

Qualtrics ID	To be copied on ChatGPT-Threat description, assumptions, STRIDE threat type, and Affected components
STOLEN-AUTH-INFO	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: Spoofing a remote repo admin by stealing the authentication credentials via a social engineering attack</p> <p>Assumptions: The attacker carries out a successful social engineering attack (attackers communicate legitimately with others, manipulating and exploiting human qualities to achieve their attack) and gets authentication credentials. The credentials are valid.</p> <p>STRIDE threat type: Spoofing</p> <p>Affected components: The remote code repository</p>
LEAKED-CONFIG-FILE	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: An attacker uses leaked (e.g. on Github) configuration file to interact with the remote repo, potentially jeopardize running code and submitting malicious code</p> <p>Assumptions: The attacker finds the leaked information, The attacker can (remotely) interact with the remote repository</p> <p>STRIDE threat type: Information disclosure</p> <p>Affected components: Victim's server</p>
DOS-SERVER	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: An attacker submit malicious code can crash the server running the code, causing a Denial of Service (DoS)</p> <p>Assumptions: The attacker submits malicious code that can cause Denial of Service (DoS) to remote repo. The server has pulled and been running the code submitted by the attacker</p> <p>STRIDE threat type: Denial of Service</p> <p>Affected components: Victim's server</p>
MALICIOUS-CODE-GITHUB	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: An attacker submit malicious code to the project on GitHub and get a shell of the server running the code</p> <p>Assumptions: The attacker can submit code to remote repo. The server has pulled and been running the malicious code submitted by the attacker</p> <p>STRIDE threat type: Elevation of privilege</p> <p>Affected components: Victim's server</p>
ELEVATION-PRIVILEGED-ACCESS	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: The attacker uses the malicious code to gain root access to the server</p> <p>Assumptions: The attacker can submit code to remote repo. The server has pulled and been running the code submitted by the attacker. Code run as root on the server</p> <p>STRIDE threat type: Elevation of privilege</p> <p>Affected components: Victim's server</p>

DOS-REMOTE-REPO	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: The attacker submits the same fake push request to other remote code repositories, causing a Denial of Service attack</p> <p>Assumptions: Permission management is properly implemented in the remote (GitHub) provided repository hosting service to differentiate user access to the code repository. An attacker has the right to submit a bogus push request to a remote repository</p> <p>STRIDE threat type: Denial of service</p> <p>Affected components: Other remote code repositories</p>
DISCLOSE-THIRD-PARTY	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: Not only can the attacker use these third-party services, but the attacker can also push code to the remote code repository where the yml file is located</p> <p>Assumptions: An attacker can browse the project's yml file. The developer has left the keys to the third-party services they need to use in the yml file that configures GitHub Actions</p> <p>STRIDE threat type: Information Disclosure</p> <p>Affected components: Third-party services, The remote code repository</p>
ELEVATION-PRIVILEGED-REPO	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: The attacker can launch a push request to a repository on GitHub and can delete the repository</p> <p>Assumptions: The attacker has gained push access to the code repository on GitHub</p> <p>STRIDE threat type: Elevation of privilege</p> <p>Affected components: The remote code repository</p>
ELEVATION-PRIVILEGED-CODE	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: An unauthenticated and non privileged attacker can still submit custom code into the remote repo to prepare the first step of another attack, e.g. turning off logging service or cause a Denial of Service</p> <p>Assumptions: The attacker can reach the remote repo (e.g. through internet)</p> <p>STRIDE threat type: Elevation of privilege and tampering</p> <p>Affected components: The remote code repository</p>
EXPLOIT-HTTP-PROTOCOL	<p>Scenario: updating a remote repository on GitHub</p> <p>Threat description: If an attacker compromises a http protocol on GitHub, the attacker can steal other users' identities by using HTTP by running a man in the middle attack</p> <p>Assumptions: GitHub uses the HTTPS protocol. The attacker has compromised the HTTP protocol on GitHub</p> <p>STRIDE threat type: Spoofing</p> <p>Affected components: GitHub engine</p>