

Xenon Vision Statement

Project Title: GitHub Auditor

Team

- **Team name:** So Far, So Good
- **Lead:** Chris Yang
- **Scribe:** Thomas Zhang
- **Other members:** Nico Wong, Edward Thai, Kyle Stubbs

Project Summary

Problem

CSOs, CTOs, and departmental managers do not possess sufficient insights into GitHub organizations, particularly when a company relies upon multiple organizations.

Why is the problem important?

Xenon Partners manages a portfolio of 9 companies. Each company separately manages a GitHub organization. The CSO and portfolio company CTOs do not possess a simple means to audit and proactively respond to potential security issues due to a lack of easy insights into issues such as 2FA, pending subscription renewals, third-party contributions, etc.

Current solutions

GitHub has a [built-in organization dashboard](#), but this lacks security insights. You would have to manually check for things like 2FA or Dependabot alerts.

Project Outcome/Goal

- Create an umbrella dashboard that presents insights into one or more GitHub organizational accounts, reporting on:
 - 2FA requirement
 - Outside contributors
 - Dependabot alerts
 - Pull requests lacking an assigned reviewer
 - Code contains sensitive information such as API keys or passwords
- Configure alerts to notify pertinent parties about potential issues

Solution Implementation Details (Technologies you will need):

- Web framework - Laravel, Ruby on Rails
- Database - MySQL

- Job queues - Redis
- GitHub OAuth
- GitHub API
- Transactional emails - Mailgun
- Text processing/code auditing - Python

Milestones and How to Achieve Them:

- Identify problem
 - Discuss with Xenon mentors, potentially Xenon clients/portfolio companies?
- Determine technologies needed, decide which we can practically implement
 - Mentor recommendations, personal experience/research
- Construct a plan to implement these technologies
 - Mock model
- Present a functioning prototype and demonstration at CS Summit

Github Repo Link: <https://github.com/chrisyang365/github-auditor>

Trello Link: <https://trello.com/githubauditor>

Google Drive Link:

https://drive.google.com/drive/folders/1pnO-T6cQ4scamQ_y1UJoN7E9-AErP4eQ?usp=sharing