FILE *temp_file160 = fopen("data_statistics_temp.txt", "w");
    if (original_file160 == NULL)
    {
        original_file160 = fopen("data_statistics_available.txt", "w");
        fclose(original_file160);
        original_file160 = fopen("data_statistics_available.txt", "r");
    }
    char line160[10000];
    int taka160 = -1;
    while (fgets(line160, sizeof(line160), original_file160))
    {
        char money160[100];
        char no160[100];
        if (sscanf(line160, "%99s %99s", money160, no160) == 2)
        {
            if (!strcmp(money160, data160))
            {
                taka160 += atoi(no160);
                continue;
            }
            else if (!strcmp(line160, " ")) continue;
        }
        fprintf(temp_file160, line160);
    }
    char string_num160[10000];
    snprintf(string_num160, sizeof(string_num160), "%d", taka160);
    fprintf(temp_file160, "%s %s\n", data160, string_num160);
    fclose(original_file160);
    fclose(temp_file160);
    remove("data_statistics_available.txt");
    rename("data_statistics_temp.txt", "data_statistics_available.txt");
}
void statistics()
{
    printf("Used Card list: ");
    FILE *file160 = fopen("data_statistics_used.txt", "r");
    char data160[100];
    printf("\n");
    while (fgets(data160, 100, file160))
    {
        char taka160[100];
        char time160[100];
        sscanf(data160, "%99s %99s", taka160, time160);
        printf("                %s Minutes: %s times\n", taka160, time160);
    }
    fclose(file160);
    printf("\nAvailable list:\n");
    file160 = fopen("data_statistics_available.txt", "r");
    printf("\n");
    while (fgets(data160, 100, file160))
    {
        char no160[100];
        char taka160[100];
        sscanf(data160, "%99s %99s", taka160, no160);
        printf("                %s Minutes card is available: %s \n", taka160, no160);
    }
    fclose(file160);
    file160 = fopen("data_statistics_totalbalance.txt", "r");
    printf("\n");
    while (fgets(data160, 100, file160))
    {
        char taka160[100];
        sscanf(data160, "%99s", taka160);
        printf("\nTotal earn %s taka\n", taka160);
    }
    fclose(file160);
}
int is_exist(char data160[], char location160[])
{
    char line160[100];
    FILE *file160 = fopen(location160, "r");
    if (file160 == NULL)
    {
        file160 = fopen(location160, "w");
        fclose(file160);
    }
    while (fgets(line160, sizeof(line160), file160))
    {
        char mobile160[100];
        if (sscanf(line160, "%99s", mobile160) == 1)
        {
            for (int i = 0; mobile160[i] != '\0'; i++)
            {
                if (mobile160[i] == ' ')
                {
                    mobile160[i] = '\0';
                    break;
                }
            }
            size_t data_len160 = strlen(data160);
            size_t mobile_len160 = strlen(mobile160);
            size_t min_len160 = data_len160 < mobile_len160 ? data_len160 : mobile_len160;
            if (strncmp(data160, mobile160, min_len160) == 0)
            {
                fclose(file160);
                return 1;
            }
        }
    }
    fclose(file160);
    return 0;
}
void unblock_user_list()
{
    char filename160[100] = "data_lockmobileno.txt";
    char line160[100];
    FILE *original_file160 = fopen(filename160, "r");
    if (original_file160 == NULL)
    {
        original_file160 = fopen(filename160, "w");
        fclose(original_file160);
        original_file160 = fopen(filename160, "r");
    }
    while (fgets(line160, sizeof(line160), original_file160))
    {
        printf("\t\t\t%s", line160);
    }
    printf("\n\n");
    fclose(original_file160);
}
int unblock_user(char card_number160[])
{
    int cnt160 = 0;
    char filename160[100] = "data_lockmobileno.txt";
    char temp_filename160[100] = "data_temp.txt";
    char line160[100];
    card_number160[strcspn(card_number160, "\n")] = 0;
    card_number160[strcspn(card_number160, " ")] = 0;
    FILE *original_file160 = fopen(filename160, "r");
    FILE *temp_file160 = fopen(temp_filename160, "w");
    while (fgets(line160, sizeof(line160), original_file160))
    {
        char current_card160[100];
        if (sscanf(line160, "%11s", current_card160))
        {
            current_card160[strcspn(current_card160, "\n")] = 0;
            current_card160[strcspn(current_card160, " ")] = 0;
            if (!strcmp(current_card160, card_number160))
            {
                cnt160 = 1;
                continue;
            }
        }
        fputs(line160, temp_file160);
