**MCIP CI4 meeting minutes – week 3**

**Time:** 15:00-16:00, 18 March 2025

**Location:** IW4

**Items:**

* Discussion:
* Proposal to Dr. Cruz Izu:
  + Our team has made a proposal, a draft diagram, and a UI prototype for the project.
* The content of the proposal:
* System and User Workflow

1. \*\*User Login\*\* → The user logs in to access the platform.

2. \*\*Chapter Selection\*\* → User selects a Python topic, and LLM generates relevant coding questions.

3. \*\*User Attempts to Answer:\*\*

- \*\*Knows the answer\*\* → Submits code → LLM suggests improvements.

- \*\*Requests the answer\*\* → LLM provides \*\*guiding hints\*\* (terminology, algorithm, data structure) instead of direct code.

- \*\*Submits incorrect/incomplete code\*\* → LLM provides \*\*step-by-step feedback\*\* instead of full correction.

4. \*\*Hint System\*\* → The AI provides a maximum of \*\*10 guided iterations\*\* before revealing the correct code. (shreshold depending by the system)

- The AI provides \*\*up to 10 guided hints\*\*.

- after 10 interactions, if the student keeps asking for the correct code, the AI \*\*reveals the correct solution\*\* (configurable per question difficulty).

- after 10 interactions, If the student makes meaningful progress, the AI may \*\*extend the interactions to 15\*\* instead of revealing the answer immediately.

5. \*\*Progress Tracking\*\* → All interactions and submissions are stored in the database.

* Tech Stack:

- Frontend: React.js (User Interface)

- Backend: Flask (API Server)

- LLM Integration: OpenAI ChatGPT & LLaMA

- Database: PostgreSQL (User Progress & Code Storage)

- Deployment: Docker (Containerized Services)

* Feedback from Dr. Cruz Izu:
  + Put in more effort and focus on the core development of our project. If we have enough time, then put effort on front-end UI design.
  + Changing the fixed interaction limited in 10 iterations to a dynamic LLM parameter. Let AI decide the dynamic number of iterations based on different user level interaction.
  + Storing user interactions for only a limited time.
  + Separate the diagram into two parts: User workflow and System workflow.
* Action Items:
* Sending the meeting agenda to Dr. Cruz Izu every Monday before Tuesday meeting.
* Preparing pitch presentation slide and recording.
* List tasks and set up milestones in GitHub while the project details are defined.
* Uploading the previous meeting minutes.