

**Course:** CSCI 450 / ECE 461 – Software Engineering  
**Assignment:** Homework 1  
**Section :** #6  
**Description:** Tokens Group Discussion

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As brought out in the GitHub documentation, a token functions as a stand-in for your password. This means that anyone with access to your personal access token essentially has access to your signature (*“Managing Your Personal Access Tokens”*).

Tokens are used for authentication and authorization. When these tokens are made public, this facilitates a sort of impersonation of the actual owner. This allows bad actors the ability to delete important repos, change code, modify GitHub Actions pipelines, or view critical information. In fact, if a token is exposed, unauthorized users could gain access to any GitHub repository linked to the associated account. One could argue that infiltrating a repo of college class material is a small issue. However, in an enterprise environment there could be much bigger repercussions. After gaining access to a stolen token, interlopers have an opportunity to figure out the inner workings of a system and use that information to exploit the application and its users.

**Source:**

GitHub Article – “Managing Your Personal Access Tokens”

<https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/managing-your-personal-access-tokens>

*This response was the result of collaboration between all 6 members of Team 1. Each member contributed.*