

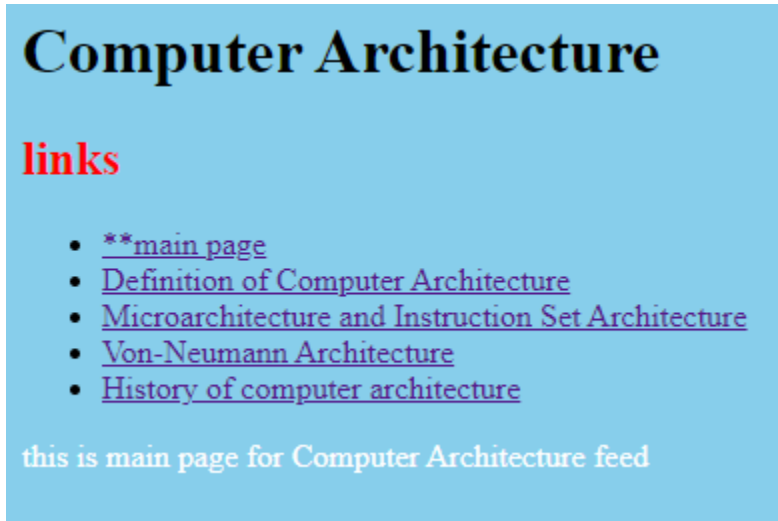
Name	محمد صابر عبدالرحمن عبدالمقصود
B.N	732
Topic	Computer Architecture
Github link	https://github.com/mohammed20807/ECE001
Github page	https://mohammed20807.github.io/ECE001/

"Application brief "

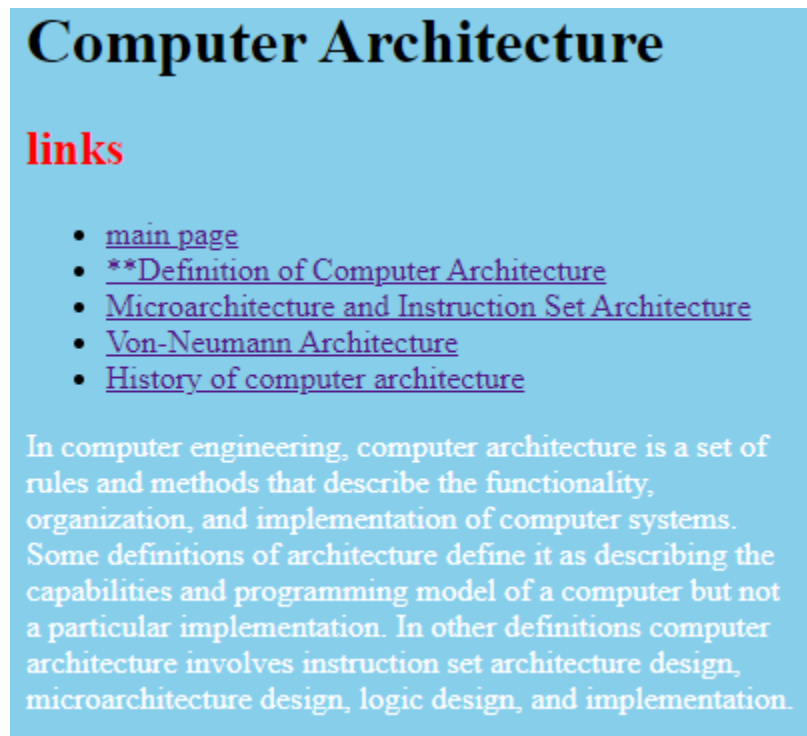
Computer architecture consists of rules and methods or procedures which describe the implementation, functionality of the computer systems. Architecture is built as per the user's needs by taking care of the economic and financial constraints. Earlier architecture is designed on paper built with hardware form.

