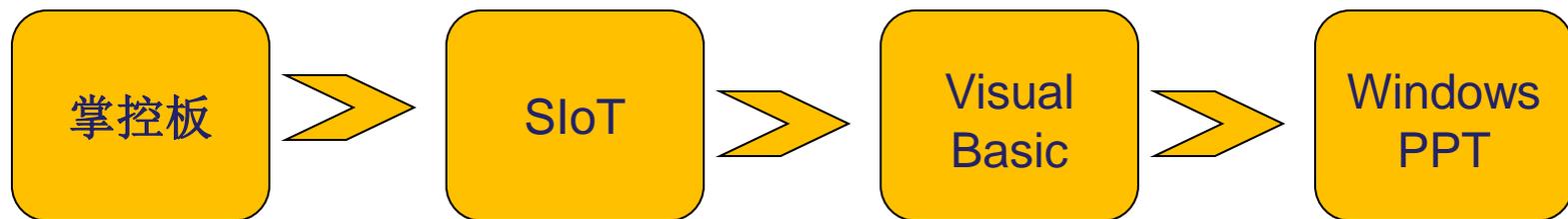


掌控板PPT翻页笔

—— 创客教育 ——

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1、实现思路



2、掌控板编程

(1) 连接网络，并连接到SIoT服务器



2、掌控板编程

(2) 封装OLED屏显示函数



2、掌控板编程

(3) 绑定各个按键事件

The image shows two event-driven code blocks for a DFRobot board. Each block starts with a trigger event: '当触摸键 P 被 触摸 时' (When key P is touched) and '当触摸键 N 被 触摸 时' (When key N is touched). The first block contains two actions: '发布 "LEFT" 至主题 "DFRobot/mouseandkeyborad"' (Broadcast 'LEFT' to topic 'DFRobot/mouseandkeyborad') and 'show 与: text "方向左键"' (Show with: text '方向左键'). The second block contains two actions: '发布 "RIGHT" 至主题 "DFRobot/mouseandkeyborad"' (Broadcast 'RIGHT' to topic 'DFRobot/mouseandkeyborad') and 'show 与: text "方向右键"' (Show with: text '方向右键').

```
当触摸键 P 被 触摸 时
执行
  发布 "LEFT" 至主题 "DFRobot/mouseandkeyborad"
  show 与:
    text "方向左键"

当触摸键 N 被 触摸 时
执行
  发布 "RIGHT" 至主题 "DFRobot/mouseandkeyborad"
  show 与:
    text "方向右键"
```

2、掌控板编程

(3) 绑定各个按键事件

The image displays two event-driven code blocks for a control board. Each block starts with an event trigger: '当触摸键 T 被 触摸 时' (When touch key T is touched) and '当触摸键 H 被 触摸 时' (When touch key H is touched). The first block's execution sequence is: '发布 "UP" 至主题 "DFRobot/mouseandkeyborad"' (Broadcast 'UP' to topic 'DFRobot/mouseandkeyborad'), followed by 'show 与: text "方向上键"' (show with: text '方向上键'). The second block's execution sequence is: '发布 "DOWN" 至主题 "DFRobot/mouseandkeyborad"' (Broadcast 'DOWN' to topic 'DFRobot/mouseandkeyborad'), followed by 'show 与: text "方向下键"' (show with: text '方向下键').

```
当触摸键 T 被 触摸 时  
执行  
  发布 "UP" 至主题 "DFRobot/mouseandkeyborad"  
  show 与:  
    text "方向上键"  
  
当触摸键 H 被 触摸 时  
执行  
  发布 "DOWN" 至主题 "DFRobot/mouseandkeyborad"  
  show 与:  
    text "方向下键"
```

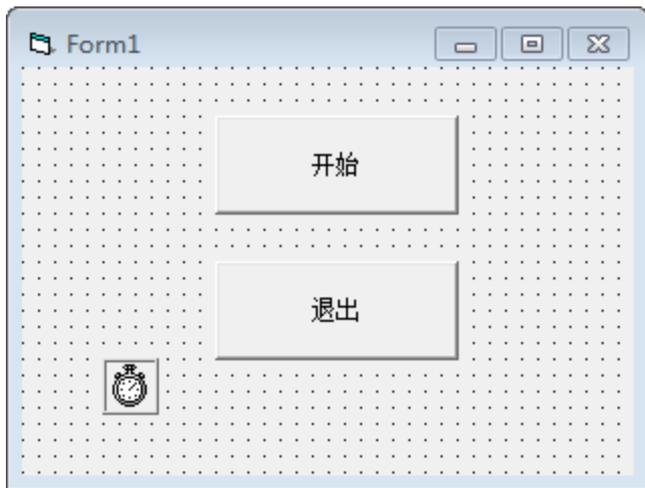
2、掌控板编程

(3) 绑定各个按键事件



3、Visual Basic编程

(1) 添加“开始”和“退出”两个命令按钮，和一个定时器



3、Visual Basic编程

(2) 定时器Enable初始状态设置为：False，点击“开始”按钮后，才启动定时器。

退出按钮，直接退出程序

```
48 Private Sub Command1_Click()  
49     Timer1.Enabled = True  
50 End Sub  
51  
52 Private Sub Command2_Click()  
53     End  
54 End Sub  
55
```

3、Visual Basic编程

(3) 定时器重复执行:

- ①请求获取SIoT最新一条消息记录
- ②解析接收到的JSON数据（截取）
- ③判断接收到消息字符
- ④根据不同的字符，执行不同的Windows操作

3、Visual Basic编程

(4) 定时器关键代码:

```
Set xmlhttp = CreateObject("MSXML2.ServerXMLHTTP") '成功
strUrl = "http://192.168.100.7:8080/lastmessage?topic=DFRobot/mouseandkeyborad@iname=siot@ipwd=dfrobot" '请求服务器
xmlhttp.open "GET", strUrl, False
xmlhttp.send
If xmlhttp.ReadyState = 4 Then
    responseStr = xmlhttp.responseText '服务器返回的JSON数据 形如{"code":1,"data":[{"ID":102,"Topic":"DFRobot/mous
    pos1 = InStr(1, responseStr, search1, 1)
    pos2 = InStr(1, responseStr, search2, 1)
    msg = Mid(responseStr, pos1 + 10, pos2 - 3 - pos1 - 10) '截取获取siot的消息msg

    posID1 = InStr(1, responseStr, searchID1, 1)
    posID2 = InStr(1, responseStr, searchID2, 1)
    ID = Mid(responseStr, posID1 + 4, posID2 - 3 - posID1 - 3)
    If ID <> IDpre Then '为了防止请求到的消息不是同一条消息，需要对比消息ID，IDpre是全局变量
        IDpre = ID
        Rem 键盘操作
        If msg = "LEFT" Then
            SendKeys "{LEFT}"
        ElseIf msg = "RIGHT" Then
            SendKeys "{RIGHT}"
        ElseIf msg = "UP" Then
            SendKeys "{UP}"
        ElseIf msg = "DOWN" Then
            SendKeys "{DOWN}"
        ElseIf msg = "F5" Then
            SendKeys "{F5}"
        ElseIf msg = "ESC" Then
            SendKeys "{ESC}"
        ElseIf msg = "ENTER" Then
            SendKeys "{ENTER}"
        End If
    End If
End If
Set xmlhttp = Nothing
```