

# **Skill Coach Hackathon**

Guidelines for Innovation & Responsibility

**A collaboration between Škoda Auto a.s. and 42 Prague**

# Welcome, Innovators!

**We're thrilled to have you!**

- **Our Goal:** To foster creativity, collaboration, and rapid innovation.
- **Your Challenge:** Gain new insights from our employee skills and job description data.
- **Your Mission:** Build amazing, viable solutions that could shape our future.

These guidelines are here to empower you while keeping our data secure.

**Let's build the future, responsibly.**



# The Core Principle: Data Security

**This is our #1 Rule.**

You are working with anonymized but sensitive company data.  
Protecting it is your **top priority**.

## **The Golden Rule**

**The provided dataset and any derivatives of it must not leave the designated hackathon environment.**



# Your Toolkit: Secure AI Endpoints

## Leverage LLMs Safely

We have provisioned secure, internal LLM endpoints for you.

- **Models:** Access powerful models like **GPT-4o** and others.
- **Infrastructure:** Hosted securely on our internal Azure environment.
- **How it works:** A single API endpoint that is fully compatible with the standard OpenAI API.

Your welcome packet contains your unique API URL and authentication credentials.



# The *Only* Approved Method

## Using LLMs on Hackathon Data

Interacting with our provided **secure, internal API endpoint** is the **ONLY** approved method for using a Large Language Model on the hackathon dataset.

- Analyze data
- Summarize text
- Generate insights

...all within our secure, sandboxed environment.

# Recommended UI: OpenWebUI

## Quick Start: OpenWebUI

A self-hosted, open-source chat interface you can point to our secure endpoint.

**GitHub:** [github.com/open-webui/open-webui](https://github.com/open-webui/open-webui)

### Recommended Install (Docker):

```
docker run -d -p 3000:8080 \  
  -e OLLAMA_BASE_URL=YOUR_API_ENDPOINT_URL \  
  -v open-webui:/app/backend/data \  
  --name open-webui --restart always \  
  ghcr.io/open-webui/open-webui:main
```

*(Note: The OLLAMA\_BASE\_URL variable works for any OpenAI-compatible API, including ours!)*

Access it at: **<http://localhost:3000>**

# Recommended UI: LibreChat

## Alternative Option: LibreChat

Another powerful, self-hosted UI for interacting with our LLM endpoint.

**GitHub:** [github.com/danny-avila/LibreChat](https://github.com/danny-avila/LibreChat)

### Recommended Install (Docker Compose):

1. Create a `docker-compose.yml` file from their official setup guide.
2. Create a `.env` file and configure your custom endpoint.
3. Run:

```
docker compose up -d
```

*(Local install without Docker is complex and recommended for advanced users only.)*



# Critical Restriction: External AI Tools

## Using Public AI (ChatGPT, Copilot, etc.)

We encourage you to use external tools for general tasks, but with one critical rule:

**You must NEVER send, paste, or upload the provided sensitive data to any external, public, or third-party service.**

**Violation will result in immediate disqualification.**



# How to Use External AI Safely

## The Key: Abstraction & Anonymization

### BAD (FORBIDDEN)

Pasting into public ChatGPT:

*"Here is a list of 50 job descriptions from our company. Cluster them by seniority."*

### GOOD (ALLOWED)

Asking public ChatGPT:

*"Write a Python script using scikit-learn that takes a list of text documents and clusters them using TF-IDF and K-Means."*

**Use external tools for code, ideas, and assets—not for data processing.**



# Tech Guidelines: Cloud Infrastructure

## Build for Our Ecosystem

- **Primary Cloud:** Škoda Auto is an **Azure** ecosystem. We strongly encourage using the provided Azure services.
- **Other Clouds (AWS, GCP)?** Allowed only if:
  1. **Unique Capability:** It offers a clear, justifiable advantage not available on Azure.
  2. **Platform Agnostic:** Your solution is fully **containerized** (e.g., Dockerfile) to ensure it can be deployed anywhere.



# Tech Guidelines: Open Source Licenses

## Choose Your Dependencies Wisely

For a project to be commercially viable, it must use permissively licensed software.

### ✓ Highly Encouraged (Permissive)

- ✓ **MIT** (NumPy, Pandas, .NET)
- ✓ **Apache 2.0** (TensorFlow, Spark)
- ✓ **BSD** (PyTorch, scikit-learn)

### 🚫 Generally Avoid (Strong Copyleft)

- ✗ **GPL**
- ✗ **AGPL** (Affero General Public License)

**Your Responsibility:** Check the `LICENSE` file before adding a new dependency! When in doubt, ask an organizer.



# Tech Guidelines: Version Control Hygiene

## Secure Coding with Git & GitHub

### Rule 1: NEVER Commit Credentials

- **Problem:** Hardcoding API keys or passwords exposes them in your repository's history forever.
- **Solution:** Use **environment variables**. Load them from a `.env` file for local development.


### Rule 2: NEVER Commit the Dataset

- **Problem:** The sensitive `.csv` or `.json` data file should never be in your repository.
- **Solution:** Add the data files and your `.env` file to your `.gitignore` file.



# A Note on Automation Tools

## Advanced Local Setup: Pinokio Browser





- **What it is:** A tool to simplify installing and running local AI applications from GitHub.
-  **IMPORTANT WARNING:** Tools like Pinokio may require **root/administrator access** to your machine.
- Granting these permissions carries inherent security risks.

**Use these tools at your own risk.**

We recommend using isolated environments (like VMs or containers) if you choose to explore them.

# Hackathon Code of Conduct

## Our Etiquette

-  **Collaborate and Respect:** Support your teammates and respect all participants.
-  **Innovate and Have Fun:** Think outside the box, experiment, and don't be afraid to fail.
-  **Ask for Help:** Mentors and organizers are here for you. If you're stuck, just ask!
-  **Present with Pride:** Show us what you built, what you learned, and the potential of your idea.

## **Questions?**

We are incredibly excited to see what you create.

# **Happy Hacking!**