Designing Smartphone Microlessons to Improve the Cybersecurity Workforce

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URL: https://www.sri.com/work/projects/microlessons-build-readiness-cybersecurity-workforce

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PROJECT GOALS

- Create and test prototype microlessons
- Evaluate proof-of-concept with adult learners
- Assess user learning and satisfaction
- Develop recommendations for self-directed microlearning for cybersecurity workforce

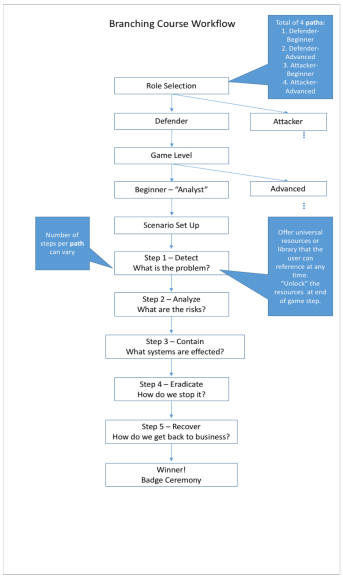
PROBLEM: HOW TO GROW THE CYBERSECURITY WORKFORCE

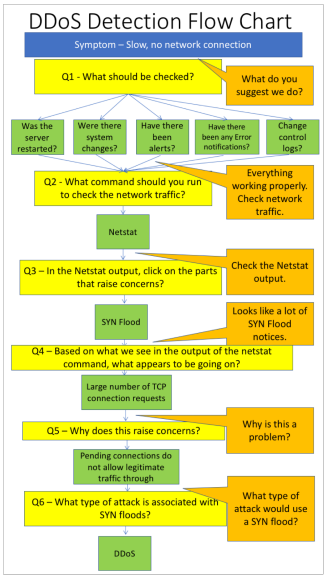
- To expand the workforce and keep it current with changing cybersecurity challenges

SCIENTIFIC IMPACT: HOW TO FOSTER SELF-DIRECTED LEARNING

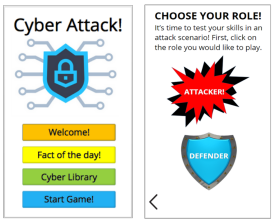
- Study will test proof-of-concept of using 5-minute smartphone game scenarios to motivate self-directed learning on the job

SOLUTION: SMARTPHONE MICROLESSONS – GAME-BASED SCENARIOS

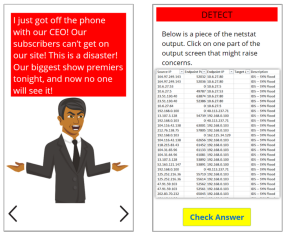




Choose your own adventure



Confront a series of realistic challenges



Check additional learning resources

- Mini-lessons & QuickFacts
- CyberWar Stories

BROADER IMPACT: SOCIETY

- New tool for cybersecurity vendors, employers, and educators to engage current and future technicians
- New method for working adults to explore future careers or courses in cybersecurity

BROADER IMPACT: EDUCATION AND OUTREACH

- Designed for busy, working adult learners
- Supports informal learning about cybersecurity
- Refreshes knowledge gained in technical courses
- Leverages experiential approach

BROADER IMPACT: MICROLESSONS AIM TO INCREASE…

- Perceived confidence and job readiness by 50%
- Informal learning of cybersecurity by 25%
- Interest in cybersecurity careers by 10%