# Comprehensive Train-the-Trainer Lab Guides

1. Microsoft Labs: Create copilots with Microsoft Copilot Studio

### 1. Pre-class Activities

License and Access Requirements:

* Ensure all participants have an Azure account with access to Azure OpenAI Service

Environment Setup:

* Ensure participants have a computer with internet access and a supported browser

Pre-reading Materials:

* Share introductory articles on Large Language Models (LLMs) and prompt engineering
* Distribute a glossary of key terms related to the Copilots

### 2. In-class Activities

Teaching Core Concepts:

* Use Microsoft Learn modules for Create copilots with Microsoft Copilot Studio
* Use MCT PowerPoints and material for AI-3016 Develop Custom copilots with Azure AI Studio
* Implement live coding demos to demonstrate key concepts
* Utilize official Azure OpenAI documentation for in-depth explanations

Lab Guidance:

* Follow the official documentation for the copilot labs from the GitHub repo
* Highlight key steps and potential pitfalls in the lab instructions
* Prepare answers for common questions and issues

Best Practices:

* Emphasize responsible AI practices and content filtering
* Discuss best practices for prompt engineering and model selection

Tips and Tricks:

* Demonstrate effective use of Azure AI Studio for testing prompts

### 3. Post-class Activities

Continuous Learning:

* Provide links to advanced Azure OpenAI tutorials and case studies
* Share upcoming AI and ML conferences or webinars

Additional Scenarios:

* Suggest ideas for extending the lab project with additional features
* Provide a list of real-world use cases for Copilot-like applications

## 2. CloudLabs LabGuide Preview: Gen AI hackathon

### 1. Pre-class Activities

License and Access Requirements:

* Ensure all participants have Azure accounts with necessary permissions
* Verify access to required Azure AI services (e.g., Azure OpenAI, Cognitive Services)

Environment Setup:

* Ensure participants have a computer with internet access and a supported browser

Pre-reading Materials:

* Share introductory articles on various generative AI technologies
* Distribute a guide on hackathon best practices and team collaboration

### 2. In-class Activities

Teaching Core Concepts:

* Utilize Microsoft Learn paths on generative AI and Azure AI services
* Conduct brief workshops on key generative AI concepts (text, image, code generation)
* Use Azure AI documentation for detailed explanations of services

Lab Guidance:

* Follow the official MS Learn lab instructions
* Prepare a list of potential project ideas and challenges
* Create a troubleshooting guide for common issues participants might face

Best Practices:

* Emphasize the importance of ethical AI development
* Discuss best practices for rapid prototyping and MVP development

Tips and Tricks:

* Demonstrate effective use of Azure AI services for quick prototyping
* Show how to leverage pre-trained models and fine-tuning techniques

### 3. Post-class Activities

Continuous Learning:

* Provide links to advanced generative AI research papers and tutorials
* Share information about ongoing AI competitions and challenges

Additional Scenarios:

* Provide a list of real-world problems that could benefit from generative AI solutions

General Tips for Both Labs

1. Regularly check for updates to Azure services and lab content
2. Encourage hands-on experimentation beyond the prescribed lab steps
3. Foster a collaborative learning environment, possibly through group discussions or pair programming
4. Provide guidance on building a professional network in the AI and Azure community
5. Offer office hours or Q&A sessions for participants to address individual queries