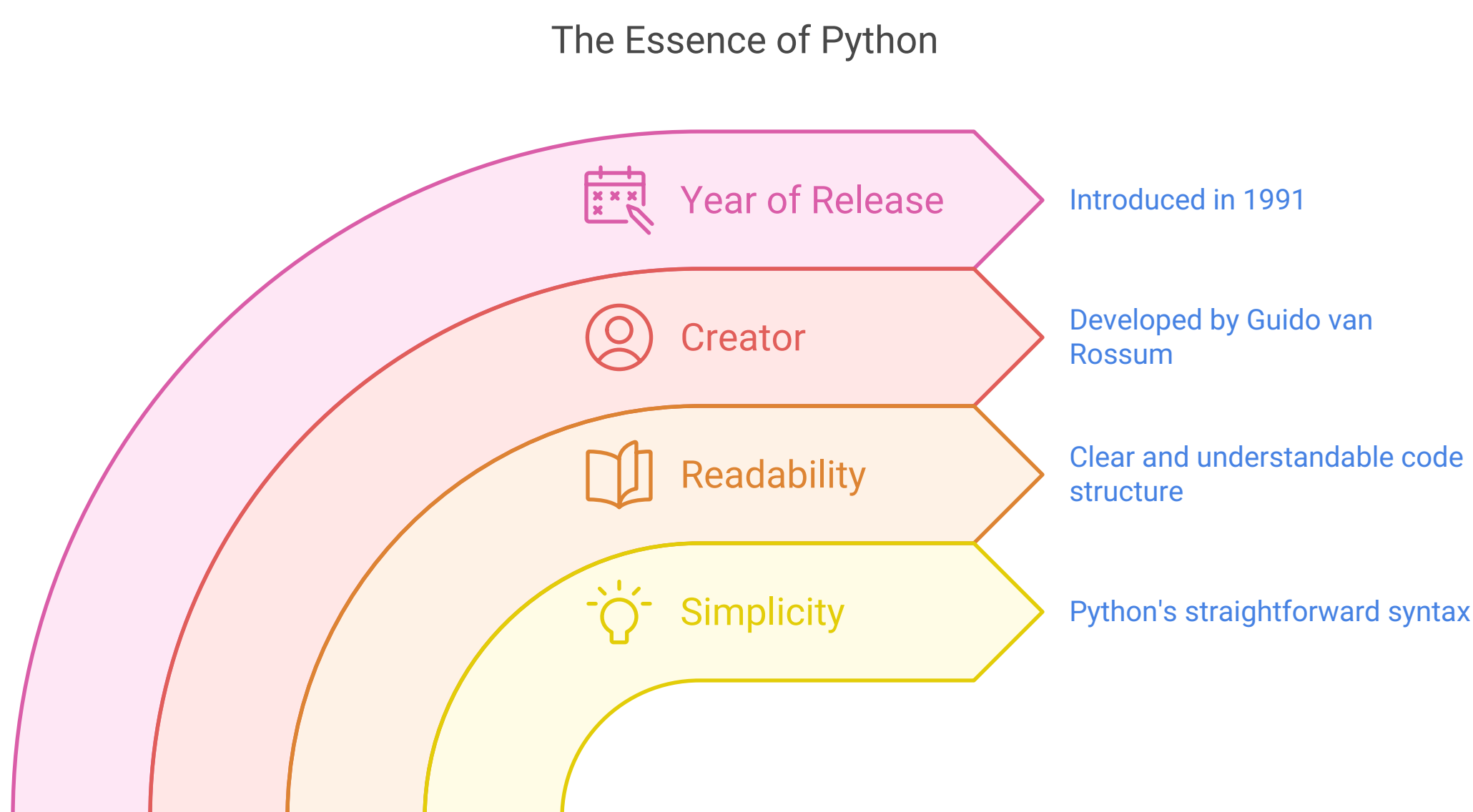


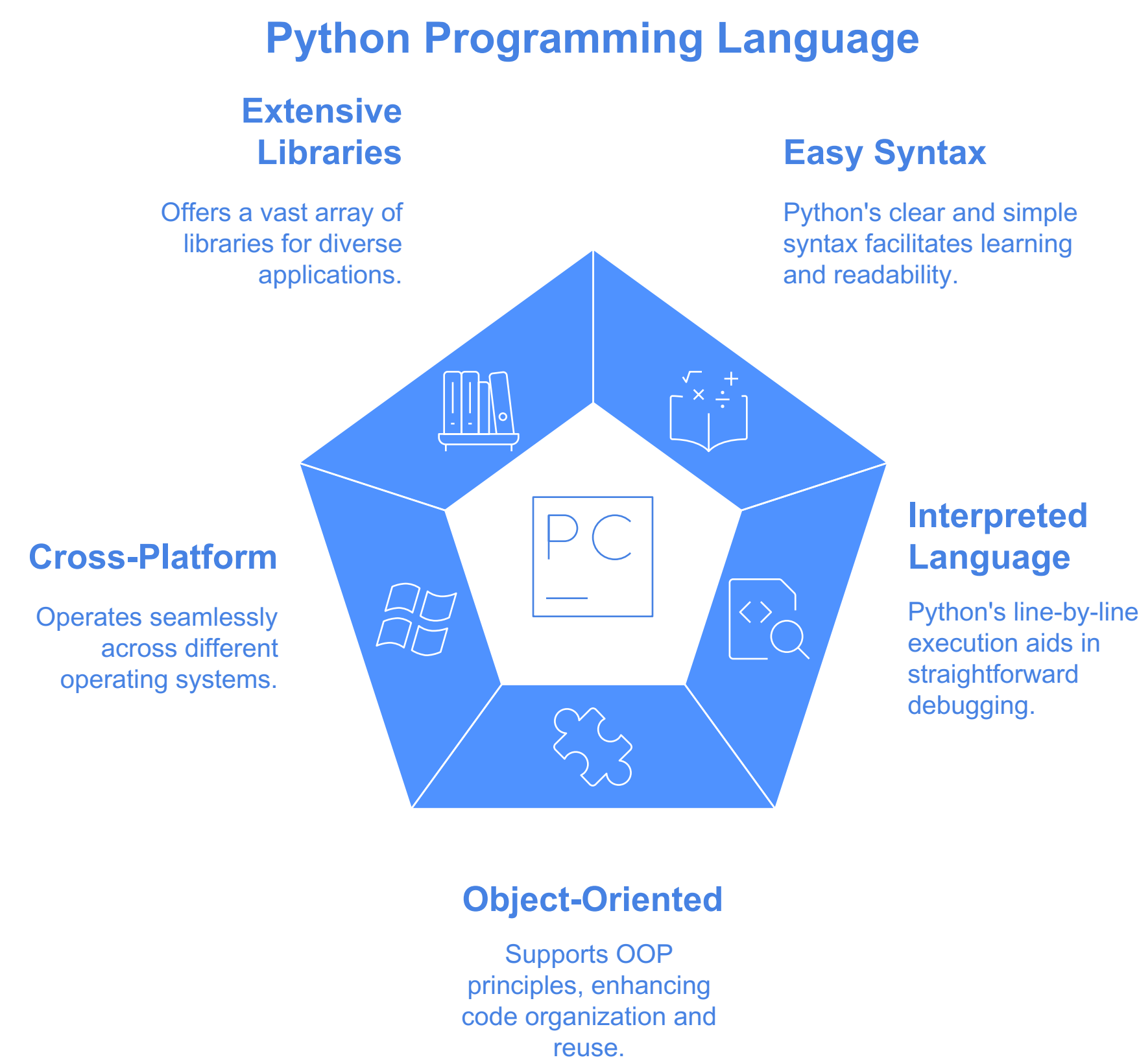
what is python

Python is a high-level, interpreted programming language known for its simplicity and readability. It was created by **Guido van Rossum** and released in 1991. Python emphasizes code readability and ease of use, which makes it a great choice for both beginners and experienced programmers.



