

Reflection Use of AI

- 1. List all the ways that your team used generative AI in this deliverable. Please be specific. (E.g. to identify key stakeholders)**

We used generative AI to word our thoughts better, describe the company, generate stakeholders and schedules, and review our RFP structure and content.

- 2. Which AI model(s) did you use?**

ChatGPT 4o mini

- 3. What similarities and differences did you notice between your content and the content generated by AI? Please give examples from your RFP.**

The AI-generated content had a lot of similar ideas to our RFP. The scheduling system and profiling were both similar to the ideas we came up with as a group. The AI differed in our response by mentioning broader ideas. Instead of describing how and why the processes should be implemented, the AI mainly focused on the what factor. This was especially relevant in the intended users, where it mentioned that patients and healthcare providers are the intended users, and in the objectives section, where it mentioned increasing availability but now how, or the direction to go to solve that.

- 4. What aspects of the AI-generated artifact surprised you or that you hadn't considered? Provide examples from your RFP.**

The AI-generated response was beneficial as it had a quicker and broader knowledge of related aspects to a RFP. Certain regulations for constraints on the health, privacy and development side were overlooked when building the constraints. The AI also defined and simplified the current systems used in hospitals today which were implemented in the current systems section.

- 5. What are some areas where AI did not help you in writing your RFP? Be specific about those areas.**

The AI-generated prompts were very broad. We noticed that even with our problem definition, the results could have been applied to any industry. For the first few iterations the AI While there is overlap between industries, I was not as specific as we wanted it to be. The AI initially outlined a large majority of the document in bullet points. While this is good for learning and referring to, it was excessive even for an RFP.

- 6. What did you do when AI's content differed from your own content? How did you decide what content to keep? Give examples of the differences here.**

While we did not incorporate any AI-generated content into our RFP, the AI-generated material aligned closely with our objectives and was repeating what we had already said.

- 7. How confident were you in generative AI's output?**

We were confident in AI's ideas, such as problem statement and project objectives, but we did not find its formatting and writing style to conform to our purposes with our background of requirements engineering.

8. In your observations, what made prompts effective and what made prompts ineffective? How did you decide that a prompt was effective, or not? Please give examples of your prompts for both good and bad prompts, and your perceived good and bad responses from the AI model.

Prompt 1:

If you were tasked with creating a healthcare app as a business analyst with requirements engineering background, how would you create a request for proposal with the following sections:

Product Overview, Project Objectives, Current Systems, Intended Users of the System, Known Interaction Within or Outside the Client Organization, Known Constraints to Development, Project Schedule

Problem Statement: Healthcare systems face long wait times for appointments, checkups, consultations, and more. There is a need to reduce these wait times to increase availability and access to essential services provided for all patients. Additionally, each patient has their own set of prescriptions, injuries, and other medical diagnoses and issues. These systems can be managed by a non-human, to increase healthcare provider availability, healthcare efficiency, ...

Prompt 1 Response Example:

2. Project Objectives

- **Reduce wait times** for appointments, consultations, and checkups.
- **Increase accessibility** to healthcare services for all patients.
- **Streamline healthcare workflows** to improve healthcare provider efficiency.
- **Enable easy management** of patient prescriptions, diagnoses, and medical history.
- **Automate routine tasks** to reduce manual intervention, leveraging AI-driven solutions where applicable.
- **Enhance patient experience** through an intuitive and user-friendly interface.
- **Ensure data privacy and security** in compliance with healthcare regulations (e.g., HIPAA, GDPR).

Prompt 1 Reflection:

This turned out to be a bad prompt as it was littered with unhelpful bullet points and vague wording. In the example from the AI's output above, having only bullet points makes it hard to read and does not conform to the typical 'section' of an RFP. The AI also did not include anything on how this project would accomplish the objectives.

Prompt 2:

If you were tasked with creating a healthcare app as a business analyst with requirements engineering background, how would you create a request for proposal with the following sections:

Product Overview, Project Objectives, Current Systems, Intended Users of the System, Known Interaction Within or Outside the Client Organization, Known Constraints to Development, Project Schedule

Problem Statement: Healthcare systems face long wait times for appointments, checkups, consultations, and more. There is a need to reduce these wait times to increase availability and access to essential services provided for all patients. Additionally, each patient has their own set of prescriptions, injuries, and other medical diagnoses and issues. These systems can be managed by a non-human, to increase healthcare provider availability, healthcare efficiency, ...

