Project Title: Security Lab manager

Project Engineer(s): Simon Owens

What I’ve accomplished so far

* Docker Container Database Built and configured
* Docker Container Nginx Built and configured
* Docker Container Django Built and configured
* Install and configured scripts generate for Windows and Linux
* Anchore Engine, Sonarqube, Jenkins Docker services setup in homelab
* OWASP ZAP scanner configured and automated via bash script
* Anchore Engine scanner configured and automated via bash script
* Sonarqube scanner configured and automated via bash script
* Jenkins configured to activate ZAP,Anchore, and Sonarqube
* Database tables created for Classes, Exercises, Users, and Administrators
* Forms that sanitize input created to map to database tables
* Views created to Display Classes, Exercises, Users, and Administrators
* Django Authentication used so that admins and users can login and view only their items
* Signup form created for users
* Signup form created for admins
* Password reset portal created
* Test data generated so users can click around to play with the project
* Tests generated for login
* view/add/remove student
* view/add/remove class
* view/add/remove exercise
* exercise submit hash box

What has been giving me trouble

* Django Authentication database tables
* CSS styling
* Postgresql data not persisting on reboot
* Django Test

Future tasking

* get button to turn on docker container
* exercise button stop
* exercise button reset
* status of exercises
* create xss exercise
* dynamically make hash value and copy it in upon creation
* port allocator
* sql injection exercise
* cross site scripting exercise
* buffer overflow exercise
* format string exercise
* hard coded password exercise
* make sure all of these automatically load upon startup
* Grade submitted exercises(check for same answers)
* email grades button
* download to CSV
* Edit security documentation
* Edit final proposal