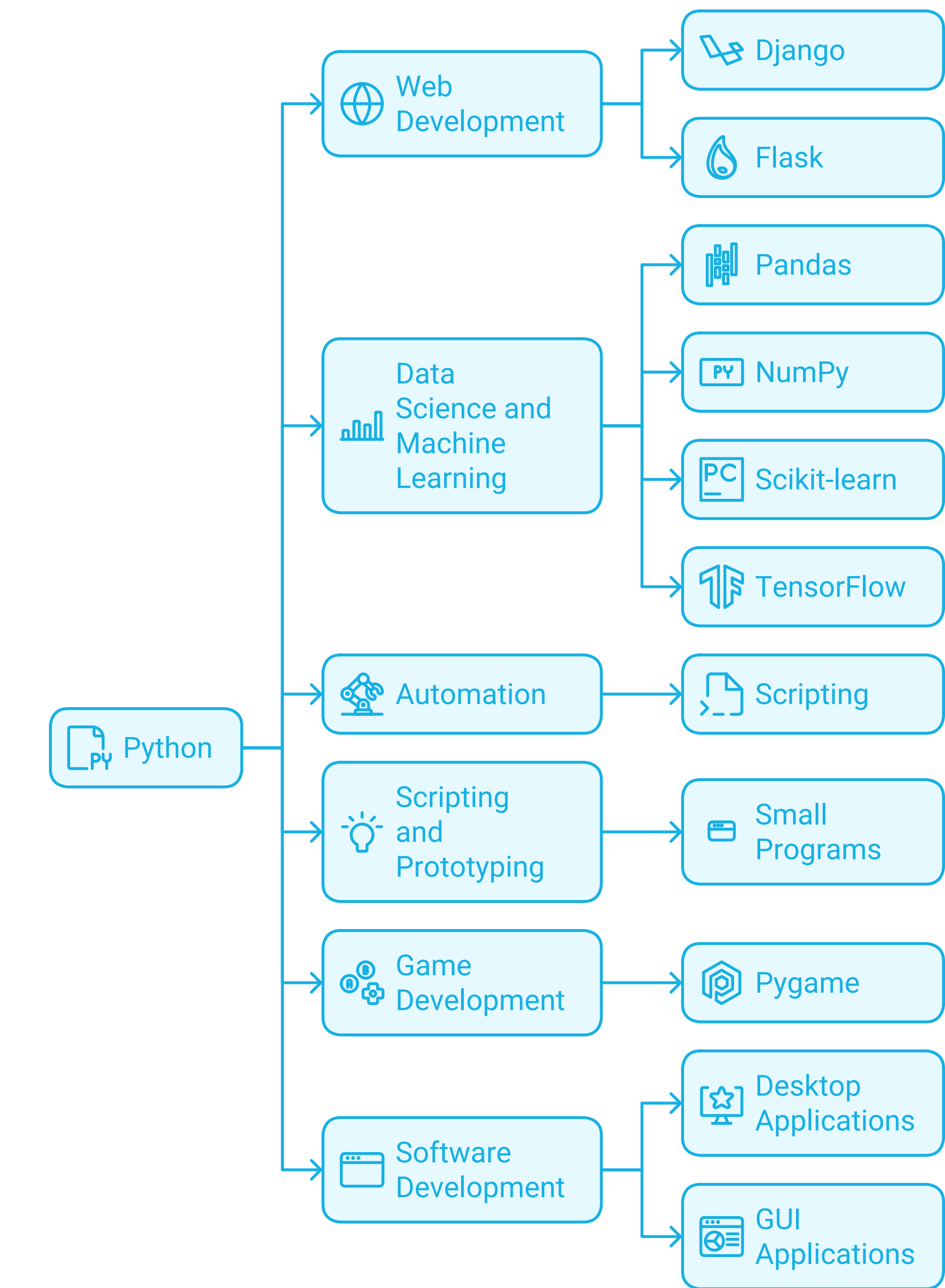
Some key features of Python include:

- Easy Syntax:** Python's syntax is clear and easy to understand, making it a good language for learning programming.
- Interpreted Language:** Python code is executed line by line, which makes debugging easier, as you can immediately see errors and fix them.
- Object-Oriented:** Python supports object-oriented programming (OOP) principles, such as classes and objects.
- Cross-platform:** Python works on various platforms, including Windows, macOS, and Linux.
- Extensive Libraries:** Python comes with a rich standard library and a large ecosystem of third-party libraries, making it useful for tasks ranging from web development and data analysis to machine learning and automation.



Python is used in many domains, such as:

- Web development:** Using frameworks like Django and Flask.
- Data Science and Machine Learning:** With libraries like Pandas, NumPy, Scikit-learn, and TensorFlow.
- Automation:** Automating repetitive tasks with scripts.
- Scripting and prototyping:** Quickly writing small programs or proofs of concept.
- Game development:** Using libraries like Pygame.
- Software development:** Building desktop and GUI applications.



Because of its versatility, Python has become one of the most popular programming languages in the world.