**Dakota State University**

**Pen Tester**

**TextFileGuys**

**Ethan Shafer, Alex Wollman, Chris Johnson**

Table of contents

Summary of Project

The goal of the project is to take individual scans from programs such as NMAP as input. Once uploaded the scans are checked for correctness using a file called a Document Type Definition. This DTD is uploaded by users through a plugin structure, described next. Once verified, the scans are combined into one document. This document is formatted in such a way so as to meet the needs of companies desiring security reports. The reports are organized by scans; beginning with the first scan checked and ending with the last.

The program will support NMAP scans by default with a built in DTD. Users can add functionality to the program by uploading their scan's DTDs via the programs plugin structure. This structure allows the user to customize the program, and only concern themselves with scan types they work with. The user creates their DTD, which defines the rules their scan abides by, then uploads it to the program to add support to that scan type. Other types of scans that a user might wish to add to this program include: Nesses, Zap, SET.

To upload scans and DTDs an account must be created with the program. A user can upload scans (which are automatically parsed and checked for correctness,) delete old scans, and create reports. Reports are generated in human readable form and can be viewed or saved on the users machine.

Vision Statement

The TextFileGuys' project for Secure Software Engineering has various purposes. As a class project, it serves as an assignment and is an effective way to provide experience for the group in software design.

However, at the group level, the project serves as an expansion of knowledge. To us, this project acts as a method to help us learn new technologies while applying them to a real-world project. The PenTester project also serves a dual role as teaching us about security tools and the importance of penetration testing.

Requirements

Design