

Introduce to Python Course

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Python



python™

Why choose it field.

- I have choose it field because Python's high demand, strong community support, an abundance of libraries and frameworks and strong job growth are just a few of the reasons.
- Python is the top preferred language for data science and research.
- Python can be used for tasks, such as web development, data analysis, machine learning, game development, GUI application, and many more.



Learning in growth

- Python's popularity in data science and machine learning is probably the main driver of its fast growth.
- The benefits of Python for building Machine Learning systems and the major tools and frameworks typically used to solve Machine Learning problems.
- EX: 1) Django: Django is a free and open-source, Python-based web framework that runs on a web server. It follows the model–template–views architectural pattern.
- 2) Flask
- 3) CherryPy



Where is Python used in daily life?

Top Uses of Python in the Real World

- Web Development.
- Data Science.
- Artificial Intelligence and Machine Learning.
- Game Development.
- Software Development.



History of Python

Python 1

- Python 1 launched in 1994 with new features for functional programming, including lambda, map, filter and reduce.
- It also included features from 0.9 Python, including classes with inheritance, exception handling, functions, and the core data types list, dict, str.



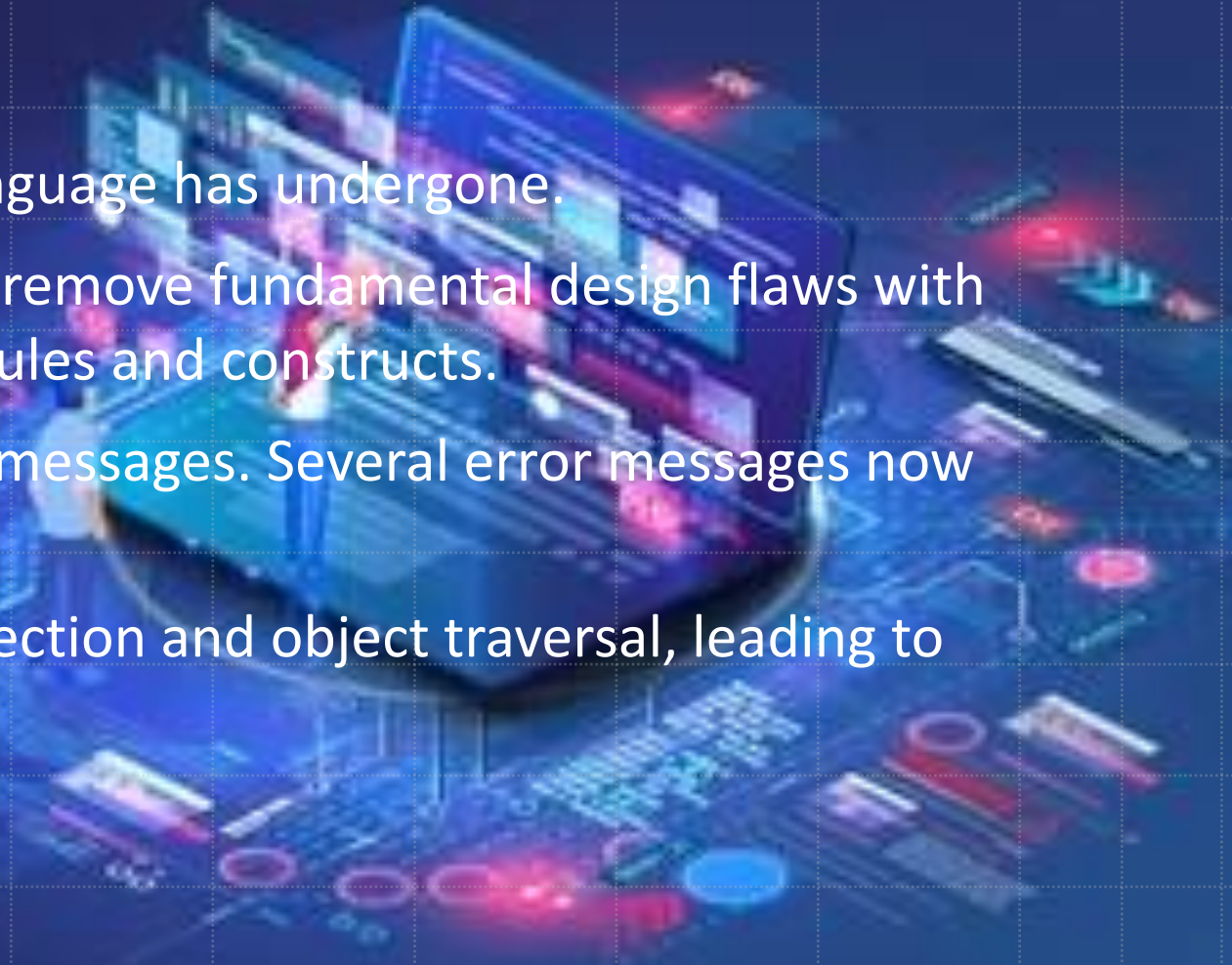
Python 2

- Python 2 launched in 2000 with big changes to source code storage.
- It introduced many desired features like unicode support, list comprehension, and garbage collection.



Python 3

- Python 3.0 is the **biggest change** the language has undergone.
- The main mission of the update was to remove fundamental design flaws with the language by deleting duplicate modules and constructs.
- This update introduced improved error messages. Several error messages now come with helpful suggestions.
- This update also optimized garbage collection and object traversal, leading to better overall memory management.



What's the future of Python

- In 2019, Python was declared as the fastest-growing programming language in the world, and it now has one of the **largest programming communities**. This growth is expected to continue following the 2020 lockdowns, which spiked a surge in AI, automation technologies, and data science tracking.
- This naturally leads many to invest heavily in data science predictive analytics, even in **non-tech sectors** like tourism, real estate, health care, and more.
- In 2024, Python stands as a versatile, powerful, and accessible programming language that opens numerous doors in the tech industry.

Thank You!!!

