**👨‍💻 Task 4: Effective PR Review using Role Prompting**

In this task, we will practice **role prompting** — an AI technique where you direct the model to adopt a specific **expert persona**.

**📚 Theory**

**AI Technique: Role Prompting**

**Role prompting** is an AI technique that directs a model to adopt a specific **persona, character, or expert perspective** when generating a response or performing a task.

By assigning the model a particular role — such as a seasoned **security expert**, an experienced **senior software developer**, a meticulous **technical writer**, or even a specific **fictional character** — we can elicit responses that are more **specialized**, **contextually relevant**, and aligned with the **nuances of that chosen role**.

**🧠 How it Works**

When a role is assigned, the AI leverages its vast training data to simulate the **knowledge, language style, and reasoning patterns** associated with that role.

For instance, if prompted to act as a "**cybersecurity analyst**", the model will prioritize:

* Security vulnerabilities
* Threat assessment
* Mitigation strategies

***⚠️ This doesn’t mean the AI becomes that expert — it filters and focuses its output through the lens of the designated persona.  
The prompt serves as a strong contextual anchor, guiding the AI’s generation to stay consistent with that role's typical concerns, priorities, and tone.***

**💼 Example: Human Resources Scenario**

Imagine you have a company-wide communication draft about a new **remote work policy**. Using role prompting, you could ask the AI to review it from multiple angles:

**As an HR Director:**

* Evaluate clarity, compliance, and company culture impact
* Ensure the tone is authoritative yet supportive
* Check clarity on employee vs. manager responsibilities

**As an Employee Engagement Specialist:**

* Assess morale and work-life balance implications
* Spot gaps regarding team cohesion or isolation
* Promote empathetic, supportive language

**As a Legal Compliance Officer (within HR):**

* Verify alignment with labor laws and regulations
* Detect legal ambiguities or omissions
* Ensure legal clarity and precision in language

This technique is **especially useful** when:

* Domain expertise is required for nuanced answers
* A multi-perspective analysis ensures **thoroughness**

**🛠️ Task**

You've submitted code for review but received **superficial feedback**.  
Now, you want **AI to provide a deeper analysis** from different expert perspectives.

Your task is to **craft a prompt** using the following instructions:

**🔸 Choose a code sample:**

Select one of the provided implementations of the process UserData function:

* [processUserData.java](https://ventionteamsinc-my.sharepoint.com/:u:/g/personal/mikita_sauko_ventionteams_com/EQVjRaVGLpNPjwRWOxgum1kBlIKG3_X9pkfABar8d9HH6w?e=rg9Asi)
* [processUserData.js](https://ventionteamsinc-my.sharepoint.com/:u:/g/personal/mikita_sauko_ventionteams_com/EcEmzsceelBMsPxn_RbQmdgBD9l-aqFlDigwJjPDEhPJvg?e=McUrfH)
* [processUserData.py](https://ventionteamsinc-my.sharepoint.com/:u:/g/personal/mikita_sauko_ventionteams_com/Edb4V5rcxWFKqbqsC0uEl2sBjGIXrVXYZBMiYXI27UcrBg?e=q15TX3)
* [processUserData.cs](https://ventionteamsinc-my.sharepoint.com/:u:/g/personal/mikita_sauko_ventionteams_com/EYUa1gqjxx5AlPQ3B3fqYCABFCaMsgwEvX8eaJuEjjkS0w?e=Fu4dEy)
* [processUserData.go](https://ventionteamsinc-my.sharepoint.com/:u:/g/personal/mikita_sauko_ventionteams_com/EcaCQ5hyDBhItia2p6Oif5IBpvjGMEn7DO6nXd4wfHG2QQ?e=dYDlXe)

**🔸 Define Expert Roles and Analysis Focus**

Your prompt must instruct the AI to adopt **each of the following three expert personas sequentially**:

1. 👨‍💻 **Experienced Developer**
2. 🔐 **Security Engineer**
3. ⚙️ **Performance Specialist**

Each persona should focus on areas relevant to their role.

**🔸 Create the Prompt**

The prompt must clearly instruct the AI to:

* Take the provided **code snippet** as input
* Analyze it from each of the **three expert perspectives** listed above
* Provide **specific, actionable recommendations** for each perspective — not just generic statements

**📌 Requirements**

* The analysis in your result should:
  + ✅ Provide **distinct and relevant feedback** for each of the three roles
  + ✅ Cover the **specified focus areas** for each role
  + ✅ Offer **actionable and specific recommendations**, not just generic statements