    }
    fclose(original_file160);
    fclose(temp_file160);
    remove(filename160);
    rename(temp_filename160, filename160);
    return cnt160;
}

void newcard_generetor()
{
    srand(time(NULL));
    int n160, choice160;
    printf("Available package: \n");
    printf("\t1. 40 min 50 taka\n");
    printf("\t2. 60 min 70 taka\n");
    printf("\t3. 100 min 120 taka\n");
    printf("\tHow many cards and choose a number: ");
    scanf("%d %d", &n160, &choice160);
    char taka160[100] = "";
    if (choice160 == 1)
    {
        strcat(taka160, "40");
    }
    else if (choice160 == 2)
    {
        strcat(taka160, "60");
    }
    else if (choice160 == 3)
    {
        strcat(taka160, "100");
    }
    else
    {
        printf("Wrong submission---->returning admin panel");
        return;
    }
    for (int i = 0; i < n160; i++)
    {
        unused_data2(taka160);
        char fullfilename160[200] = "data_validcard.txt";
        char card160[21];
        for (int i = 0; i < 20; i++)
        {
            card160[i] = '0' + (rand() % 10);
        }
        card160[20] = '\0';
        FILE *f1160 = fopen(fullfilename160, "a");
        if (f1160 == NULL)
        {
            FILE *f2160 = fopen(fullfilename160, "w");
            fprintf(f2160, "%s %s\n", card160, taka160);
            fclose(f2160);
        }
        else
        {
            fprintf(f1160, "%s %s\n", card160, taka160);
            fclose(f1160);
        }
    }
    printf("%d Cards Creation Successful \n ", n160);
}

int remove_card(char card_number160[])
{
    char filename160[100] = "data_validcard.txt";
    char temp_filename160[100];
    char line160[100];
    int card_found160 = 0;
    int changes_made160 = 0;
    snprintf(temp_filename160, 100, "%s.temp", filename160);
    card_number160[strcspn(card_number160, "\n")] = 0;
    FILE *original_file160 = fopen(filename160, "r");
    FILE *temp_file160 = fopen(temp_filename160, "w");
    while (fgets(line160, 100, original_file160))
    {
        char current_card160[100];
        char taka160[100];
        if (sscanf(line160, "%31s %99s", current_card160, taka160) == 2)
        {
            if (strcmp(current_card160, card_number160) == 0)
            {
                card_found160 = 1;
                changes_made160 = 1;
                unused_card(taka160);
                continue;
            }
        }
        fputs(line160, temp_file160);
    }
    fclose(original_file160);
    fclose(temp_file160);
    if (changes_made160)
    {
        if (remove(filename160) != 0)
        {
            return 1;
        }
        if (rename(temp_filename160, filename160) != 0)
        {
            return 1;
        }
        return 1;
    }
    else
    {
        if (remove(filename160) != 0)
        {
            return 1;
        }
        if (rename(temp_filename160, filename160) != 0)
        {
            return 1;
        }
        return 0;
    }
}
void total_profit(char data160[])
{
    char taka160[100] = "";
    if (!strcmp(data160, "40"))
    {
        strcat(taka160, "50");
    }
    if (!strcmp(data160, "60"))
    {
        strcat(taka160, "70");
    }
    if (!strcmp(data160, "100"))
    {
        strcat(taka160, "120");
    }
    FILE *original_file160 = fopen("data_statistics_totalbalance.txt", "r");
    FILE *temp_file160 = fopen("data_statistics_temp.txt", "w");
    char line160[100];
    if (original_file160 == NULL)
    {
        original_file160 = fopen("data_statistics_totalbalance.txt", "w");
        fprintf(original_file160, "0");
        fclose(original_file160);
        original_file160 = fopen("data_statistics_totalbalance.txt", "r");
    }
    while (fgets(line160, sizeof(line160), original_file160))
    {
        int sum160 = atoi(line160) + atoi(taka160);
        char string_num160[12];
        snprintf(string_num160, sizeof(string_num160), "%d", sum160);
        fprintf(temp_file160, "%s", string_num160);
    }
    fclose(original_file160);
    fclose(temp_file160);
    remove("data_statistics_totalbalance.txt");
    rename("data_statistics_temp.txt", "data_statistics_totalbalance.txt");
}
void user_current_balance_updater(char number160[], char taka160[])
{
    char add160[100] = "data_statistics_useramount_";
    strcat(add160, number160);
    strcat(add160, ".txt");
    FILE *original_file160 = fopen(add160, "r");
    FILE *temp_file160 = fopen("data_statistics_useramount_temp.txt", "w");
    if (original_file160 == NULL)
    {
        original_file160 = fopen(add160, "w");
        fprintf(original_file160, "0");
