

Weekly Progress Report

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Domain: Python

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Week Ending :01

1.Introduction

In this week I learnt about fundamentals of python programming language application of pythons in various domains and I learnt about different kind IDE's (integrated development environment)

2. Understanding The Python:

2.1 Definition:

- Python is a high-level, interpreted programming language which has facilities likes simple, readability, and easy to understand and it has easy syntax.
- It is invented by Guido van Rossum in 1991.

2.2 Key Features:

- Simple and easy syntax
- Interpreted
- Easy to Debug
- Support key features like OOPS, multi-threading ..etc.
- Secured
- Platform Independent
- Open Source

3. IDE'S Of Python:

- **PYCHARM:** Pycharm is a IDE used for developing the python program. It is consider as a best IDE for python developers. And this ide is using most of developers in the industry

➤ Features:

1. It is an intelligent, fast & Safe code editor
2. Provides features like debugging, testing. Etc
3. Supports web technologies, Scientific libraries. Etc

- **PYTHON IDE:** It is a default IDE of the python. It is suitable for beginner developers.

➤ Features:

1. Highlighting the code & static code analysis
2. Allows smart indentation

- **Jupyter Notebook:** It is an open source and web-based application.

➤ Features:

1. Support data cleaning, machine learning
2. Code can convert to pdf and HTML files

4.Applications Of Python:

- **Data Science & Machine Learning:** Python was rich in libraries such as NumPy, pandas are preferred choice for data science ,machine learning and AI.
- **Web Development:** Python frameworks like Django and Flask are widely used for building web applications..
- **Scripting or Automations:** Python can help us to develop automated process is called scripting.
- **Software Testing:** Python can aid in tasks like bugging, tracking, and testing.

5. Lesson Learned:

1. Python is a high-level, interpreted programming language which has facilities likes simple, readability, and easy to understand

2. Python IDEs such as Pycharm, jupyter, Visual code.etc
3. Python applications such as data science, machine learning, software testing and web development.

6 .Next Week Goals:

1. Excited to learn more concepts about the python
2. Improving the practical knowledge about the python

7. Conclusion: Python is the most popular programming language. It's applications are spread over domains such as data science, web development, AI.. etc