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Database Progress Statement:

During my time as an IT Programmer I for UMB, I have completed an entire information system called the sign-in system. The sign-in system is used by transporters on a 24/7 basis to enter PHI information regarding decedents dropped off at the State Anatomy Board (SAB) location. The sign-in system was put into production in July with the previous data back-up and was able to be used by all essential employees with little to no issues. With the system being put into production, the University's security team put the system through a variety of different security penetration testing. The list below contains the few different areas of security flaws that were fixed and resolved in the sign-in system:

- Reflected XSS vulnerability
- Form Resubmission
- CSRF
- Http Only Attribute
- WebMethod
- Same Site Attribute
- AutoComplete Attribute Check
- Secure Attribute
- Sub resource Integrity

These security vulnerabilities were prevented within a 4–6-week period. The system still undergoes a weekly penetration test and there have yet to be any more security related issues.

The sign-in system is a very small system compared to the main employee system currently in development. For nearly 9 months the main system has been in development and is nearing the end of the development phase. The main system will replace the current system and will dramatically improve efficiency for employee tasks and information security. There are roughly 8 different sections to the main system and nearly all tasks performed by the SAB system will be tracked by this new system in a secure and user-friendly manner. Additionally, the new system will minimize the amount of printing done by SAB employees and hopefully remove the need to print in the future of the system.

Once development ends, Tracy (the other developer that just joined the team) and I will begin user testing. User testing will involve meeting with current SAB employees to discuss changes to the new system that will benefit completion of employee tasks. For the entire development of this system, I have had one other junior developer working with me to complete development. The first 6 months of development the junior developer was Justin Beavers, but he left our team in August. However, Tracy Graves joined the team in the middle of October. Working with both developers, I instructed them both on development tasks, design decisions, and taught them different coding practices.