        fclose(original_file160);
        original_file160 = fopen(add160, "r");
    }
    char line160[100];
    while (fgets(line160, 100, original_file160))
    {
        int sum160 = atoi(line160) + atoi(taka160);
        char string_num160[12];
        snprintf(string_num160, sizeof(string_num160), "%d", sum160);
        fprintf(temp_file160, string_num160);
    }
    fclose(original_file160);
    fclose(temp_file160);
    remove(add160);
    rename("data_statistics_useramount_temp.txt", add160);
}
void used_card(char data160[])
{
    FILE *original_file160 = fopen("data_statistics_used.txt", "r");
    FILE *temp_file160 = fopen("data_statistics_temp.txt", "w");
    if (original_file160 == NULL)
    {
        original_file160 = fopen("data_statistics_used.txt", "w");
        fclose(original_file160);
        original_file160 = fopen("data_statistics_used.txt", "r");
    }
    char line160[10000];
    int taka160 = 1;
    while (fgets(line160, sizeof(line160), original_file160))
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    {
        char money160[100];
        char no160[100];
        if (sscanf(line160, "%99s %99s", money160, no160) == 2)
        {
            if (!strcmp(money160, data160))
            {
                taka160 += atoi(no160);
                continue;
            }
            else if (!strcmp(line160, " ")) continue;
        }
        fprintf(temp_file160, line160);
    }
    char string_num160[10000];
    snprintf(string_num160, sizeof(string_num160), "%d", taka160);
    fprintf(temp_file160, "%s %s\n", data160, string_num160);
    fclose(original_file160);
    fclose(temp_file160);
    remove("data_statistics_used.txt");
    rename("data_statistics_temp.txt", "data_statistics_used.txt");
}
void dynamic_data_updater(char data160[], char number160[])
{
    total_profit(data160);
    user_current_balance_updater(number160, data160);
    used_card(data160);
}
char* cardno_money(char cardno160[])
{
    FILE *file160 = fopen("data_validcard.txt", "r");
    char data160[100];
    while (fgets(data160, 100, file160))
    {
        char current_card160[100];
        char taka160[100];
        sscanf(data160, "%99s %99s", current_card160, taka160);
        if (!strcmp(current_card160, cardno160))
        {
            fclose(file160);
            return strdup(taka160);
        }
    }
    fclose(file160);
    return NULL;
}
void full_time_history(char cardno160[], char moneey160[], char mobileno160[])
{
    FILE *file160 = fopen("data_history.txt", "r");
    time_t rawtime160;
    struct tm *timeinfo160;
    char buffer160[80];
    time(&rawtime160);
    timeinfo160 = localtime(&rawtime160);
    strftime(buffer160, sizeof(buffer160), "%Y-%m-%d\t%H:%M:%S", timeinfo160);
    if (file160 == NULL)
    {
        FILE *file160 = fopen("data_history.txt", "w");
        fprintf(file160, "      Card No            Date           Time           Minute     mobile no");
        fclose(file160);
    }
    file160 = fopen("data_history.txt", "a");
    fprintf(file160, "\n%s\t%s\t%s\t%s", cardno160, buffer160, moneey160, mobileno160);
    fclose(file160);
    return;
}
void user_full_time_history(char cardno160[], char mobileno160[])
{
    time_t rawtime160;
    struct tm *timeinfo160;
    char buffer160[80];
    time(&rawtime160);
    timeinfo160 = localtime(&rawtime160);
    strftime(buffer160, sizeof(buffer160), "%Y-%m-%d\t%H:%M:%S", timeinfo160);
    char data160[100] = "data_search_";
    strcat(data160, mobileno160);
    strcat(data160, ".txt");
    FILE *file160 = fopen(data160, "r");
    if (file160 == NULL)
    {
        FILE *file160 = fopen(data160, "w");
        fprintf(file160, "      Card No            Date           Time           Minute  ");
        fclose(file160);
    }
    file160 = fopen(data160, "a");
    fprintf(file160, "\n%s\t%s\t%s", cardno160, buffer160, cardno_money(cardno160));
    fclose(file160);
    return;
}
void user_panel()
{
    while (1)
    {
        char mobileno160[100];
        char cardno160[100];
        char line160[100];
        printf("Enter your mobile number or enter 0 for exit: ");
        scanf("%s", mobileno160);
        mobileno160[strcspn(mobileno160, "\n")] = 0;
        char blocklocation160[100] = "data_lockmobileno.txt";

        if (!strcmp("0", mobileno160))
        {
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            printf("\n");
            break;
        }
        if (strlen(mobileno160) != 11)
        {
            printf("\nEnter a valid mobile no.\n");
        }
        else if (is_exist(mobileno160, blocklocation160))
