User Experience Working Group

January 29, 2025

Participants

- Abhi Balakrishnan
- Chris Coffin
- Steven Christev
- Matthew Coles
- Matt DiVisconte
- Scott Drinkall
- Jim Duncan
- Jill Kamienski
- John Keane

- Mark Muha
- Rich Piazza
- Rae Powers
- Kathryn Stout
- Alec Summers
- Chris Sundberg
- Katherine Taylor-Jewell
- Paul Wortman

Agenda

- CWE Macro Usability Updates
- CWE Views Questions & Guidance (tabled for next meeting)
- Root Cause Mapping LLM "Use Cases"
- Open Discussion

Meeting Summary

- Home Page Redesign: Jill Kamienski presented proposed changes to the CWE website's
 landing page, aiming to make the content more intuitive and accessible for both new and
 experienced users. She highlighted the reorganization of the content into clear headers for
 learning about CWE, accessing content, and contributing to CWE. Jill requested feedback
 from the group on the proposed changes, either during the meeting or later via email.
- **CWE Large Language Model**: Steven Christey presented LLM solutions to help users map vulnerabilities to specific CWEs. Steven discussed the notion of use cases and applications for such a bot to improve the usability of CWE.

Action Items

- 1. **Clarification of Search Options:** Add brief one-sentence descriptions for each search option (ID lookup, standard search, LLM search) to guide users on the landing page.
- 2. **Search Function Placement:** Evaluate the possibility of moving the ID search next to the access content search features for better user experience.
- 3. **Download Section Naming:** Discuss internally whether to rename the "Download Lists" to "Downloads" or "Download Content" for better clarity.
- 4. **Archive Naming:** Consider renaming "Archives" section to "Releases" or "Release Archive" to make it more intuitive for users.
- 5. **Review of Menu Structure:** Review and potentially clean up the current menu structure to improve navigation.
- 6. **Feedback on LLM Bot Use Cases:** Provide feedback to Steven on the use cases for the LLM bot.

Meeting Notes

• This is the first UEWG meeting since November 20, 2024.

CWE Macro Usability Updates (Jill Kamienski)

- Proposed landing page goals:
 - o Reorganize the content to be more intuitive and accessible.
 - o Emphasize new users, who are less likely to know how to access the site's contents.
 - Highlight headline stories of critical interest to the broader community.
- Proposed landing page updates:
 - "Learn About CWE" includes an overview and a root cause mapping section and is centered on the page.
 - o "Access Content" shows various ways to access content and lists.
 - o "Contribute" has links for contributing content and joining working groups.
 - An optional headline story will only be shown if there is an item of critical interest to the broader community.
- Comment (Jim): How can a user access a previous headline story?
 - Potential options: Place story in the news page archives or as a separate archive under the story links.
- Comment (Chris): Thoughts on the type of user who would be visiting the CWE homepage?
 - Experienced users may bookmark the page and then use the Google search feature to navigate to CWEs (Matthew C, Jim).
- Comment (Matthew C): As the webpage is currently designed, it is helpful to not need to scroll to search for features. This improves ease of access for developers.
- Comment (Chris): Thoughts on a pop-up or one-liner to prompt users?
 - o A brief one-sentence description could be used to give context to searches (Jill).
- Comment (Matthew C): Thoughts on moving the ID search and access content search buttons closer together?
 - o ID search is used heavily and on every page as part of the header. This is convenient for users to look up an ID (Steven).
 - Could the header be used for additional buttons, such as hardware and software weaknesses, for quick access? (Matthew C)
 - The horizontal space for the search box is not necessarily wasted on other parts of the website, though it is on the first page (Steven).
 - o ID lookup could be in both places (Jill).
- Proposed new menu structure:
 - Goal: Improve intuitiveness, especially for new users.
 - Addition of "Learn" menu (previously in the "About" menu)
 - "Access Content" includes lists, reports, visualizations, REST API
 - "Community" includes news, social media, working groups, email lists
 - o "Search" includes three searches: ID lookup, site search, LLM search
 - Comment (Matthew C): Is "download lists" intuitive?
 - It is technically a "list of downloads" (Rich).
 - Options: "Downloads" or "Download Content" (Matthew C)
 - Comment (Matthew C): What are "archives" in the "Access Content" page?
 - Suggestion to call it "Releases," which is consistent with GitHub (Matthew C) or another option: "Release Archive".

- o Comment (Steven): There are multiple pages where people can download releases.
 - There is no link in the proposed structure for the current CWEs (Matthew C).
 - Link of CWE releases (older versions): https://cwe.mitre.org/data/archive.html
 - Link for all the download information (different views of current versions):
 https://cwe.mitre.org/data/downloads.html
 - "Latest versions" and "downloads" are similar but not the same. The former page goes to the actual CWE entry. The latter allows for downloading aspects of the "view" in different formats (Rich).
 - Link for various views in CWE: https://cwe.mitre.org/data/index.html
 - Rationale: Users may not necessarily want to download data.
 - Concluding point: Some cleanup is needed (though duplication is not necessarily an issue as there are reasons for each page).
- Comment (Chris): The menu structure separates "access content" and "search."
 Should search be moved behind "access content" and then have "community" separate?
 - These could be swapped (Jill).
 - Many users are trying to find information quickly. The current format could be valuable to have a separate space for searching (Jim).
 - There are multiple places to get to the search (Chris).
- Next step: Review individual entry pages and stories to make more accessible for working group: reorganize individual pages and stories.

Root Cause Mapping LLM "Use Cases" (Steven Christey)

- Impetus for tool: Understand weaknesses in general and improve understanding of navigation hierarchies (a broad goal of macro-usability).
- Chris Madden (Yahoo) and Nick Orr (MITRE) developed much of the underpinnings for a mapping bot that could be used to navigate CWE. He emphasized having use cases and defining requirements to drive the architecture.
- Current gaps: architecture needed, how to make the capability available to others, and what would constitute a minimum viable product.
- Considerations for a root mapping tool: The information available to the user (variable), coding background knowledge, time pressure, importance of correctness.
- Comment (Alec): We are seeing heavy adoption of CWE mapping at the time of disclosure by CNAs. We operate under the notion that those closest to the product are best positioned to do the mapping.
- Comment (Steven): It would be valuable to make the decision tree available to the user.
 - The notion of a neighborhood is useful. The benefit is if the LLM realizes that if you
 emphasize one item, the user might be in a different part of the neighborhood. This
 is more than archiving. It's possible that some details are tethered too tightly (Jim).
- Activity 1: PSIRT member writing a vulnerability advisory
 - Discussion point: How important is correctness?
 - Consider "correctness" versus "completeness," e.g., if a CVE has multiple weaknesses (Matthew C).

- Activity 2: Developer fixing a vulnerability
- Activity 3: Vulnerability researcher/bug bounty hunter reporting vulnerabilities
- Activity 4: Product manager fixing weaknesses at scale
- Next step is to get to a minimum viable product by
 - o Developing walkthrough mockups
 - o Clarifying requirements
 - o Identifying the intended user base
 - o Choosing the architecture and implementation

NEXT MEETING 2/26