```c
#include <stdio.h>
#include <stdlib.h>
#include <mc9s12e128.h>
#include <S12e128bits.h>
#include <Bin_Const.h>
#include <termio.h>
#include "ES_Configure.h"
#include "ES_Framework.h"
#include "ES_Timers.h"
#include "ES_Types.h"

//#include for hardware initialization services
#include "E128_PWM.h"
#include "E128_SPI.h"
#include "E128_Servo.h"
#include "AlignPPService.h"
#include "ResupplyService.h"

void main( void)
{

    ES_Return_t ErrorType;

//set wireless communication
    SCI0BD = 39;

// When doing testing, it is usefull to annouce just which program
// is running.
    puts("running 218B CapThatShip\r\n");

// Your hardware initialization function calls go here
    InitSPIHardware();      //initialize SPI hardware
    InitServoHardware();    //initialize servo hardware for Flywheel ball release
    InitPWMHardware();      //initialize PWM for DriveTrain hardware

    InitIREmitHardware(); //initialize Timer capabilities IR Emitter for ball refill
    InitControlTimerHardware(); //initialize Timer0 for P-Control


// now initialize the Events and Services Framework and start it running
    ErrorType = ES_Initialize(ES_Timer_RATE_1MS);
    if ( ErrorType == Success )
        {

            ErrorType = ES_Run();

        }


//if we got to here, there was an error
    switch (ErrorType)
        {
        case FailedPointer:
            puts("Failed on NULL pointer");
            break;
        case FailedInit:
            puts("Failed Initialization");
            break;
        default:
            puts("Other Failure");
            break;
        }


    for (;;)
        ;
```

```
};
```

```
/*------------------------------ Footnotes ------------------------------*/
/*------------------------------ End of file ------------------------------*/
```