

1. Download Arduino IDE from <https://www.arduino.cc>
2. Download  
[https://github.com/exploitagency/esp8266FTPServer/archive/feature/bbx10\\_speedup.zip](https://github.com/exploitagency/esp8266FTPServer/archive/feature/bbx10_speedup.zip)
3. Download <https://github.com/exploitagency/ESPloitV2.git>
4. Extract the files from ESPloitV2 in a sub folder. Remember the location.
5. Install Arduino
6. Open Arduino
7. Open menu File
8. Click on Preferences
9. In the field Additional Board Manager URLs, enter the following:  
[http://arduino.esp8266.com/stable/package\\_esp8266com\\_index.json](http://arduino.esp8266.com/stable/package_esp8266com_index.json)
10. Click on OK
11. Click on menu Sketch
12. Hover over on Include Library
13. Click on Manage Libraries
14. In the search field, write ArduinoJSON
15. ArduinoJSON from Benoit Blanchon should appear
16. Click on "Select version", and browse to 5.11.0
17. Click "Install"
18. When done, click on Close in the lower right corner
19. Click on menu Tools
20. Hover over on Board (perhaps: Board: "LilyPad Arduino USB")
21. Click on Boards Manager
22. In the search field, write 8266, and wait a second OR press on Enter
23. esp8266 should appear. If not, go back to step 7, and verify the URL in step 9
24. Click on "Select version", and browse to 2.3.0
25. Click "Install"
26. When done, click Close in the lower right corner
27. Click on menu Sketch
28. Hover over Include Library
29. Click on Add .ZIP Library
30. Browse to the folder, where you saved the file, you downloaded in step 2
31. Select the file you downloaded in Step 2

Now, Arduino is prepared to fulfill the flashing procedure

32. Click on menu File
33. Click on Open
34. Browse to the folder from Step 4
35. Enter the subfolder ESPloitV2-master
36. Enter the subfolder flashing
37. Enter the subfolder esp8266Programmer
38. Double Click on the file esp8266Programmer
39. Open a new instance of Arduino
40. Click on Open

41. Browse to the folder from Step 4
42. Enter the subfolder ESplloitV2-master
43. Enter the subfolder Source
44. Enter the subfolder ESP\_Code
45. Double click on the file ESP\_Code
46. Open a new instance of Arduino
47. Click on Open
48. Browse to the folder from Step 4
49. Enter the subfolder ESplloitV2-master
50. Enter the subfolder Source
51. Enter the subfolder Arduino\_32u4\_Code
52. Double click on the file Arduino\_32u4\_Code
53. Make sure, only three instances of Arduino are running. If there are more, please close those who have files, that are opened in other instances
54. Arrange the three instances so you can see them altogether

Now, all the files, needed to create a BIN file, which is your first goal, are loaded.

55. Insert your WHID Cactus into a free USB port.
56. Click on the instance, that has loaded the esp8266Programmer file
57. Click on menu Tools
58. Hover over Board
59. Hover over Arduino AVR Boards
60. Click on Arduino Lilypad USB
61. Click on menu Tools
62. Hover over Port
63. Click on the port, that has detected your WHID Cactus (by the name of Arduino Lilypad USB)
64. Click on the arrow that points to right at the top of the window, just above the tab that contains the name of the file you opened (esp8266Programmer)
65. Wait for the sketch to be uploaded. This does not take more than 10 seconds
66. Close the Arduino instance that contains the esp8266Programmer file

Now, the first part is done

67. Click on the instance of Arduino, that has loaded the ESP\_Code (and a few other tabs)
68. Click on the menu Tools
69. Hover over Board
70. Hover over ESP8266 Modules
71. Click on Generic ESP8266 Module
72. Click on the menu Tools
73. Hover over Flash Size
74. Click on 4M (3M SPIFFS)
75. Click on menu Sketch
76. Click on Export Compiled Binary
77. Wait for the Binary file to be compiled. This should not take more than 15 seconds

Now, the second part is done, you have a binary file to upload to your USB key

78. Download Nodemcu Flasher from <https://github.com/nodemcu/nodemcu-flasher>

79. Extract the ZIP-file
80. Enter the folder where you extracted the Nodemcu Flasher
81. Enter subfolder Win64
82. Enter subfolder Release
83. Rightclick on ESP8266Flasher
84. Click "Run as administrator"
85. Confirm you want to run the program as administrator
86. Switch back to Arduino
87. Click on menu Tools
88. Hover over Port
89. Take a note on which port your Lilypad Arduino USB is found
90. Switch back to Nodemcu Flasher
91. On tab Operation, select the port you found in Step 87
92. Click on tab Config
93. Click on the wheel behind the first line
94. Browse to the folder from Step 4
95. Enter the subfolder ESPloitV2-master
96. Enter the subfolder Source
97. Enter the subfolder ESP\_Code
98. Double click on the file ESP\_Code.ino.generic.bin
99. Make sure, the field right to the wheel contains the text 0x00000
100. Click on the tab Advanced
101. Select the Baud rate 115200
102. Select the Flash size: 512Kbyte
103. Select the Flash speed: 40MHz
104. Select the SPI Mode: DIO
105. Click on the tab Operation
106. Click on the button Flash(F)
107. Wait for the operation to complete, this might take one minute, or perhaps two

Now, your USB key is flashed. DO NOT REMOVE IT FROM YOUR USB PORT

108. Switch back to Arduino, this time the instance that contains the Arduino\_32u4\_Code
109. Click on menu Tools
110. Hover over Board
111. Hover over Arduino AVR Boards
112. Click on Lilypad Arduino USB
113. Click on menu Tools
114. Hover over Port
115. Click on the port, your USB key is connected to
116. Click on the error that points to right at the top of the window, just above the tab that contains the name of the file you opened (Arduino\_32u4\_Code)

Now you should be finished!

