# **Internship Final Report**

Student Name: Gunal K

University: Annai violet Arts and Science College

Major: Computer Science

Internship Duration: September 1st, 2025 - September 30th, 2025

Company: ShadowFox

Domain: Python Development

Mentor: Mr. Hariharan

Coordinator: Ms. Kalai Maha

## **Objectives**

My primary objectives for this internship were to:

1. Strengthen my foundation in Python programming.

- 2. Gain hands-on experience by working on beginner, intermediate, and advanced level Projects.
- 3. Learn and apply data handling, object-oriented programming, web scraping, and analytical methodologies using Python.

### **Tasks and Responsibilities**

During my internship, I worked on the following projects and tasks:

#### > Beginner Tasks:

- Istartedwith thebasics of Python, practicing variables, numbers, lists, conditions, and loops to build a strong foundation.
- Implemented conditional statements (if-else) and loops to solve small logic-based problems.

#### > Intermediate Tasks:

- Developed a Hangman Game with CLI Interaction, focusing on logic building and user input handling.
- Built a Web Scraper using Beautiful Soup to extract and process information from websites.

#### > Advanced Tasks :

#### **Cricket Fielding Performance Analysis:**

- Designed a program to collect and organize cricket fielding performance data from matches.
- Implemented data structures to store player-wise statistics for easy retrieval.
- Processed collected data for insights such as catches, run-outs, and fielding efficiency.

• Prepared the dataset in a structured format for future visualization or analysis.

### **Learning Outcomes**

- Improved understanding of Python basics and logic building through variables, conditions, and loops.
- Learned to use external libraries like Beautiful Soup for real-world web scraping tasks.
- Gained experience in handling and preparing data for structured analysis and insights.
- Strengthened ability to design small applications, such as games and data analysis Programs.

### **Challenges and Solutions**

- Web Scraping Errors: Handling messy or incomplete HTML data was difficult at first, but I solved it by experimenting with different Beautiful Soup functions.
- Performance Formula Application: Applying the weighted performance formula correctly required iterative testing and debugging, which improved my understanding of score aggregation.

### **Conclusion**

This internship in Python Development gave me the chance to explore projects from beginner to advanced levels. Starting with basics, moving to small applications, and finally working on cricket fielding data collection, I was able to strengthen my skills and apply Python to solve practical problems. This experience has motivated me to continue learning and take up more advanced data analysis projects.

### **Acknowledgments**

I would like to sincerely thank ShadowFox for giving me this opportunity to learn and practice Python through different projects. My special thanks to Aakash for their guidance and encouragement throughout the internship. I am also grateful to my family and friends for supporting me and keeping me motivated. This internship has been an important step in my growth as a programmer.