CORE GAME USER EXPERIENCE PROTOTYPE

CORE Security and WPI Joint Project
Project Goal

Take the techniques that make games easy to use and apply them to professional security software.
The Team

Mike – Code
AJ - Code
Eric - Code
Lyndon – Production
The Team

Professor Moriarty
IMGD

Professor Shue
CS

Professor Claypool
CS, IMGD

Beth Hankel - Art
Core Impact Professional

Network Security

Penetration testing:

- Ethical Hacking
- Scan and attack a computer network to discover vulnerabilities
- By Experts for Experts…
The module hasn't reported any output yet. You can see more information in the Module Log window.

Network Information Gathering

Brief: This module performs automatic information gathering in a network range.
Category: RPT/Network RPT
Author: CORE Security Technologies
Version: 06110

Description: This module helps you perform information gathering automatically. The module will detect active hosts in a network range, identify their operating system and available services. This module utilizes the following modules from the Information Gathering module folder:

For Network Discovery:

- Quick Information
- Entity Properties
How Do Games Do Complex Information?
Concept Art
Concept Art
Software Storyboard
Game UX Techniques

- Direct manipulation
- Sound and animation
- Context-relative information
Game UX Techniques

- Spatial network layout
Architecture

Separate Thread

CORE

Python

Prototype

Mayhem Engine

Boost
General Purpose

SFML
Graphics

GWEN
UI

C++
Usability Study

Does our prototype perform better than the existing interface?

- **Control group:** Core Impact Pro
- **Test group:** Prototype

1) **Network security task**
   - Scan a network
   - Attack a machine
   - Discover a new network

2) **Subjective survey questions**
   - What did they think about the interface
# Usability Study

<table>
<thead>
<tr>
<th>Interface</th>
<th>Test Score</th>
<th>N</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>CORE Impact Pro</td>
<td>9.07</td>
<td>15</td>
<td>0.702</td>
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<tr>
<td>Mayhem Prototype</td>
<td>11.19</td>
<td>13</td>
<td>0.477</td>
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</table>

Independent t-test (2-tailed):
P = 0.0225

<table>
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<tr>
<th>Interface</th>
<th>Subjective Survey</th>
<th>N</th>
<th>Standard Error</th>
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<tbody>
<tr>
<td>CORE Impact Pro</td>
<td>12.5</td>
<td>15</td>
<td>2.465</td>
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<tr>
<td>Mayhem Prototype</td>
<td>16.8</td>
<td>12</td>
<td>1.011</td>
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</tbody>
</table>

Independent t-test (2-tailed):
P < 0.0001
DEVELOPMENT BUILD DEMO