You have two options: security assessment of an open-source software or explore a software security research topic. The descriptions of the options follow.

Option 1: Security assessment of an open-source software

The goal of this activity is to practice with assessing the security of a software.

You should communicate with your colleagues, e.g., through Piazza, to select a partner. Then, you should select a software that you may work on. You may visit [https://github.com/Links to an external site.](https://github.com/) to select an open source software that you may evaluate. Given the time limitation, you may need to limit the scope of the analysis.

Examples of previously selected projects:

[https://keepass.info/index.htmlLinks to an external site.](https://keepass.info/index.html)

[Links to an external site.](https://keepass.info/index.html)[https://github.com/nopSolutions/nopCommerceLinks to an external site.](https://github.com/nopSolutions/nopCommerce)

[https://github.com/WordPress/WordPressLinks to an external site.](https://github.com/WordPress/WordPress) (Partial assessment)

[https://github.com/ispysoftware/iSpy Links to an external site.](https://github.com/ispysoftware/iSpy)(Partial assessment)

First, each team prepares and submits a proposal of one page--IEEE conference style. We will review the proposals and give feedback.

Option 2: Explore a software security research topic

The goal of this activity is to practice with extending your knowledge about engineering secure software.

You should communicate with your colleagues, e.g., through Piazza, to select a partner. Then you should select a problem that you may work on. The research activity must be on either one of the course topics as specified in the syllabus or on a topic that I agree with you on. You may visit the following link to learn how to select a research problem: [https://libguides.usc.edu/writingguide/researchproblem (Links to an external site.)](https://libguides.usc.edu/writingguide/researchproblem). Examples of research activities include:

1. Literature review

2. Tool evaluation

3. Algorithms and tools for a given problem

4. Questionnaire on a given problem

5. Interviewing experts on a given problem

The following are two examples of research problems related to the course:

- Evaluation of threat modeling tools.

- A case for limitations of secure coding standards.

Examples of previously selected projects: Literature review of security of implemented blockchain framework, Literature review of security in AI-based systems.

**What you need submit now**

First, each group of students prepares and submits a proposal of one page--IEEE conference style. We will review the proposals and give feedback in Webex meeting to each team.