

Wireless Connectivity to Arduino

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



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- **Configure and upload code on ESP8266-01 module**



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- **Establish Wireless Communication between ESP and other devices**



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To follow this tutorial, you should have basic knowledge of:



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To follow this tutorial, you should have basic knowledge of:

- Electronics
- C or C++ programming language
- Wireless Communication



System Requirements

To record this tutorial, I am using



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- **Arduino UNO board**



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- Arduino UNO board
- Ubuntu Linux 16.04 OS



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- Arduino UNO board
- Ubuntu Linux 16.04 OS
- **Arduino IDE**



External Components Required



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- **ESP8266-01 Wi-Fi module**



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- **Breadboard**



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- **Jumper Wires**



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- **ESP8266-01 Wi-Fi module**
- **Breadboard**
- **Jumper Wires**
- **Push Button**



ESP8266-01 Module



About ESP8266 - 01 Module



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- It has a UART and 2 GPIO pins (General Purpose Input/Output)
- It is widely used for development of IoT applications



Summary



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- **Configure and upload code on ESP8266-01 module**
- **Establish Wireless Communication between ESP and other devices**



Assignment

- 1 Check if your PC or laptop has **Wireless Connectivity** and do the below steps
- 2 On the top right corner, click on **WiFi icon**
- 3 Select **WIFI_ESP8266_Your SSID** and enter the password



Assignment (cont.)

- 4 Open the browser and go to **192.168.4.1**
- 5 Select the button and see the output on the ESP8266-01 module



About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Forum for specific questions

- Do you have questions in THIS Spoken Tutorial?
- Please visit <http://forums.spoken-tutorial.org>
- Choose the minute and second where you have the question
- Explain your question briefly
- Someone from our team will answer them



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