**Tools We're Using**

**1. Azure**

* **Portal**: Minimal use, primarily for turning on VMs and adding API keys to the [key vault Opens in new window or tab](https://azure.microsoft.com/en-us/products/key-vault/).

**2. Virtual Machines (VMs)**

* **Azure Virtual Desktop**: Acts as the gateway for other VMs. [Browser Access Opens in new window or tab](https://client.wvd.microsoft.com/arm/webclient/index.html) or [App Download Opens in new window or tab](https://www.microsoft.com/store/productid/9WZDNCRFJ3PS).
* **dev-vm**: Linux-based VM for development.
* **prod-vm**: Linux-based VM for stable projects.

**3. VS Code**

* **Main IDE**: Pre-installed in Azure Virtual Desktop (AVD).

**4. DevOps**

* **Functionality**: Source code management, CI/CD, and more. [Browser Access](https://dev.azure.com/team-orion/).

**5. Elasticsearch**

* **Database**: NoSQL, primarily used to store and retrieve data in JSON format.

**6. Kibana**

* **UI**: Interface to interact with Elasticsearch. [Browser Access Opens in new window or tab](https://polaris.kb.eastus.azure.elastic-cloud.com:9243/).

**7. Microsoft Teams**

* **Communication**: For internal and external communication.

**8. Microsoft Planner**

* **Task Management**: Assign and track tasks. [Browser Access Opens in new window or tab](https://tasks.office.com/greendreamteam.onmicrosoft.com/en-US/Home/Planner/).

**9. Key Vault**

* **Security**: Secure storage for sensitive information like API keys.

**10. Poetry**

* **Python Environments**: Dependency management tool. [Documentation Opens in new window or tab](https://python-poetry.org/docs/basic-usage/).

**First-Time Tasks**

**1. Connecting to dev-vm**

* **Prerequisites**: Install "Remote development" extension in VS Code.
* **Process**: Further steps will be explained during the GDT user setup.s

**2. Configure Git**

* Open terminal in VS Code and navigate to your project folder.
* Run the following commands:
* git config user.name "{your username}"
* git config user.email "{your email}"

**Best Practices and Guidelines**

* **Cloning a repo**: Clone from DevOps. Use a Personal Access Token (PAT) for authentication.
* **Turn on autosave**: Ensures that your code changes are saved automatically.
* **Turn on format on save**: Maintains the readability and standard of the code.
* **Write less code**: Focus on writing efficient and clean code.
* **Add type hints and docstrings**: Enhances readability and documentation.
* **Write descriptive commit messages**: Enables better code history tracking.

**Poetry**

**Two Main Files:**

* **.toml**: Configuration file.
* **.lock**: Log file. Auto-generated.

**To start working with an existing project:**

poetry shell

poetry install

**For a new project:**

poetry init

poetry add {Library Name}

**TL;DR**

Welcome to the team! This guide introduces you to our tools, tasks, and best practices. We use Azure, VMs, VS Code, DevOps, Elasticsearch, Kibana, Microsoft Teams, Microsoft Planner, Key Vault, and Poetry. Follow the guide to set up your development environment and adhere to best practices.