



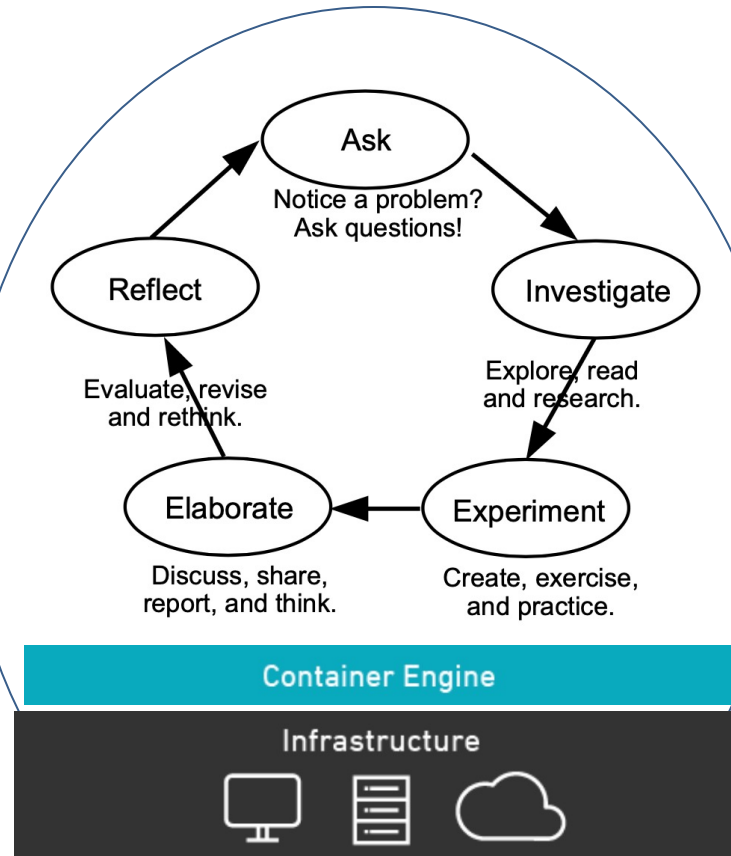
SaTC: EDU: Collaborative: Advancing Cybersecurity Learning Through Inquiry-based Laboratories on a Container-based Virtualization Platform

Challenge:

- Cybersecurity concepts and techniques are challenging to teach and difficult to apprehend in an effective manner
- Need matching and intriguing hands-on activities to stimulate interest
- Lack of consistent and compatible hands-on lab platform

Solution:

- Create environmental factors to arouse situational interest
- Design activities to facilitate effective learning
- Utilize container-based virtualization as the lab platform: easy to adopt and modify; consistent and logical flows; universal compatibility



Scientific Impact:

- Accelerate learning and skill development in the field of cybersecurity
- Strengthen cybersecurity education and training across the ecosystem to diversify the future workforce
- Transition research outcomes into practice and workforce development

Broader Impact and Broader Participation:

- Developed published on <https://eurekalabs.net/>
- About 2,400 views (and downloads) per lab on average
- About 36,000 visits in total

Project # 1912753, Georgia State University,
zcaj@gsu.edu, wli28@gsu.edu
Project # 1912755, Texas Christian University,
l.ma@tcu.edu