PRE_WORKSHOP_CHECKLIST

Contents

Pre-Workshop Environment Checklist

Use this checklist to verify your environment is ready **before** attending the GitHub Copilot workshop. Completing these steps in advance ensures you can focus on learning during the workshop without setup delays.

Required Setup (Complete Before Workshop)

1. GitHub Account & Copilot Subscription

☐ **GitHub account created**

- Visit github.com to sign up if needed

☐ **GitHub Copilot subscription active**

- Individual: $10/month or $100/year
- Business: Through your organization
- Students/Teachers: Free through GitHub Education

☐ **Verify subscription status**

1. Go to github.com/settings/copilot
2. Should show "GitHub Copilot is active"
3. Note your subscription type (Individual/Business/Free)

Troubleshooting:

- If no subscription: Visit github.com/features/copilot to subscribe
- If using Business/Organization: Contact your admin to be added

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2. Visual Studio Code Installation

☐ **VS Code installed** (version 1.80 or later)

- Download: code.visualstudio.com
- Verify: Run `code --version` in terminal

Expected output:

```
1.95.0 (or later)
```

Platform-specific notes:

- **macOS**: Install VS Code, then open Command Palette (Cmd+Shift+P) → "Shell Command: Install 'code' command in PATH"
- **Windows**: Add to PATH during installation
- **Linux**: Follow distribution-specific instructions

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3. VS Code Extensions

Install these required extensions:

☐ **GitHub Copilot** (GitHub.copilot)

1. Open VS Code
2. Click Extensions icon (left sidebar) or press `Cmd/Ctrl+Shift+X`
3. Search for "GitHub Copilot"

4. Click "Install"
5. Sign in with your GitHub account when prompted

☐ **GitHub Copilot Chat** (GitHub.copilot-chat)

- Search for "GitHub Copilot Chat"
- Click "Install"

☐ **C# Dev Kit** (ms-dotnettools.csdevkit)

- Search for "C# Dev Kit"
- Click "Install"
- Includes C# language support, IntelliSense, and debugging

Verify extensions installed:

1. Open Command Palette (`Cmd/Ctrl+Shift+P`)
2. Type "Extensions: Show Installed Extensions"
3. Confirm all three are listed

Verify Copilot is working:

(Optional) Use the Dev Container

☐ **Use the Dev Container:**
Open the project in VS Code and select `Dev Containers: Reopen in Container` from the Command Palette. This will automatically set up all required tools and extensions for the workshop. See the main README for details.

1. Create a new file: `test.cs`
2. Type: `// Function to calculate fibonacci`
3. Press Enter - you should see gray "ghost text" suggestions
4. Press Tab to accept or Esc to dismiss
5. If you see suggestions, Copilot is working!
6. Delete test file

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4. .NET 9 SDK Installation

☐ **.NET 9 SDK installed**

- Download: dotnet.microsoft.com/download/dotnet/9.0
- Choose ".NET 9 SDK" (not Runtime)
- Run installer for your platform

☐ **Verify installation**

Run in terminal:

```
dotnet --version
```

Expected output:

`9.0.x (any 9.x.x version is fine)`

Common issues:

- **Command not found**: Restart terminal or reboot computer
- **Old version showing**: Uninstall old versions, reinstall .NET 9, restart terminal
- **Multiple versions**: That's OK! The workshop uses .NET 9, but having 6/7/8 won't hurt

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5. Git Installation & Configuration

☐ **Git installed**

- macOS: Install via Xcode Command Line Tools or Homebrew
- Windows: Download from git-scm.com
- Linux: Use package manager (`apt`, `yum`, `dnf`)

☐ **Verify Git version**

```
git --version
```

Expected: `git version 2.30` or later

☐ **Configure Git identity** (if not already done)

```
git config --global user.name "Your Name"
git config --global user.email "your.email@example.com"
```

☐ **Verify configuration**

```
git config --global user.name
git config --global user.email
```

Should display your name and email.

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6. Clone Workshop Repository

☐ **Clone the repository**

```
git clone https://github.com/centricconsulting/ai-coding-workshop.git
cd ai-coding-workshop
```

☐ **Create your own branch from `main`**

```
git checkout main
git pull
git checkout -b my-workshop-branch
```

Replace `my-workshop-branch` with your name or a unique identifier.

☐ **Open in VS Code**

```
code .
```

VS Code should open with the workshop repository.

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7. Verify Solution Builds

☐ **Restore dependencies**

```
dotnet restore
```

Expected: "Restore succeeded" with no errors

☐ **Build solution**

```
dotnet build
```

Expected output:

```
Build succeeded in X.Xs
TaskManager.Domain succeeded
TaskManager.Application succeeded
TaskManager.Infrastructure succeeded
TaskManager.Api succeeded
TaskManager.ConsoleApp succeeded
TaskManager.UnitTests succeeded
TaskManager.IntegrationTests succeeded
```

☐ **Run tests** (should have failures - this is expected!)

```
dotnet test
```

Expected output:

```
Test summary: total: 11, failed: 11, succeeded: 0
```

This is correct! The 11 failing tests are placeholders you'll implement during the workshop.

Build issues?

