

# Class Based language and framework and Actor language

Prepared by:

Khouildi Mohamed heithem

## Class-Based Languages:

These programming languages follow the paradigm of object-oriented programming (OOP). They use classes and objects as fundamental concepts for organizing and structuring code. Examples include Java, C++, and Python.

## Framework:

A framework is a pre-built set of tools, libraries, and conventions that provide a structure for building applications. It offers a foundation for software development and often enforces a specific architecture or design pattern. Examples include Django (for Python), Ruby on Rails (for Ruby), and Spring (for Java).

## Actor Model:

The actor model is a programming paradigm that deals with concurrent computation. It involves actors, which are independent, autonomous entities that communicate with each other by passing messages. It is used for building concurrent and distributed systems. Examples include languages like Erlang, Elixir, and systems like Akka. In summary, "class-based languages" refer to a programming paradigm, "framework" refers to a pre-built structure for application development, and the "actor model" refers to a concurrency model.

They are not necessarily exclusive; a programming language can support classes, a framework can be built using a class-based language, and an actor model can be implemented in various programming languages.