After it is built-in transistor-transistor logic the architecture is built, tested and formed in the hardware form. We can define computer architecture based on its performance, efficiency, reliability, and cost of the computer system. It deals with software and hardware technology standards. The computer system has the processor, memory, I/O devices and communication channels that connect to it.ⁱ

"Screenshots"



Index



Computer Architecture

links

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- [Definition of Computer Architecture](#)
- [**Microarchitecture and Instruction Set Architecture](#)
- [Von-Neumann Architecture](#)
- [History of computer architecture](#)

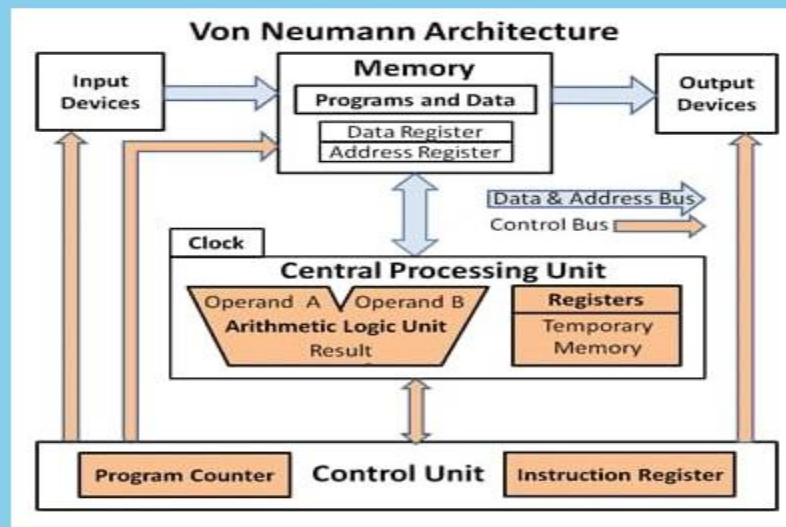
Microarchitecture	Instruction Set Architecture
Microarchitecture is known as computer organizations and it is the way when instruction set architecture is implemented with various microarchitecture and it varies because of changing technology. Microarchitecture performs in a certain way. It reads the instruction and decodes it, will find parallel data to process the instruction and then will process the instruction and output will be generated.	to make up the architecture, instruction set architecture is needed because it has a set of instructions that the processor understands. It has two instruction set one is RISC (reduced instruction set computer) and the second is CISC (complex instruction set computer). Reduced instruction set computer architecture was realized in the 90's by IBM. Instruction has multiple address modes, but programs do not use all of them that is the reason multiple address modes were reduced. This helps the compiler to easily write the instructions, performed is increased.

P2

Computer Architecture

links

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- [History of computer architecture](#)



P3

Computer Architecture

links

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The first documented computer architecture was in the correspondence between Charles Babbage and Ada Lovelace, describing the analytical engine. When building the computer Z1 in 1936, Konrad Zuse described in two patent applications for his future projects that machine instructions could be stored in the same storage used for data, i.e., the stored-program concept.

"Source Code"

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Computer Architecture</title>
5 </head>
6 <body bgcolor="skyblue">
7 <h1>Computer Architecture</h1>
8 <h2 style="color:red">links</h2>
9 <ul>
10 <li><a href="index.html">**main page</a></li>
11 <li><a href="Definition of Computer Architecture.html">Definition of Computer Architecture</a></li>
12 <li><a href=" Microarchitecture and Instruction Set Architecture.html">Microarchitecture and Instruction Set Architecture</a></li>
13 <li><a href="Von-Neumann Architecture.html">Von-Neumann Architecture</a></li>
14 <li><a href="History of computer architecture.html">History of computer architecture</a></li>
15 </ul>
16 <p style="color:white"> this is main page for Computer Architecture feed</p>
17 </body>
18 </html>
```

Code of index

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Computer Architecture</title>
5 </head>
6 <body bgcolor="skyblue" style="width:20%">
7 <h1>Computer Architecture</h1>
8 <h2 style="color:red">links</h2>
9 <ul>
10 <li><a href="index.html">main page</a></li>
11 <li><a href="Definition of Computer Architecture.html">**Definition of Computer Architecture</a></li>
12 <li><a href=" Microarchitecture and Instruction Set Architecture.html">Microarchitecture and Instruction Set Architecture</a></li>
13 <li><a href="Von-Neumann Architecture.html">Von-Neumann Architecture</a></li>
14 <li><a href="History of computer architecture.html">History of computer architecture</a></li>
15 </ul>
16 <p style="color:white"> In computer engineering, computer architecture is a set of
17 rules and methods that describe the functionality, organization, and implementation of computer systems.
18 Some definitions of architecture define it as describing the capabilities and programming model
19 of a computer but not a particular implementation.
20 In other definitions computer architecture involves instruction set architecture design,
21 microarchitecture design, logic design, and implementation.</p>
22 </body>
23 </html>
```