- Run `dotnet clean` then try again
- Check .NET version is 9.x
- Ensure all extensions are installed

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8. Verify GitHub Copilot Integration

☐ **Open a C# file**

- Navigate to `src/TaskManager.Domain/Tasks/Task.cs`

☐ **Check Copilot status bar**

- Look at bottom-right of VS Code window
- Should see GitHub Copilot icon
- Icon should show checkmark ( ) or be blue/white (active)
- If red/crossed out, click it and sign in

☐ **Test inline suggestions**

1. At the end of the file, add a new line
2. Type: `// Method to validate task title`
3. Press Enter
4. Start typing: `public static bool`
5. You should see gray "ghost text" completing the method
6. Press Tab to accept or Esc to dismiss
7. Delete the test code

☐ **Test Copilot Chat**

1. Open Copilot Chat: `Cmd/Ctrl+Shift+I` (or click chat icon in left sidebar)
2. Type: `What testing frameworks are used in this project?`
3. Press Enter
4. Should get a response mentioning xUnit and FakeItEasy
5. Chat is working!

☐ **Test @workspace participant**

1. In Copilot Chat, type: `@workspace Where is the Task entity defined?`
2. Should respond with file path: `src/TaskManager.Domain/Tasks/Task.cs`
3. Workspace context is working!

Copilot not working?

- Click Copilot icon in status bar → "Sign in to GitHub"
- Check subscription at github.com/settings/copilot
- Reload window: Command Palette → "Developer: Reload Window"
- Check internet connection (Copilot requires online access)

Workshop Day Quick Check (5 minutes before)

Run these commands to verify everything still works:

```
# 1. Check .NET
dotnet --version
# Should show: 9.x.x

# 2. Navigate to workshop directory
cd path/to/ai-coding-workshop
git checkout main

# 3. Pull latest changes
git pull origin main

# 4. Verify build
dotnet build
# Should show: Build succeeded

# 5. Check Copilot status in VS Code
code .
# Check status bar icon is active ( )
```

Common Issues & Solutions

Issue: "GitHub Copilot is not available"

Solution:

1. Check subscription: github.com/settings/copilot
2. Sign out and back in: Click Copilot status bar icon → Sign out → Sign in
3. Reload VS Code window: Command Palette → "Developer: Reload Window"

Issue: "dotnet: command not found"

Solution:

1. Ensure .NET 9 SDK is installed (not just Runtime)
2. Restart terminal/computer after installation
3. Check PATH environment variable includes .NET

Issue: Build fails with "SDK not found"

Solution:

1. Run `dotnet --list-sdks` to see installed SDKs
2. Should include `9.0.xxx`
3. If missing, reinstall .NET 9 SDK
4. If multiple SDKs, ensure global.json (if present) doesn't pin to old version

Issue: Copilot suggestions not appearing

Solution:

1. Ensure you're typing in a supported file (`.cs`, `.md`, etc.)
2. Wait 1-2 seconds after typing
3. Check Copilot isn't disabled for the file type
4. Try closing and reopening the file
5. Check Copilot status bar icon isn't showing error

Issue: Extensions not loading

Solution:

1. Ensure VS Code is up to date (Help → Check for Updates)
2. Disable other AI/autocomplete extensions that might conflict
3. Reload window: Command Palette → "Developer: Reload Window"
4. Reinstall extensions if needed

Issue: Git clone fails

Solution:

1. Check internet connection
2. If using SSH: Ensure SSH keys are configured on GitHub
3. Try HTTPS instead: `git clone https://github.com/centricconsulting/ai-coding-workshop.git`
4. Check firewall/proxy settings

Getting Help

If you encounter issues completing this checklist:

1. **Check workshop documentation**:
   - Main README: `README.md`
   - Facilitator Guide: `docs/FACILITATOR_GUIDE.md`
2. **Official documentation**:
   - GitHub Copilot Docs
   - .NET Installation Guide
   - VS Code Setup
3. **Contact workshop facilitator**:
   - Reach out via email/Slack before the workshop
   - Arrive 15 minutes early for help
4. **Backup plan**:
   - If all else fails, we can use GitHub Codespaces (cloud-based VS Code)

- Requires only a browser and GitHub account

Final Checklist

Before the workshop, confirm:

- ☐ GitHub Copilot subscription is active
- ☐ VS Code with all 3 extensions installed (Copilot, Copilot Chat, C# Dev Kit)
- ☐ .NET 9 SDK installed (`dotnet --version` shows 9.x.x)
- ☐ Git installed and configured
- ☐ Workshop repository cloned and personal branch created from `main`
- ☐ Solution builds successfully (`dotnet build`)
- ☐ Tests run and show 11 expected failures (`dotnet test`)
- ☐ Copilot inline suggestions work
- ☐ Copilot Chat responds to queries
- ☐ Workspace context works with `@workspace`

You're Ready!

If all items above are checked, you're fully prepared for the workshop!

See you at the workshop! Bring:

- Your laptop with the environment set up
- Power adapter (3-hour workshop)
- Curiosity and willingness to experiment
- Questions about AI-assisted development

Note: If you couldn't complete all checklist items, still attend! Facilitators will help during the setup period, and we have backup options available.