        {
            printf("\n\nYOU are a blocked user\n\n");
        }
        else
        {
            while (1)
            {
                if (is_exist(mobileno160, blocklocation160))
                {
                    printf("\n\nYOU are a blocked user\n\n");
                    break;
                }
                int n;
                printf("\nchoose a option\n\t1.Balance\n\t2.Recharge\n\t3.logout\n\tEnter a valid digit: ");
                scanf("%d", &n);
                if (n == 1)
                {
                    char address160[100] = "data_statistics_useramount_";
                    strcat(address160, mobileno160);
                    address160[strcspn(address160, "\n")] = 0;
                    strcat(address160, ".txt");
                    FILE *file160 = fopen(address160, "r");
                    if (file160 == NULL)
                    {
                        file160 = fopen(address160, "w");
                        if (file160 != NULL)
                        {
                            fprintf(file160, "0");
                            fclose(file160);
                            file160 = fopen(address160, "r");
                        }
                    }
                    if (file160 != NULL)
                    {
                        char line160[100];
                        if (fgets(line160, 100, file160))
                        {
                            line160[strcspn(line160, "\n")] = 0;
                            printf("Your total Balance is %s minutes\n", line160);
                        }
                        fclose(file160);
                    }
                }
                else if (n == 2)
                {
                    int t = 3;
                    int flag = 1;
                    while (t--)
                    {
                        printf("Enter Your card no: ");
                        scanf("%s", cardno160);
                        if (strlen(cardno160) != 20)
                        {
                            printf("Enter a valid card no...\n");
                        }
                        else if (is_exist(cardno160, "data_validcard.txt"))
                        {
                            for (int i = 0; i < strlen(cardno160); i++)
                            {
                                if (cardno160[i] == '\n') cardno160[i] = '\0';
                            }
                            for (int i = 0; i < strlen(mobileno160); i++)
                            {
                                if (mobileno160[i] == '\n') mobileno160[i] = '\0';
                            }
                            dynamic_data_updater(cardno_money(cardno160), mobileno160);
                            full_time_history(cardno160, cardno_money(cardno160), mobileno160);
                            user_full_time_history(cardno160, mobileno160);
                            printf("%s minutes recharge successful\n", cardno_money(cardno160));
                            remove_card(cardno160);
                            flag = 0;
                            break;
                        }
                        printf("You have only %d attempts left\n", t);
                    }
                    if (flag)
                    {
                        FILE *file160 = fopen("data_lockmobileno.txt", "a");
                        fprintf(file160, "%s \n", mobileno160);
                        printf("\n\nYou have been blocked.\n\n");
                        fclose(file160);
                        break;
                    }
                }
                else if (n == 3)
                {
                    return;
                }
                else
                {
                    printf("\nEnter a valld digit!!!\n\n");
                }
            }
        }
    }
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}
void admin_panel()
{
    srand(time(NULL));
    printf("Welcome to the Admin Panel: \n");
    while (1)
    {
        printf("\n\t1. Generate new Card\n");
        printf("\t2. Delete Card\n");
        printf("\t3. Unblock mobile number\n");
        printf("\t4. History\n");
        printf("\t5. Statistics\n");
        printf("\t6. search\n");
        printf("\t7. Exit\n");
        printf("\t Enter your option: ");
        int option;
        scanf("%d", &option);
        if (option == 1)
        {
            newcard_generetor();
        }
        else if (option == 2)
        {
            char data160[100];
