```
memclear
serialprintln ""
serialprintln "Esp8266-Mcu Initialising......"
ver$ = "ESP8266-Mcu 0.8"
prompt$ = "getdata:"
serialflush
serialtimeout 2000
timesetup(11,0)

gosub [getinfo]
f1 = 23.3
f2 = 78
f3 = 10
f4 = 1008
f5 = 23.3
f6 = 78
f7 = 12.6
f8 = 18.6
f9 = 120
f10 = 90
f11 = "0"
f12 = "0"
f13 = "0"
f14 = "0"
f15 = "0"

cls
wprint "<head>"
wprint "<meta http-equiv='refresh' content='15;URL=/input?'>"
wprint "</head>"
print "uMite Serial Network Server"
print
wprint "<br>"
wprint "Weather Station"
wprint "<br>"
wprint "Temperature="
wprint htmlvar(f1)
wprint " 'C "
wprint " Humidity="
wprint htmlvar(f2)
wprint " %RH"
wprint "<br>"
wprint " Avg Wind Speed="
wprint htmlvar(f3)
wprint " km/h"
wprint " Pressure="
wprint htmlvar(f4)
wprint " hpa"
wprint "<br>"
wprint "<br>"
wprint "GreenHouse"
wprint "<br>"
wprint "Temperature="
wprint htmlvar(f5)
wprint " 'C "
```

```
wprint " Humidity="
wprint htmlvar(f6)
wprint " %RH"
wprint "<br>"
wprint "<br>"
wprint "Garden Solar"
wprint "<br>"
wprint "Battery="
wprint htmlvar(f7)
wprint " VDC "
wprint " PV Panels="
wprint htmlvar(f8)
wprint " VDC"
wprint "<br>"
wprint "Battery Power Used="
wprint htmlvar(f9)
wprint " wHrs "
wprint " PV Power Gen="
wprint htmlvar(f10)
wprint " wHrs "
wprint "<br>"
wprint "<br>"
button "Exit" [quit]
button "Weather" [weather]
timer 6000 [update]
wait

[update]
timer 0
input prompt$ str$
'serialprintln len(str$)
if len(str$) = 1 then goto [exitupdate]
if instr(str$,"sync:") > 0 then goto [parsedata]
gosub [parse]
cmd = field$
goto [command]
[parsedata]
gosub [parse]
sstatus = field$
gosub [parse]
f1 = field$
gosub [parse]
f2 = field$
gosub [parse]
f3 = field$
gosub [parse]
f4 = field$
gosub [parse]
f5 = field$
gosub [parse]
f6 = field$
gosub [parse]
f7 = field$
gosub [parse]
f8 = field$
```

```
gosub [parse]
f9 = field$
gosub [parse]
f10 = field$
gosub [parse]
cmd = field$
[command]
if cmd == "time" then gosub [gettime] else [exitupdate]
if cmd == "email" then gosub [sendemail] else [exitupdate]
if cmd == "info" then gosub [getinfo] else [exitupdate]
if cmd == "quit" then goto [quit]
if cmd == "reboot" then reboot
if cmd == "net" then gosub [setnet]
if cmd == "ts" then gosub [thingspeak]
[exitupdate]
timer 6000 [update]
wait

[thingspeak]
input "gettsdata:" str$
gosub [parse]
sstatus = field$
gosub [parse]
ts.key$ = field$
gosub [parse]
ts.fieldnum$ = field$
gosub [parse]
ts.fielddata$ = field$
sendts(ts.key$,ts.fieldnum$,ts.fielddata$)
prompt$ = "getdata:"
return

[setnet]
input "getnetwork:" str$
gosub [parse]
sstatus = field$
gosub [parse]
net.name$ = field$
gosub [parse]
net.password$ = field$
gosub [parse]
net.ip$ = field$
gosub [parse]
net.gateway$ = field$
gosub [parse]
net.mask$ = field$
if net.ip$ == "" then [auto] else [static]
[static]
connect net.name$ net.password$ net.ip$ net.gateway$ net.mask$
goto [exitsetnet]
[auto]
connect net.name$ net.password$
[exitsetnet]
gosub [getinfo]
return
```

```
[sendemail]
input "getemail:" str$
gosub [parse]
sstatus = field$
gosub [parse]
address$ = field$
gosub [parse]
reply$ = field$
gosub [parse]
subject$ = field$
gosub [parse]
body$ = field$
email address$ reply$ subject$ body$
prompt$ = "getdata:"
return

[getinfo]
prompt$ = "busy:"
serialprintln ""
serialprint "Version:"
serialprintln ver$
serialprint "IP:"
serialprintln ip()
read "WIFIname" blaWIFIssid
serialprint "SSID:"
serialprintln blaWIFIssid
serialprint "FlashFree:"
serialprintln flashfree()
serialprint "RamFree:"
serialprintln ramfree()
prompt$ = "getdata:"
return

[gettime]
prompt$ = "busy:"
ntp$ = time()
ntp$ = "NTP:" & ntp$
serialprintln ntp$
prompt$ = "getdata:"
return

[parse]
field$ = ""
[search]
delim = instr(str$,":")
[found]
field = delim - 1
delim = delim + 1
rest = len(str$) - delim
field$ = left(str$,field)
rest$ = right(str$,rest)
str$ = rest$
[exitparse]
return
```

```
[weather]
cls
bla =
"api.openweathermap.org/data/2.5/weather?q=Melbourne,AU&units=metric&appid=your-api-key"
serialprint wget(bla)
return

[quit]
timer 0
wprint "<a href='/'>Menu</a>"
end
```