

# Wo, wie, was

Die main.c ist bereits vorgefertigt. Wo ergänzen wir welche Programmteile?

```
/* USER CODE BEGIN Header */
/**
 * *****
 * @file      : main.c
 * @brief     : Main program body
 * *****
 * @attention
 *
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 *
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 *
 *          opensource.org/licenses/BSD-3-Clause
 *
 * *****
 */
/* USER CODE END Header */

/* Includes -----*/
#include "main.h"

/* Private includes -----*/
/* USER CODE BEGIN Includes */
/* USER CODE END Includes */

/* Private typedef -----*/
/* USER CODE BEGIN PTD */
/* USER CODE END PTD */

/* Private define -----*/
/* USER CODE BEGIN PD */
/* USER CODE END PD */

/* Private macro -----*/
/* USER CODE BEGIN PM */
/* USER CODE END PM */

/* Private variables -----*/

/* USER CODE BEGIN PV */
int global=0;
/* USER CODE END PV */

/* Private function prototypes -----*/
void SystemClock_Config(void);
static void MX_GPIO_Init(void);
/* USER CODE BEGIN PFP */
/* USER CODE END PFP */
```

<= globale Variablen

```

/* Private user code -----*/
/* USER CODE BEGIN 0 */
void setBitGPIOC(int Bit) <= Unterprogramm
{ GPIOC->BSRR=Bit; }
/* USER CODE END 0 */

/**
 * @brief The application entry point.
 * @retval int
 */
int main(void)
{
    /* USER CODE BEGIN 1 */
    int alt, neu; <= Lokale Variablen
    /* USER CODE END 1 */

    /* MCU Configuration-----*/
    /* Reset of all peripherals, Initializes the Flash interface and the Systick. */
    HAL_Init();

    /* USER CODE BEGIN Init */
    /* USER CODE END Init */

    /* Configure the system clock */
    SystemClock_Config();

    /* USER CODE BEGIN SysInit */
    /* USER CODE END SysInit */

    /* Initialize all configured peripherals */
    MX_GPIO_Init();
    /* USER CODE BEGIN 2 */
    RCC->AHBENR|=0b111; <= Initialisierungen
    GPIOC->MODER=0b010101;
    /* USER CODE END 2 */

    /* Infinite loop */
    /* USER CODE BEGIN WHILE */
    while (1)
    {
        while(HAL_GPIO_ReadPin(GPIOB,GPIO_PIN_0)==0);
        GPIOC->ODR++;
        if (GPIOC->ODR>6) GPIOC->ODR=1;
        while(HAL_GPIO_ReadPin(GPIOB,GPIO_PIN_0)==1);
        GPIOC->ODR++;
        if (GPIOC->ODR>6) GPIOC->ODR=1;

        /* USER CODE END WHILE */

        /* USER CODE BEGIN 3 */
    }
    /* USER CODE END 3 */
}

```

<= Endlosprogramm