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/1pnQ-T6cQ4scamQ_y1UJoN7E9-AEeP4eQ?usp=sharing