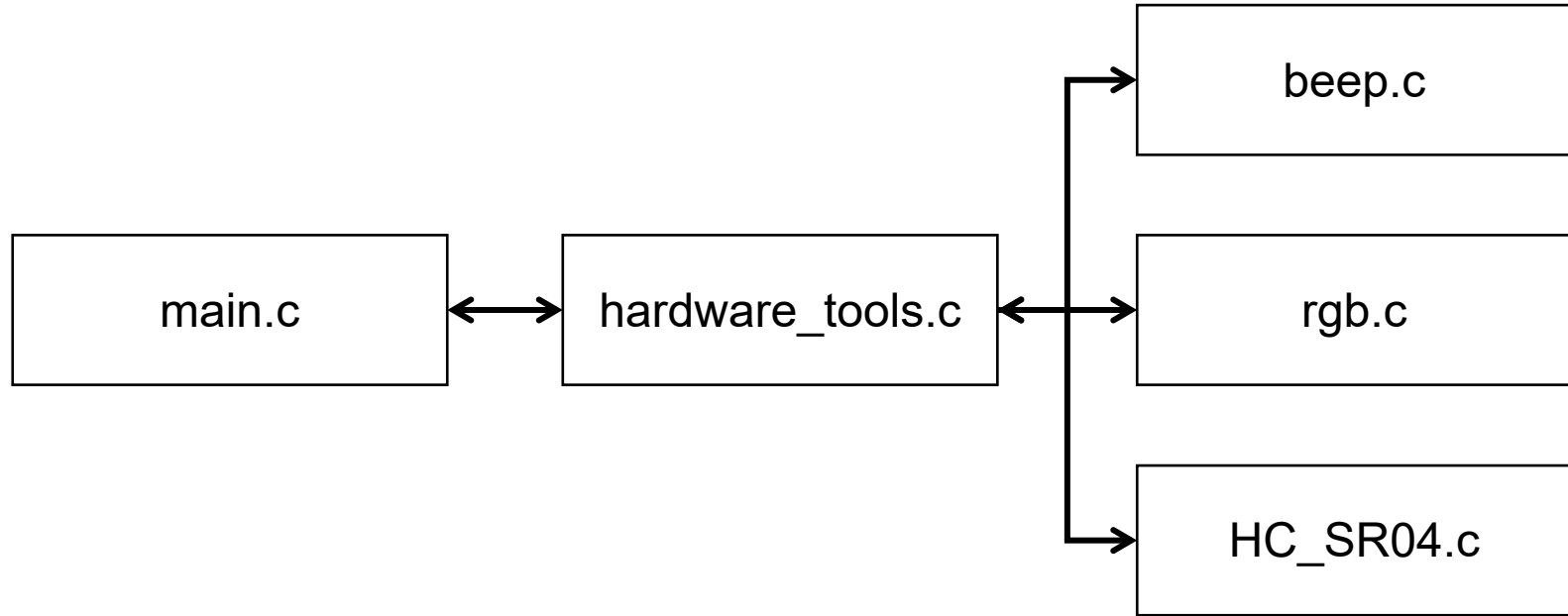




3 - STM32 SENSORS

System Design and Intelligent Manufacture
2019 Spring

Structure of Code



Structure of Code

main.c

```
while (1)
{
    //TO DO: get the distance between object and hc-sr04

    //TO DO: if object appears, declare a state of emergency, else declare a state of normal. Tips: finish hardware_tools.c first.
    /*if()
    {}
    else
    {}*/
}
}
```

Structure of Code

hardware_tools.c

```
void hardware_init()  
{  
    //TO DO: initial the beep, HC-SR04 module and RGB module  
}  
  
void display(u8 mode)  
{  
    switch(mode)  
    {  
        case NORMAL_STATE:  
            //TO DO: set the color of rgb to RED.  
  
            break;  
        case EMERGENCY_STATE:  
            //TO DO: flash rgb and display the beep  
            /*for(i=0;i<3;i++)  
            {}*/  
            break;  
        case ERROR_STATE:  
            //TO DO: try your best  
            break;  
    }  
}
```

Structure of Code

rgb.c

beep.c

```
//flash when declare the emergency state  
void RGB_flash()  
{  
    //TO DO: flash the rgb led  
}
```

```
//display when declare the emergency state  
void BEEP_display(void)  
{  
    //TO DO: display the beep  
}
```