Static Analysis:


| Category | Issues |
|---|---|
| Critcal | None |
| High Severity | None |
| Moderate Severity | Timeout missing on requests |
| Low Severity | HTML parsing, safe usage |
| Hardcoded Secret | None |
| External Library Issues | None |

Dynamic Analysis:

I used strace, tcpdump, py-spy, and mprof to do the Dynamic Analysis

System Calls(program asks the operating system to do something).

What was found:

- Only normal calls happened
- It is connected to only safe sports APIs
- It opened Python, HTML, and CSS files
- Nothing suspicious occurred, and no attempts to change system settings

Simple Meaning:
Your app behaves like a normal web application. Nothing dangerous.

Web traffic:

- The app only contacted:
  - TheSportsDB API
  - The Pro-Football-Reference website (through the scraper)
- No strange IP addresses
- No hidden communication

- No unauthorized data leaving your system

Simple Meaning: The network behavior is safe and expected.

Memory Usage:

- Memory stayed stable
- Small spikes happened when loading stats (normal)
- No leaks, no runaway usage

Simple Meaning:
The app handles memory safely.

CPU usage:

- CPU stayed very low
- Only small spikes during API scraping
- No infinite loops
- No performance problems

Simple Meaning:
The app runs efficiently.

ASLR/DEP

ASLR Verification: The value of /proc/sys/kernel/randomize_va_space was ‘2’, confirming Full ASLR is enabled.

DEP/NX Verification: Inspection of the Python binary stack segment using readelf confirmed the GNU_STACK segment is non-executable, proving DEP/NX protection is active.