**DEPARTMENT:**
Computer Science

**FACULTY SPONSOR:**
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**PROJECT TITLE:**
PyGoat - WebGoat reimagined in Python
The Problem

- Create a deliberately insecure web application designed to teach the average person about common web vulnerabilities

- Web application security tools exist, but are commonly written in enterprise-friendly languages like Java and NodeJS
  - This makes writing lessons about additional vulnerabilities challenging

- We wanted to create a collection of web vulnerabilities, written entirely in Python
Requirements

- Build a framework in Python in which to store various hacking challenges
- Should compile to a self-contained executable for Linux
- **Needs to be extensible**
  - Should be easy to add additional lessons and challenges
Design

- Flask
- SQLite
- Yaml Config Files
Testing

- Using Pytest to test functions behaving correctly and automate adding tests for solutions in an extensible format.
- Using bash scripts to test that the designed solutions do solve the given problems, which can simply be dropped into the `../Pytest/solutions/curl_scripts/` directory.