Client Meeting: API Threat Assessment Tool (AT-AT)

Date: 13th May 2025

Time: 15:00

Platform: Google Meets

Attendees:

BlueVision ITM: Mr. Ivan Burke

Skill Issue: All PresentCOS301 Staff: tbd

Agenda:

Introductions

- Our vision
 - Basics of the app
 - The program takes in an API specification.
 - This can be done using an API specification.
 - A scan can be made based on common endpoints and heuristics based on the type of business.
 - A predefined template to allow users to enter details of more complex API's.
 - Users can switch between pre-made or user made testing profiles that vary in complexity and scale.
 - The program will run the API through a suit of scans both static and dynamic looking for vulnerabilities and abnormal responses as well as outdated vulnerable packages.
 - Current focus is OWASP API top 10 2023 but this can be extended later on.
 - Once the scan is completed a report is generated providing a summary of the scan, any vulnerabilities found, recommended actions, compliance outcomes and a security score.
 - For threat detection and recommended actions a database could be consulted, client suggestions on where to look for this information would be welcomed.
 - We've identified these as the core components of the app but we still need to do more research into additional features, client suggestions are welcome here as well.

Technology

- Version Control: GitHub.
- Back end: python.
- Front end: react.
- Database: postgresSQL.

Requirements

Functional Requirements

- Use Registration.
- User Login.
- Form Validation.
- Input via known API specification.
- Discovery via Heuristic Scan.
- Ability to select various pre-configured testing profile
- API scanning and testing.
 - Identify vulnerabilities
 - Report outdated packages.
 - Detect Abnormal responses.
- Generate an Assessment Report.

Non-Functional Requirements

- Scan should be completed in a feasible amount of time.
- The system should accurately identify vulnerabilities with a low rate of false positives (Goal is 1% and under).
- The application should be easy to use.
 - Minimal training should be required to use the threat assessment tool.
- The report should be clear, concise and easy to understand.
 - There could be an option for more technical reports.
- The scan should not consume a lot of resources and have a reliable execution time.
- The app should be secure and follow the guidelines of the CIA triad ensuring that sensitive information is protected.

Use cases

- Load in user API file via import.
- Initiate API discovery.
- Select testing profile
- Execute API scan.
- View / export Threat assessment report.

- Register User.
- Login User.

Development Road map

- Next 2 weeks (Demo 1)
 - Core components / Proof of concept build.
 - Basic UI and back end with 3 working use cases.
 - Login, Register, API specification import.
 - Basic documentation and architecture diagrams.
 - Research report.
- Documentation and Testing
 - Documentation will be created and updated throughout the development life cycle.
 - Stability and Quality will be ensured through both automated and manual testing.
- Initial Project Road map
 - Define internal API specification with support for imports.
 - API scanning engine.
 - Security reporting.
 - Enhanced UX.
 - Improvement of scan accuracy and performance.
 - Expand vulnerability coverage.
 - Maintainability and App Security evaluation and remediation.
 - Advanced and WOW features.

Client Vision

- Overview and feedback.
- Additional Requirements.
- Additional Use Cases.
- Technical review.

Communication

- Discuss how often client meetings should occur.
- Preferred platform.
- Discuss what needs to be done for the next meeting.
- Closing

AT-AT

```
_.-'::'\____`.
    ,'::::' |,----.
    /::::' ||`-.._;
::::' || /___\
    |:: _|| [ [___]]
    |: __,-' `-._\__/
    :_,-\ \| |,-'_,......
    | \ \ | |.-'_,-\ \ ~
    | |`._`-| |,-| \ \ ~
    |_|`----|
             \ \ ~
    | | [[_]| | `| | ~ _( ) )
    /__\ []__\ /__\ ((\\))
                       ( ))
jrei /___\
                       ( # )
```