Why are you all here for ?

--- Become a fullStack developer.

What is computer?

--It is a combination of a hardware and an operating system.

So we as developers what would we be doing ?

--building an application right ?

So can anybody tell me what is an application ?

An application, also referred to as an application program or application software, is a computer software package that performs a specific function directly for an end user or, in some cases, for another application.

Rules-

--Set of programs to perform dedicated functionality

--every application has it’s known file extension

--every application is either OS dependent or platform dependent.

--application acts as an interface between the user and hardware or an OS

So now tell me is JAVA an application or a programming language ?

--Java is both an application and also a programming language.

JDK is the application which is platform dependent. Java programming is platform independent(JRE).

User

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application

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OS

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Hardware

Types of application--  
 StandAlone Web

1)Present in our pc 1)present in some other pc we connected via network

2) may or maynot need 2) mandatory internet also

internet. A browser.

3) single user access 3) multiple users

Now, lets discuss about language.

Can anyone tell me what is a language ?

Set of rules and regulations

Two types-

Human understandable and computer understandable.

So, human understandable language we know. What we are

Looking for is computer understandable language.

So, computer understandable language are of two types-

Can we say

-programming language—java, c, c++ , python

-non-programming language—html, css, xml, sql

Using programming lang we can develop applications but not

By using non programming lang.

TYPES of PROGRAMMING LANG-

Statically typed- java, c (A language is statically typed if the type of a variable is known at compile time)

Dynamically types- js, python(A language is dynamically typed if the type is associated with run-time values, and not named variables/fields/etc.)

Now let’s come to what is java and why it is more preferred.

So, as I already mentioned java is a programming language. So, here we will be learning set of rules and regulations of java.

Does anyone of you know what is the 1st programming lang ?

Fortran-🡪 1954

Cobol, simula. 🡪 domain specific🡪 basically let’s say for banking is a domain, insurance is a domain, so for each of these domains we have to learn particular language .

So Cobol was designed for commerce domain. Explain a bit.

Then came c,c++ -- they were very powerful lang  
-- it was also non-domain specific but it was platform independent. But most imp disadvantage was the use of pointers in c. Let’s not go deep into c now. But pointers are something allow you to dereference whatever they point to as data of a particular type. Wrong usage of them can invoke undefined behavior, making it exclusively your responsibility to ensure that you're using them correctly.

So c was unsafe in terms of security.

That’s why Java came into being--  
Java was invented by James Gosling in June 1991.. There was a company known as sun microsystems, a small team from sun micro systems known as the Green team started working on this project.

1st it was named as Greentalk and the file extension was .gt. but then they named it “Oak” as Oak was a symbol of strength and chosen as a national tree in many countries. But they had to change it again to Java as “Oak” was a name already registered with Oak technologies.

How did they come up with the name java?

Java is an island of Indonesia where the first coffee was produced. It is kind of a espresso bean. That’s why we also have a term called bean in java. We will talk about that java bean going forward.