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1 // GROUP B
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4
5
6 #include "header.h"
7
8
9 // A function to get calculate tomorrows date and return it for use in checking the correct date by the client
10 int GetTomorrowDate(char *tomorrowsDate)
11 {
12     FILE *fp;
13
14
15     // variables to store the date and time components
16     int hours, minutes, seconds, day, month, year;
17
18     // `time_t` is an arithmetic time type
19     time_t now = (int)time(NULL) + 86400;
20
21     // localtime converts a `time_t` value to calendar time and
22     // returns a pointer to a `tm` structure with its members
23     // filled with the corresponding values
24     struct tm *local = localtime(&now);
25
26     day = local->tm_mday;        // get day of month (1 to 31)
27     month = local->tm_mon + 1;    // get month of year (0 to 11)
28     year = local->tm_year + 1900; // get year since 1900
29
30     fp = fopen("dates.txt", "w+");
31
32     // print the current date
33     fprintf(fp, "%02d/%02d/%d", month, day, year);
34     fclose(fp);
35
36     fp = fopen("dates.txt", "r");
37
38     fgets(tomorrowsDate, 11, fp);
39     fclose(fp);
40
41
42     return 0;
43 }
44
45
46 // A function to get calculate todays date and return it for use in checking the correct date by the client
47 int GetTodayDate(char *todaysDate)
48 {
49     FILE *fp;
50
51     // variables to store the date and time components
52     int hours, minutes, seconds, day, month, year;
53
54     // `time_t` is an arithmetic time type
55     time_t now = (int)time(NULL);
56
57     // localtime converts a `time_t` value to calendar time and
58     // returns a pointer to a `tm` structure with its members
59     // filled with the corresponding values
60     struct tm *local = localtime(&now);
61
62
63     day = local->tm_mday;        // get day of month (1 to 31)
64     month = local->tm_mon + 1;    // get month of year (0 to 11)
65     year = local->tm_year + 1900; // get year since 1900
66
67     // print the current date

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68 fp = fopen("dates.txt", "w+");
69
70 // print the current date
71 fprintf(fp, "%02d/%02d/%d", month, day, year);
72 fclose(fp);
73
74 fp = fopen("dates.txt", "r");
75
76 fgets(todaysDate, 11, fp);
77 fclose(fp);
78
79 return 0;
80 }
81
82
83 // This function is to check through the selected train file and count how many seats are not taken
84 // and then return that value to the server.
85 int seatChecker(int trainNum)
86 {
87     FILE *fp ;
88     char c;
89     int zeros = 0;
90
91
92     printf( "Opening the file train in read mode \n" );
93     if (trainNum == 1)
94     {
95         fp = fopen ( "train1.txt", "r" ); // opening an existing file
96     }
97     else if (trainNum == 2)
98     {
99         fp = fopen ( "train2.txt", "r" ); // opening an existing file
100     }
101     if ( fp == NULL )
102     {
103         printf ( "Could not open file train \n" );
104         return 1;
105     }
106     printf( "Reading the file train \n" );
107     while ( 1 )
108     {
109         c = fgetc ( fp ); // reading the file
110
111         if(c == '0')
112         {
113             zeros++;
114             printf("%d\n", zeros);
115         }
116
117         if ( c == EOF )
118             break ;
119         //printf ( "%c", c );
120     }
121     printf("Closing the file train \n");
122     fclose ( fp ); // Closing the file
123     return zeros;
124 }

```