            printf("Enter card no: ");
            scanf("%s", data160);
            if (remove_card(data160))
            {
                printf("Card %s was found and deleted.\n", data160);
            }
            else
            {
                printf("Card %s was invalid!!!!!.\n", data160);
            }
        }
        else if (option == 3)
        {
            while (1)
            {
                printf("Choose a option: \n");
                printf("\t1.showing block user:\n");
                printf("\t2.unblock user\n");
                printf("\t3.exit\n");
                printf("\tEnter a VAlid digit: ");
                int x;
                scanf("%d", &x);
                if (x == 3) return;
                else if (x == 1)
                {
                    printf("Block users list:\n");
                    unblock_user_list();
                }
                else if (x != 2)
                {
                    printf("\nEnter a valid digit!!!1\n");
                }
                else
                {
                    printf("Enter the mobile no: ");
                    char mobile_no160[100];
                    scanf("%s", mobile_no160);
                    if (unblock_user(mobile_no160))
                    {
                        printf("%s unblock successful.\n", mobile_no160);
                    }
                    else
                    {
                        printf("%s is not a block user..\n", mobile_no160);
                    }
                }
            }
        }
        else if (option == 4)
        {
            FILE *file160 = fopen("data_history.txt", "r");
            char line160[100];
            if (file160 == NULL)
            {
                file160 = fopen("data_history.txt", "w");
                fprintf(file160, "      Card No            Date            Time          Minute     mobile no");
                fclose(file160);
                file160 = fopen("data_history.txt", "r");
            }
            while (fgets(line160, sizeof(line160), file160))
            {
                printf("%s", line160);
            }
            fclose(file160);
        }
        else if (option == 5) statistics();
        else if (option == 6)
        {
            printf("Enter the mobile no: ");
            char mobileno160[100];
            scanf("%s", mobileno160);
            if (strlen(mobileno160) == 11)
            {
                char data160[100] = "data_search_";
                strcat(data160, mobileno160);
                strcat(data160, ".txt");
                FILE *file160 = fopen(data160, "r");
                if (file160 == NULL)
                {
                    file160 = fopen(data160, "w");
                    fprintf(file160, "  Card No            Date            Time          Minute  ");
                    fclose(file160);
                    file160 = fopen(data160, "r");
                }
                char line160[100];
                while (fgets(line160, sizeof(line160), file160))
                {
                    printf("%s", line160);
                }
                fclose(file160);
            }
            else
            {
                printf("Enter a valid mobile number!!!");
            }
        }
        else if (option == 7) return;
        else
        {
            printf("\nPlease Enter a valid number!!!\n\n");
        }
    }
}
int main()
{
    while (1)
    {
        printf("Prepared by Nilay Paul Partha(Roll:2403160)\n\n");
        printf("Select Option\n");
        printf("\t1.Admin panel\n");
        printf("\t2.User panel\n");
        printf("\t3.Exit\n");
        printf("\tEnter a digit: ");
        int option;
        scanf("%d", &option);
        if (option == 1)
        {
            int t = 3;
            while (t--)
            {
                printf("Enter Your Admin panel password(2403160) : ");
                int password;
                int flag = 0;
                scanf("%d", &password);
                if (password == 2403160)
                {
                    admin_panel();
                    flag = 1;
                }
                else
                {
                    printf("Wrong password. You have %d attempts remaining.\n", t);
                }
                if (flag) break;
            }
        }
        else if (option == 2)
        {
            user_panel();
        }
        else if (option == 3) return 0;
        else
        {
            printf("\nEnter a valid number!!!\n\n");
        }
    }
}

```