```c
1  #define F_CPU                    16000000UL
2
3  #include <avr/io.h>
4  #include <util/delay.h>
5  #include <avr/interrupt.h>
6  #include <stdlib.h>
7  #include <string.h>
8  #include <stdbool.h>
9  #include <stdint.h>
10
11 #include "UART_Bluetooth.h"
12 #include "nrf24.h"
13
14 void initIO();
15 char messageTest[] = "UART TESTING COMMANDS! \n";
16
17 int main(void)
18 {
19     cli();  // Interrupts off
20     initIO();
21     initBluetoothUart();
22     setupReceiveMode();
23     nrf24_initRF_SAFE(POWER_BOARD_RF, RECEIVE); // CONNECTION TO POWER BOARD AND
         MOTORIZED BOARD : GENERAL RF CHANNEL 11
24     sei();  // Interrupts on
25     while (1)
26     {
27         if (commandAvailable) {
28             cli();
29             processReceivedLine();
30             setupReceiveMode();
31
32         }
33
34          // Disable UART
35
36         if(nrf24_dataReady())
37         {
38             cli();
39             nrf24_getData(command_buffer);
40             CommandStatus status = DecomposeMessageFromBuffer();
41             if (status==SUCCESFUL_DECOMPOSITION) { RetransmissionToPhone();  }
42             sei();
43         }
44
45         if (nrf24_checkAvailability()==false) { nrf24_initRF_SAFE(POWER_BOARD_RF,
           RECEIVE); }
46
47     }
48 }
49
50
```

```c
51  void initIO(){
52      /*
53          Input/Output pin initialization
54          1 : OUTPUT | 0 : INPUT | 0b76543210 Bit order
55          ATTACHMENTS
56              RED LED     : PD7                      |   OUTPUT
57              GREEN LED   : PB0                      |   OUTPUT
58          HC-05
59              TX          : PD0 (RX ATMEGA)          |   INPUT
60              RX          : PD1 (TX ATMEGA)          |   OUTPUT
61              KEY/ENABLE  : PD2                      |   OUTPUT
62              STATE       : PC5                      |   INPUT
63          nRF24L01
64              CE   : PC0                            |   OUTPUT
65              CSN  : PC1                            |   OUTPUT
66              MISO : PD0 (MSPIM MISO ATMEGA)  |   INPUT
67              MOSI : PD1 (MSPIM MOSI ATMEGA)  |   OUTPUT
68              SCK  : PD4 (MSPIM XCK)          |   OUTPUT
69      */
70      DDRD = 0b11111110;
71      DDRB = 0b00101001;
72      DDRC = 0b11011111;
73  }
74
75
76
77
78
79
```