

CS4ALL Cybersecurity Virtual Workshop

Internet of Things (IoT)

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Topics

- ☀ **What is IoT?**
- ☀ **Where is IoT Used?**
- ☀ **The Internet of Thing in K-12**
- ☀ **IoT Programming Languages**
- ☀ **Quizlet - IoT Flash Cards, Tests, and Teacher Resources**
- ☀ **Resources**

Internet of Things

☀️ **The Internet of things (IoT) is a system of interrelated computing devices, mechanical and digital machines provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.**



☀️ **Internet of things – Wikipedia**
https://en.wikipedia.org/wiki/Internet_of_Things

Internet of Things For Beginners

💡 **The Internet of Things (IOT) is a network of physical objects or people called " things " that are embedded with software, electronics, network, and sensors which allows these objects to collect and exchange data.**



💡 **Internet of Things (IoT) Tutorial for Beginners**
<http://guru99.com/iot-tutorial.html>

Where is IoT Used?



IoT devices can be used to monitor and control the mechanical, electrical and electronic systems used in various types of buildings (e.g., public and private, industrial, institutions, or residential) in home automation and building automation systems.



Internet of things – Wikipedia

[wikipedia.org/wiki/Internet_of_Things](https://www.wikipedia.org/wiki/Internet_of_Things)

10 Best IoT Programming Languages

1. **Assembler** - For compact projects.
2. **B#** - Small IoT project favorite.
3. **C** - The base IoT language.
4. **C++** - Additional layers.
5. **Go Lang** - Great with data.
6. **JavaScript** - The all-around IoT performer.
7. **Java** - Return on investment.
8. **Parasail** - Evolved language.
9. **Python** - For database-based apps.
10. **Rust** - For concurrent programming.



10 Best IoT Programming Languages

<https://www.cuelogic.com/blog/10-best-iot-programming-languages/>

Kajeet - The Internet of Things in K-12



Kajeet.Net

<https://www.kajeet.net/extracurricular/the-internet-of-things-in-k-12>

Quizlet - IoT Flashcards

☀️ **Quizlet – IoT Test**

<https://quizlet.com/245540959/test>

☀️ **Quizlet – Teachers**

<https://quizlet.com/teachers>

☀️ **Quizlet – IoT Flashcards**

<https://quizlet.com/245540959/iot-final-exam-flash-cards/>

☀️ **10 Best IoT Programming Languages**

<https://www.cuelogic.com/blog/10-best-iot-programming-languages/>

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