AI Tutor Mini Guide

Interactive Learning Experience with the "Workplace Software and Skills" Textbook

This AI Tutor is a pilot project built using the open-access textbook *Workplace Software and Skills* by OpenStax. The goal is to demonstrate how artificial intelligence can enhance open educational resources (OER) through adaptive, interactive learning experiences.

Introduction

Thank you for exploring this AI-powered tutor. This project showcases how AI can make learning from detailed textbooks more engaging and personalized. Built using content from *Workplace Software and Skills*, the tutor guides learners through summaries, real-world applications, storytelling, and interactive challenges.

It runs on Google Colab and was developed using Clemson University's Palmetto Supercomputing Cluster. The system is modular, scalable, and adaptable to other textbooks and subjects.

Time Commitment

The full experience takes about **45 minutes to 1 hour**. Each activity is modular and can be completed at your own pace.

Why Your Feedback Matters

Your input will help us improve the tool. Please share your thoughts on usability, clarity, and learning impact. Your feedback will guide future improvements and broader applications in education and training.

How to Use the AI Tutor

This guide includes.

-   Summary of Activities to Complete in the User Study
-   Detailed Explanation of Features and Interface

Summary of Activities to Complete in the User Study

Please review and complete the tasks below. If you're unable to complete the study, kindly return the task.

Step	Description	Time Estimate
1. Launch AI Tutor	Open Google Collab link, run all cells, wait for the system to initialize. Launch Link : Open AITutor on Google Collab	5–10 minutes
2. Enter Name & Start	Add your name, then choose walkthrough or skip to tutor	2–3 minutes
3. Select a Chapter	Choose a chapter from the dropdown and click "Confirm Chapter." If you skip the walkthrough, this screen appears first. Use "Return" anytime to revisit it.	2-3 minutes
4. Explore Learning Modes	Preview Business Case, Storytelling, and Challenges	10–15 minutes
5. Complete Challenges	Try at least two challenges (e.g., Flashcards, MCQs)	20–30 minutes
6. Review Progress	Check your XP Dashboard and Learning Profile	5 minutes
7. Submit Feedback	Fill out the feedback form Feedback Link: **Complete this short Feedback form**	5 minutes

Detailed Explanation of Features and Interface

The following tables summarize key features, menus, and learning modes of the AI Tutor to help participants understand the interface and available options in a compact, easy-to-follow format.

Table 1: Getting Started

Feature	Description
Runtime Setup	Click "Runtime > Run all" in the Colab notebook to start. Initial setup takes 5–10 minutes.
Walkthrough Option	Select "Yes" for a guided tour (recommended for first-time users) or skip ahead.
Name Entry	Enter your name to personalize the session and begin the tutor.

Chapter selection	Choose a chapter from the dropdown and click " Confirm Chapter" to begin.

Table 2: Learning Modes

Mode	Purpose
Business Case	Presents real-world examples of how the chapter concepts apply in companies.
Storytelling	Uses a fictional character to explain how a concept is applied in context.
Challenges	Offers interactive exercises to test and reinforce understanding of the topic.

Table 3: Challenge Types

Challenge Type	Description
Flashcards (Flip)	Flip cards to check answers, mark "I got it" or "I missed it," and track progress.
Multiple Choice (MCQ)	Select from four options; get instant feedback and XP for correct answers.
Fill in the Blanks	Complete sentences using dropdowns; incorrect choices reduce your lives (3 total).
Match the Answers	Match terms to definitions using dropdowns; view correct/incorrect feedback.
Timed Questions	Answer under a 15-second timer; encourages fast recall and immediate feedback.
Scenario-Based (Hints)	Choose actions in a real-world scenario with optional hints and decision feedback.

Table 4: Progress Tracking and Support

Feature	Description

XP Dashboard	Displays earned XP, completed challenges, badges, and progress over time.
Learning Profile	Shows level, completed chapters, trends, and personal learning milestones.
Chat with AI Tutor	Ask questions, request help, or revisit chapter summaries anytime.

Note: Chat with AI Tutor (Testing Version)

This chat feature is currently running in Google Colab and may be slow or unresponsive due to limited computing resources and lightweight models.

Please feel free to try the chat if it loads — but don't rely on it for now. The rest of the AI Tutor system (walkthroughs, challenges, and dashboards) functions normally and will give you a complete learning experience.

Quick Note on Responsiveness and Navigation

The system runs on Google Colab and may respond slowly or become unresponsive due to limited resources and lightweight models. This is expected during testing.

If anything freezes or doesn't respond:
• Click **"Return to Chapters"**
• Select another mode or challenge
• Restart the notebook if needed

You can return to the walkthrough at any step. It provides clear guidance and shows what to do next after each phase.

If anything feels stuck or slow, try restarting the session. If it still doesn't work, feel free to return later — the delay is normal due to high code load and limited resources in this test setup.

Planned Improvements:

In the full version, the chat will:

- Run on dedicated servers

- Use more powerful models

- Be available 24/7 for real-time learning support

Thank You

The walkthroughs, challenges, and dashboards all work normally and offer a complete learning experience. We appreciate your participation and feedback — it will help shape future AI-powered educational tools.