**User:** Hi

**AI:** Hello! Welcome to our interactive lesson on analysing requirements-gathering scenarios and proposing appropriate techniques. I'm here to guide you through this process.   
  
Today, you'll be taking on the role of the lead application system designer for EduLink, a global education provider. EduLink is planning to develop a Learning Management System (LMS) that will support online course delivery, student collaboration, and assessment management.   
  
Your task is to gather and analyse the requirements for the EduLink LMS.   
  
Let's start with the first task: Can you identify the stakeholders for this project?

**User:** students, teachers, IT folks, investors of EduLink, system administrators

**AI:** Great start! You've identified several key stakeholders for the EduLink LMS project: students, teachers, IT staff, investors, and system administrators.   
  
Each of these groups will have unique needs and requirements for the system.   
  
Now, let's move on to the second task: Can you outline the potential requirements for each identified stakeholder group? Remember, these requirements should be based on their roles and how they would interact with the LMS.

**User:** Students need access to course materials, teachers need tools to create and manage course content, IT folks need development tools and troubleshooting tools

**AI:** Good job! You've started to outline the requirements for some of the stakeholders.   
  
For students, you've mentioned access to course materials. They might also need features for collaboration and communication, as well as tools for tracking their progress.  
  
Teachers, as you've noted, need tools to create and manage course content. They might also need features for assessing student work and communicating with students.  
  
IT staff, as you've pointed out, need development and troubleshooting tools. They might also need features for system maintenance and security.  
  
You've not yet mentioned requirements for investors and system administrators. What might these stakeholders need from the LMS?

**User:** Investors require financial reporting tools to track profit and system administrators need management tools to control the system

**AI:** Excellent! You've now outlined potential requirements for all the identified stakeholders:  
  
- Students: Access to course materials, collaboration and communication tools, progress tracking.  
- Teachers: Tools to create and manage course content, assessment features, communication tools.  
- IT Staff: Development and troubleshooting tools, system maintenance and security features.  
- Investors: Financial reporting tools.  
- System Administrators: Management tools to control the system.  
  
Now, let's move on to the third task: Can you analyse the scenario and evaluate the suitability of different requirements gathering techniques? Remember, these techniques could include interviews, surveys, observation, document analysis, and more.

**User:** I think interviews and surveys are the most suitable way to gather requirements

**AI:** Great start! Interviews and surveys are indeed effective techniques for gathering requirements.   
  
Interviews allow for in-depth discussions and understanding of the needs of the stakeholders. They can be structured or unstructured and can provide valuable insights into the requirements.  
  
Surveys, on the other hand, can reach a larger number of people and can be used to gather quantitative data. They can be particularly useful when you need to gather information from a large group of stakeholders, like students.  
  
Can you think of any other techniques that might be useful? And how would you apply these techniques to the different stakeholder groups?

**User:** What do you mean by other techniques

**AI:** By "other techniques", I'm referring to additional methods you could use to gather requirements for the LMS. Besides interviews and surveys, there are several other techniques that are commonly used in requirements gathering, such as:  
  
- Observation: Watching users interact with a current system or process can provide insights into their needs and challenges.  
- Document Analysis: Reviewing existing documentation, such as system specifications or user manuals, can help identify current requirements and potential areas for improvement.  
- Focus Groups: Bringing together a group of users to discuss their needs and preferences can provide a range of perspectives and ideas.  
- Workshops: These are interactive sessions where stakeholders can collaborate to define requirements.  
  
Can you think about how these techniques might be applied to the different stakeholder groups?

**User:** Workshop can apply in the group of IT staffs

**AI:** Absolutely! Workshops can be an excellent technique for gathering requirements from IT staff.   
  
In a workshop setting, IT staff can collaborate to define technical requirements, discuss potential challenges, and propose solutions. This can be particularly effective as IT staff often have a deep understanding of the technical aspects of the system.  
  
What about the other stakeholder groups? How might you use observation, document analysis, or focus groups to gather requirements from them?

**User:** Observation could apply in student group, document analysis can apply in it staff and system admin group, focus groups can apply in teacher's group

**AI:** That's a great analysis!   
  
Observation can indeed be very useful for understanding how students interact with the current system, which can help identify their needs and challenges.   
  
Document analysis can provide valuable insights into the technical requirements and constraints for IT staff and system administrators.   
  
Focus groups with teachers can help gather a range of perspectives on what features and tools they need to create and manage course content effectively.  
  
Now, let's consider the fourth task: What are some challenges and constraints specific to the education domain, such as accessibility requirements and the need to support diverse learning styles?

**User:** Accessibility could be a problem, for example, if we want the system to be able to support multi-language, we have to create many versions of a single one content

**AI:** Absolutely, accessibility is a significant consideration in the education domain. Supporting multiple languages is indeed a challenge, as it requires the system to be capable of presenting content in various languages, which can be resource-intensive.  
  
In addition to language accessibility, there are other aspects of accessibility to consider. For instance:  
  
- How might the system accommodate users with disabilities?   
- How can the system support diverse learning styles and paces?  
- How can the system ensure easy access to resources regardless of the user's technological proficiency or the device they're using?  
  
Can you think of any other challenges or constraints specific to the education domain?

**User:** The system should offer features like screen reader compatibility for visually impaired students. And the system should also support muti-media content such as text, video and audio for diverse learning styles

**AI:** Excellent points!   
  
Ensuring compatibility with screen readers and other assistive technologies is crucial for making the system accessible to visually impaired students.   
  
Supporting multimedia content like text, video, and audio can cater to diverse learning styles, as some students may prefer reading, while others learn better by watching videos or listening to audio content.  
  
Now, let's move on to the final task: Can you propose which requirements gathering technique would be best suited to a given stakeholder group, considering the challenges and constraints you've identified?

**User:** Surveys are suitable for large groups such as students and teachers. Interviews could be applied in IT staffs group and teachers.

**AI:** That's a good start. Surveys can indeed be effective for gathering requirements from large groups like students and teachers, as they can reach a large number of people and provide quantitative data.   
  
Interviews, on the other hand, can provide more in-depth, qualitative data and can be particularly useful for gathering requirements from IT staff and teachers, who may have more complex or technical needs.  
  
What about the other stakeholder groups - investors and system administrators? And how might the challenges and constraints you've identified, such as accessibility and support for diverse learning styles, influence your choice of requirements gathering techniques?

**User:** Interview is suitable for investors group and workshop is suitable for system admin group

**AI:** Well done!   
  
Interviews can indeed provide valuable insights into the needs and expectations of investors, who are likely to have specific financial and strategic interests in the project.  
  
Workshops can be very effective for system administrators, as they allow for collaborative problem-solving and can help identify technical and management requirements.  
  
You've now completed the tasks for this exercise. You've identified key stakeholders, outlined their potential requirements, evaluated different requirements gathering techniques, considered specific challenges and constraints in the education domain, and proposed suitable techniques for each stakeholder group.  
  
Congratulations on your hard work! This exercise should have helped deepen your understanding of requirements gathering in the context of application system design. Keep these principles in mind as you continue your studies and eventually apply them in your professional work.