## Rebecca's One-Stop Flight Code

```
//"Rebecca Wells"
//1 stop flight function
#include <stdio.h>
#include <string.h>
//#include "airports.h"
int one_stop_flight(int choice)
  int route_id, id, input, flight_number, d_hour, d_mins, a_hour, a_mins, d_hour_stop, d_mins_stop, a_hour_stop, a_mins_stop, z, layover, b;
  char departure_input[4], arrival_input[4], stop_code[4], days[7], departure_city[50], arrival_city[50], arrival_city[50], arrival_time[7], a_letter, d_letter, travel_days[10], airport_code[4], city[50], arrival_airport[4], departure_airport[4], a_letter_stop, d_letter_stop;
  FILE *airports, *flights, *routes;
  printf("Enter departure and arrival airport codes: ");
  scanf("%s %s", departure_input, arrival_input);
  flights = fopen("flights.txt", "r");
  airports = fopen("airports.txt", "r");
  routes = fopen("routes.txt", "r");
   while(fscanf(airports, "%s %50[^\n]", airport_code, city) != EOF) //scan for the departure code but not to the arrival code
      if(airport_code != departure_input || airport_code != arrival_input)
         while(fscanf(routes, "%d. %s %s", &route_id, departure_airport, arrival_airport) != EOF) //finds the name of the city of the departure airport
             if(departure_input[0] ==departure_airport[0] && departure_input[1] ==departure_airport[1] && departure_input[2] ==departure_airport[2])
                 if(arrival_airport[0] != arrival_input[0] || arrival_airport[1] != arrival_input[1] || arrival_airport[2] != arrival_input[2])
                    strcpy(stop_code, arrival_airport);
                    rewind(routes);
                     departure_airport[0]='
                     departure_airport[1]='
                     departure_airport[2]='
                     arrival_airport[0]=' '
                     arrival_airport[1]='
                     arrival_airport[2]='
                     while(fscanf(routes, "%d. %s %s", &route_id, departure_airport, arrival_airport) != EOF) //now searches for the place where the stop is the
                                                                                                      //depart airport and the arrival input is correct
                        if(stop_code[0] == departure_airport[0] && stop_code[1] == departure_airport[1] && stop_code[2] == departure_airport[2] && arrival_airport[0] && arrival_airport[1] == arrival_airport[1] && arrival_airport[2] == arrival_airport[2])
                            id=route_id;
                            printf("Enter a day of the week (1-7, or 0 for all days):");
                            scanf("%d", &input);
                            //now depending on the day entered, program is suppose to run through each option that was entered, find where the id is similar, then
                            //check the days, finally check the time that is involved in the stop to make sure the layover is the correct time
                            //end with printing out the message if you find a suitable one stop flight
                            if(input==1)
                                while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, d_letter, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                           if(days[z]==1)
                                               //if(check_days() == TRUE)
                                                  // check_time();
                                                  if(layover >= 60 && layover <= 120)
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_city, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d.m. %s, %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, (days), d_hour_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                            //if day entered is 2
                            if(input==2)
                               while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, d_letter, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                           if(days[z]==2)
                                             // if(check_days() == TRUE)
                                                  //check_time();
                                                  if(layover >= 60 && layover <= 120)
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, (days), d_hour_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                            //if day entered is 3
                            if(input==3)
                               while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, d_letter, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                          if(days[z]==3)
                                               //if(check_days() == TRUE)
                                                 //check_time();
                                                  if(layover >= 60 && layover <= 120)
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_city, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                            //if day entered is 4
                            if(input==4)
                               while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, d_letter, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                           if(days[z]==4)
                                             // if(check_days() == TRUE)
                                                 //check_time();
                                                  if(layover >= 60 && layover <= 120)</pre>
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_city, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                            //if day entered is 5
                            if(input==5)
                               while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, d_letter, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                           if(days[z]==5)
                                            // if(check_days() == TRUE)
                                                  //check_time();
                                                  if(layover >= 60 && layover <= 120)
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                            //if day entered is 6
                            if(input==6)
                               while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                           if(days[z]==6)
                                             // if(check_days() == TRUE)
                                                 //check\_time();
                                                  if(layover >= 60 && layover <= 120)
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_city, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour_stop, d_mins_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                            //if day entered is 7
                            if(input==7)
                               while(fscanf(flights, "%d %d %d:%d%c %d:%d%c %s", flight_number, route_id, d_hour, d_mins, d_letter, a_hour, a_mins, a_letter, days) != EOF)
                                   if(id==route_id)
                                       while(z<7)
                                           if(days[z]==7)
                                             // if(check_days() == TRUE)
                                                 //check_time();
                                                  if(layover >= 60 && layover <= 120)</pre>
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour, d_mins, d_letter, departure_city, departure_input, a_hour_stop, a_mins_stop, a_letter_stop, stop_city, stop_code);
                                                     printf("Flight %d (%s)\n %d:%d%c.m. %s (%s)\n %d:%d%c.m. %s (%s)\n", flight_number, travel_days, d_hour_stop, d_letter_stop, stop_city, stop_code, a_hour, a_mins, a_letter, arrival_city, arrival_input);
                        /* if(input==0)
                       while (fscanf(flights, "%d, %d, (time) (time) (days)", flight\_number, route\_id, departure\_time, arrival\_time, (days)) != EOF)
                          if(id == route\_id)
                              if(*days has daily*)
                                 printf("Flight \%d (\%s)\n \ \%d:\%d.m. \%s, \%s (\%s)\n", flight\_number, (days), d\_hour, d\_mins, departure\_city, departure\_input, a\_hour, a\_mins, stop\_city, stop\_state, stop\_code);
                                 printf("Route \%s to \%s has no 1-stop flights on the specified days \n", departure\_input, arrival\_input);
         printf("Either airport %s or %s doesn't exist", departure_input, arrival_input);
```

return;