# Security

Security with GitHub Copilot

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# Security with GitHub Copilot

## Copilot and Secure Coding

AI-based vulnerability system that helps prevent insecure coding patterns (e.g. SQL script injection) Vulnerability filters are applied only to the Copilot-generated suggestion itself

- It cannot detect downstream vulnerabilities introduced by the code e.g. on deployment infrastructure
- We recommend taking the same precautions you take with code written by engineers (linting, code scanning, etc.) Copilot Chat can be used to query code for known vulnerabilities

## Copilot + GitHub Advanced Security

- Copilot is not a replacement of GHAS features
- Copilot can be used in tandem with GHAS features to detect and remediate vulnerabilities earlier during the SDLC
  - GHAS Code scanning results
  - GHAS Secret scanning

## Vulnerability Detection and Remediation

### Vulnerability Detection

- Prompt for insecure coding patterns
- Use GHAS Code Scanning results
- Write custom CodeQL queries
- Increase your knowledge of secure coding patterns
- Create custom Secret Scanning patterns

### Vulnerability Remediation

- Copilot helps prevent suggestions that contain insecure coding patterns in real-time
- Automatically fix insecure code based on Copilot suggestions
- Validate and improve existing CodeQL queries

## Copilot Trust Center

This resource for any further questions on security and trust from a legal standpoint. GitHub build this center as a resource to guide you through the top considerations and questions we've received when considering and building with Github Copilot.

It answers all frequently asked questions Security, Privacy, IP & Open Source, Labor Market and Accessibility.

- **Security:** GitHub Copilot uses top-notch Azure infrastructure and encryption, and an AI-based vulnerability prevention system that blocks insecure coding patterns in real-time.
- **Privacy:** Your privacy is paramount. We're committed to handling your data responsibly, while delivering an optimal GitHub Copilot experience.
- **Data flow:** Our data flow respects the privacy of our users. Once suggestions are given to the user, the prompt becomes part of the garbage collection and we don't retain it.
- **Copyright:** Respecting intellectual property rights is an important part of the software development process.
- **Labor market:** GitHub Copilot isn't made to replace developers—it's here to enhance their work and make the industry more inclusive, too.
- **Accessibility:** GitHub is committed to empowering developers with disabilities to help build the technologies that drive human progress.
- **Contracting:** GitHub Copilot Product Specific Terms