



Sample solution for the weekly exercise of TU9-MOOC Week 4: From Smart Materials to Smart Factory

```
#include <stdio.h>
#include <string.h>
#include "agents.h"

void HandleMessage(Message msg)
{
    Message Answer;
    int intErrorNo;

    //Message: GetStatus
    if(msg.Action == GetStatus)
    {
        //Checking for Errors
        intErrorNo=CheckForError();

        //Errors found
        if(intErrorNo)
        {
            strcpy(Answer.szContent,szErrorMessages);
            Answer.Action=ReportStatusError;
            SendMessage(Answer);
        }

        //No Errors found

        else
        {
            Answer.Action=ReportStatusOk;
            strcpy(Answer.szContent,szErrorMessages);
            SendMessage(Answer);
        }
    }

    //Unknown command
    else
    {
        Answer.Action=UnknownCommand;
        strcpy(Answer.szContent,"Empty");
        SendMessage(Answer);
    }
}

int CheckForError()
{
    //Count Number of Errors
    int intErrorCount = intErrors[0]+intErrors[1]+intErrors[2];

    //OK if no errors
    if (intErrorCount==0)
        strcpy(szErrorMessages,"Empty");
}
```



```
//Errors
    else if (intErrorCount>0)
    {
        strcpy(szErrorMessages,"Error in Module");

//Error in Module 1
        if (intErrors[0])
            strcat(szErrorMessages," 1");
//Error in Module 2
        if (intErrors[1])
            strcat(szErrorMessages," 2");
//Error in Module 3
        if (intErrors[2])
            strcat(szErrorMessages," 3");
    }

    return intErrorCount;
}
// end of listing
```

For questions and problems with this exercise / solution please refer to rehberger@ais.mw.tum.de