

Shadow Fox Internship

Complete Tasks Report

Report Generated:	2026-01-30 12:52:16
Intern Name:	Sachin Kumar
Email:	sach872266in@gmail.com
GitHub Repository:	https://github.com/sach200/shadow-fox-internship
Total Tasks Completed:	3 Tasks (Beginner + Intermediate + Advanced)

Task 1: Hangman Game (Beginner Level)

Objective: Create an interactive word-guessing game

Feature	Implementation	Status
Word Selection	Random word from predefined list	✓ Complete
User Input	Letter guessing with validation	✓ Complete
Game Logic	Track guesses, wins, losses	✓ Complete
Visual Display	ASCII hangman drawing	✓ Complete
Enhanced Version	Categories, difficulty levels, hints	✓ Complete
Word Management	Add/remove words dynamically	✓ Complete

Files Created:

- hangman.py - Basic game implementation
- enhanced_hangman.py - Advanced features
- word_manager.py - Word management system
- README.md - Documentation

Task 2: Web Scraper (Intermediate Level)

Objective: Extract data from websites and save in multiple formats

Feature	Implementation	Status
News Headlines	BBC News scraping	✓ Complete
Quote Extraction	Quotes to Scrape website	✓ Complete
Data Export	CSV and JSON formats	✓ Complete
Error Handling	Robust exception management	✓ Complete
Multiple Sources	Configurable target websites	✓ Complete
Scrapy Integration	Professional scraping framework	✓ Complete

Files Created:

- scraper.py - Main scraping engine
- scrapy_spiders.py - Scrapy framework implementation
- requirements.txt - Dependencies
- README.md - Documentation

Task 3: Cricket Fielding Analysis (Advanced Level)

Objective: Comprehensive cricket fielding performance analysis system

Component	Implementation	Status
Data Collection	Interactive and programmatic entry	✓ Complete
Performance Metrics	Catch rate, run-out rate, efficiency	✓ Complete
Player Analysis	Individual performance breakdown	✓ Complete
Team Analysis	Team-wide fielding summary	✓ Complete
Data Export	CSV and JSON formats	✓ Complete
Visualization	Charts and performance graphs	✓ Complete
Sample Data	India vs Australia T20 match	✓ Complete

Analysis Results:

Player	Events	Catch Rate	Run-out Rate	Net Impact	Efficiency
Ravindra Jadeja	4	100%	100%	+16 runs	75%
Virat Kohli	4	100%	50%	+1 runs	50%
Hardik Pandya	4	50%	0%	-5 runs	25%

Files Created:

- fielding_analyzer.py - Core analysis engine
- data_collector.py - Interactive data collection
- visualizer.py - Performance visualization
- requirements.txt - Dependencies
- README.md - Comprehensive documentation

Project Summary

Metric	Value
Total Projects	3
Programming Languages	Python
Total Files Created	15+
GitHub Repository	https://github.com/sach200/shadow-fox-internship
Documentation	Complete README files for each project
Code Quality	Clean, modular, well-commented
Functionality	All projects fully functional
Complexity Progression	Beginner → Intermediate → Advanced

Conclusion:
Successfully completed all three tasks demonstrating progression from basic programming concepts to advanced data analysis and visualization. Each project showcases different aspects of Python development including game logic, web scraping, data analysis, and system design.