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1.1 Defining IoT
1.2 Data flow in IoT
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2. Sensors and Actuators

2.1 Introduction
2.2 Sensors
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3. Arduino

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3.2 Arduino Internals
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3.4 Arduino C Programming
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4.2 Pi Internals
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4.3 Tools used.
4.4 Python basics

5. Protocols

5.1 IoT Hardware protocols.
5.2 Wireless protocols.
5.3Wired protocols.
5.4 IPv4 and IPv6.
5.5 IoT protocols.
5.6 Software Protocols.

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6. Communication using Middleware and platform

6.1 Queues
6.2. Message Transformation.
6.3 AWS Message Communication.
6.4 AWS hands-on
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7. IoT Device Management.

7.1 Device Management fundamentals.
7.2 Protocols
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8.1 Node-red fundamentals
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8.3 Node.js basics
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8.5 Cloud Integration.
8.6 Device control from cloud.
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9. AWS IOT Suite

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9.3 AWS Lambda.
9.4 AWS security.
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10 IOT Analytics.

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- 10.2 Dash boarding
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- 10.4 ML fundamentals
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11 IOT Solution and Security.

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- 11.3 Case Studies.
- 11.4 Application Security
- 11.5 Device security.
- 11.6 Transport Security.
- 11.7 Challenges.
- 11.8 Best practices.
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- 12.2 OPC basics.
- 12.3 Scada system basics.
- 12.4 OPC UA
- 12.5 Machine Learning basics.

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- 13.1 Platform internals.
- 13.2 Platform Expectations.