

# GitHub skills exercise

28 minutes



## Exercise overview

Welcome to Mergington High School! In this hands-on skills session, you take on the role of a gym teacher developing **OctoFit Tracker**, a social fitness app designed to help students stay active and compete with their peers. Using **GitHub Copilot Agent Mode**, you'll rapidly build a functional prototype while learning best practices for AI-assisted development.

## Workshop objectives

By the end of this workshop, you will:

- Set up a development environment using GitHub Codespaces.
- Use GitHub Copilot to accelerate app development.
- Implement core features of OctoFit Tracker with Copilot Agent Mode.
- Apply best practices for prompting and refining AI-generated code.

## Application features

OctoFit Tracker includes:

- User profiles for students and gym teachers.
- Activity tracking to monitor fitness progress.
- Team creation and management for collaborative goals.
- Leaderboards to rank student performance.
- Personalized workout suggestions to help students improve.

## Hands-on exercise: developing OctoFit tracker

This exercise walks you through the following steps:

1. Set up a GitHub Codespace for development.
2. Install and configure GitHub Copilot.
3. Use Copilot Agent Mode to generate and refine key app components.
4. Implement fitness tracking, leaderboards, and user profiles with AI assistance.
5. Test and optimize AI-generated code.

## Get started

Click **Start the exercise on GitHub** to navigate to a template repository where you complete a series of coding challenges. Before beginning, follow these steps:

1. Select **Start course** or **Use this template** to create your own repository. We recommend using a public repository since private repositories consume Actions minutes. Wait about 20 seconds after setup, then refresh the page.
2. Follow the README instructions in the repository to complete the exercise.

Once you completed the exercise, return to this module for:

- ✓ A quick knowledge check
- ✓ A summary of what you've learned
- ✓ A badge for completing this module

### ⓘ Note

You don't need to modify any of the workflow files to complete this exercise. **Altering the contents in this workflow can break the exercise's ability to validate your actions, provide feedback, or grade the results.**

[Start the exercise on GitHub](#)

## Next unit: Module assessment

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