Code of p1

```

1  <!DOCTYPE html>
2  <html>
3  <head>
4    <title>Computer Architecture</title>
5  </head>
6  <body bgcolor="skyblue">
7    <h1>Computer Architecture</h1>
8    <h2 style="color:red">links</h2>
9    <ul>
10     <li><a href="index.html">main page</a></li>
11     <li><a href="Definition of Computer Architecture.html">Definition of Computer Architecture</a></li>
12     <li><a href=" Microarchitecture and Instruction Set Architecture.html">Microarchitecture and Instruction Set Architecture</a></li>
13     <li><a href="Von-Neumann Architecture.html">Von-Neumann Architecture</a></li>
14     <li><a href="History of computer architecture.html">History of computer architecture</a></li>
15   </ul>
16   <table style="width:40%" border="1">
17     <tr style="font-size:180%">
18       <td>Microarchitecture</td>
19       <td>Instruction Set Architecture</td>
20     </tr>
21     <tr style="color:white" >
22       <td>Microarchitecture is known as computer organizations and it is the way when instruction
23         set architecture is a built-in processor. Instruction set architecture is implemented with
24         various microarchitecture and it varies because of changing technology.
25       Microarchitecture performs in a certain way. It reads the instruction and decodes it, will find
26       parallel data to process the instruction and then will process the instruction and output will be generated. </td>
27       <td>o make up the architecture, instruction set architecture is needed because it has a set of instructions
28         that the processor understands. It has two instruction set one is RISC (reduced instruction set computer) and the second
29         is CISC (complex instruction set computer).
30       Reduced instruction set computer architecture was realized in the 90's by IBM. Instruction has multiple address modes, but programs
31       do not use all of them that is the reason multiple address modes were reduced. This helps the compiler to easily write the
32       instructions, performed is increased.</td>
33     </tr>
34     <tr>
35     </tr>
36   </table>
37 </body>
38 </html>

```

Code of p2

```

1  <!DOCTYPE html>
2  <html>
3  <head>
4    <title>Computer Architecture </title>
5  </head>
6  <body style="width: 20%" bgcolor="skyblue">
7    <h1>Computer Architecture</h1>
8    <h2 style="color:red">links</h2>
9    <ul>
10     <li><a href="index.html">main page</a></li>
11     <li><a href="Definition of Computer Architecture.html">Definition of Computer Architecture</a></li>
12     <li><a href=" Microarchitecture and Instruction Set Architecture.html">Microarchitecture and Instruction Set Architecture</a></li>
13     <li><a href="Von-Neumann Architecture.html">Von-Neumann Architecture</a></li>
14     <li><a href="History of computer architecture.html">History of computer architecture</a></li>
15   </ul>
16   
17 </body>
18 </html>
19
20
21
22 <!DOCTYPE html>

```

Code of p3

```

1  <!DOCTYPE html>
2  <html>
3  <head>
4    <title>Computer Architecture</title>
5  </head>
6  <body style="width: 20%" bgcolor="skyblue">
7    <h1>Computer Architecture</h1>
8    <h2 style="color:red">links</h2>
9    <ul>
10     <li><a href="index.html">main page</a></li>
11     <li><a href="Definition of Computer Architecture.html">Definition of Computer Architecture</a></li>
12     <li><a href=" Microarchitecture and Instruction Set Architecture.html">Microarchitecture and Instruction Set Architecture</a></li>
13     <li><a href="Von-Neumann Architecture.html">Von-Neumann Architecture</a></li>
14     <li><a href="History of computer architecture.html">History of computer architecture</a></li>
15   </ul>
16   <p style="color:white">
17     The first documented computer architecture was in the correspondence between Charles Babbage
18     and Ada Lovelace, describing the analytical engine. When building the computer Z1 in 1936, Konrad
19     Zuse described in two patent applications for his future projects that machine instructions could be
20     stored in the same storage used for data, i.e., the stored-program concept. </p>
21 </body>
22 </html>
23

```

Code of p4

References

ⁱ <https://www.coursera.org/learn/comparch>