CSC 440

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Security Requirements Document

This is the security requirements document for the Cincy Crime Stoppers. Below is a table that describes the various security requirements and what we have done to meet those requirements within our website. This document will focus on the handling of

Security Requirements	Description of security measures taken
User Stored Passwords	Passwords are hashed before stored in the database by OpenBSD bcrypt() password hashing algorithm
Cryptographic keys and passwords for auto start of the application automatically generated by the startup process or stored in an encrypted key vault?	All passwords are store as an environment constant where values are assigned in a hidden files which prevent this file from being get pushed into our source control
Authentication attempts use TLS encrypted connections?	The connection uses TLS 1.2. It's encrypted and authenticated using AES_128_GCM and uses RSA as the key exchange mechanism.
Does application use predefined queries to avoid SQL injection	All queries are performed through Active Record. The user can't access the crime record-editing page. However, If the user knows the URL, the page will be blank and any editing queries will be ignored
Does the application disallow all HTML input or encode all HTML output to prevent cross-site scripting attacks?	Beside authentication and date filter, no input is allowed at all.