```c
/*******************************************************************************
  MPLAB Harmony Project Main Source File

  Company:
    Microchip Technology Inc.

  File Name:
    main.c

  Summary:
    This file contains the "main" function for an MPLAB Harmony project.

  Description:
    This file contains the "main" function for an MPLAB Harmony project.  The
    "main" function calls the "SYS_Initialize" function to initialize the state
    machines of all MPLAB Harmony modules in the system and it calls the
    "SYS_Tasks" function from within a system-wide "super" loop to maintain
    their correct operation. These two functions are implemented in
    configuration-specific files (usually "system_init.c" and "system_tasks.c")
    in a configuration-specific folder under the "src/system_config" folder
    within this project's top-level folder.  An MPLAB Harmony project may have
    more than one configuration, each contained within it's own folder under
    the "system_config" folder.
 *******************************************************************************/

// DOM-IGNORE-BEGIN
/*******************************************************************************
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 *******************************************************************************/
// DOM-IGNORE-END


// *****************************************************************************
// *****************************************************************************
// Section: Included Files
// *****************************************************************************
// *****************************************************************************

#include <stddef.h>                 // Defines NULL
#include <stdbool.h>                // Defines true
#include <stdlib.h>                 // Defines EXIT_FAILURE
#include "system/common/sys_module.h"   // SYS function prototypes


// *****************************************************************************
// *****************************************************************************
// Section: Main Entry Point
// *****************************************************************************
// *****************************************************************************

int main ( void )
{
    /* Initialize all MPLAB Harmony modules, including application(s). */
    SYS_Initialize ( NULL );
```

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    while ( true )
    {
        /* Maintain state machines of all polled MPLAB Harmony modules. */
        SYS_Tasks ( );
    }

    /* Execution should not come here during normal operation */

    return ( EXIT_FAILURE );
}


/*******************************************************************************
 End of File
*/
```