Use full sentences in paragraph format under each section.

Prompt 2 Response Example:

2. Project Objectives

The primary objective of this project is to develop a user-friendly healthcare application that reduces patient wait times while improving access to healthcare services. Specifically, the app should allow for online appointment bookings, virtual consultations, and the management of patient records such as prescriptions and medical diagnoses. The app should support both patients and healthcare providers, enhancing the overall efficiency of medical consultations and ensuring patients receive timely care. Another objective is to ensure data security and patient confidentiality by adhering to legal and regulatory requirements, such as HIPAA in the United States or GDPR in Europe. Additionally, the project aims to be scalable, allowing for future integration with new features and third-party systems.

Prompt 2 Reflection:

This prompt had a better format as it did not use only bullet points in its response. However, it mentions some irrelevant details as it begins to talk about the United States and Europe. The project objectives it mentions are broadly correct, however are quite broad. This response was a clear improvement over the prompt 1 response.

Prompt 3:

If you were tasked with creating a healthcare app as a business analyst with requirements engineering background, how would you create a request for proposal with the following sections:

Product Overview, Project Objectives, Current Systems, Intended Users of the System, Known Interaction Within or Outside the Client Organization, Known Constraints to Development, Project Schedule

Problem Statement: Healthcare systems face long wait times for appointments, checkups, consultations, and more. There is a need to reduce these wait times to increase availability and access to essential services provided for all patients. Additionally, each patient has their own set of prescriptions, injuries, and other medical diagnoses and issues. These systems can be managed by a non-human, to increase healthcare provider availability, healthcare efficiency, ...

Project Objectives:

- Decrease wait time for appointments
- Improve efficiency for report generation
- Reduce overhead for hospital staff
- Improve quality of care
- Provide consistent way of patient prioritization

Systems created (uses AI):

Medical Profiling System, Scheduling Assistant (determining patient priority based on medical profile and urgency of the situation), Report Generation

Use full sentences in paragraph format under each section.

Prompt 3 Response Example:

Project Objectives:

The primary goal of this project is to significantly decrease patient wait times for appointments, checkups, and consultations by optimizing scheduling and prioritization processes. The app will leverage AI-driven tools, including a Medical Profiling System and Scheduling Assistant, to enhance the workflow of healthcare providers. Additionally, it aims to improve the efficiency of generating medical reports, reducing the administrative burden on hospital staff. By reducing operational overhead, the project seeks to allow healthcare providers to focus more on patient care, ensuring that resources are allocated where they are most needed. The app will also provide a consistent and reliable system for patient prioritization based on urgency, ensuring the right care is delivered at the right time.

Prompt 3 Reflection:

This prompt finally gave us an AI generated RFP that we were satisfied with. We were able to eliminate most of the unfavourable formatting and wording, replacing it with nice paragraphs that excluded irrelevant details included in the previous prompt.

9. **If you had to repeatedly prompt the AI model, why did you keep updating your prompt? What changes were you making to your prompts? How did you know when you were satisfied with the output? Give examples of conversations requiring repeated or changing prompts.**

We did have to repeatedly prompt the AI to get more specific answers that were more tailored to what we wanted. For example, for Prompt 2, we specified that we wanted full sentences and paragraphs for each section. This was to make it more similar to what a proper RFP should like and to get more fleshed out responses. For Prompt 3, we specified our project objectives so rather than getting a very general answer, it was more relevant to what we envisioned. We knew when we were satisfied with the AI's response when it was becoming closer and closer to the RFP we created.

An example of a conversation that required changing the prompt is seen below.

Prompt 2 Product Overview

The proposed healthcare app will be designed to address the inefficiencies present in current healthcare systems, particularly long wait times for appointments, checkups, and consultations. The app aims to streamline patient access to healthcare services by offering features such as appointment scheduling, telemedicine consultations, electronic health record management, prescription tracking, and appointment reminders. By integrating an AI-powered system for basic consultations and medical advice, the app seeks to increase provider availability, reduce patient wait times, and ensure that healthcare resources are utilized more efficiently. Additionally, the app will integrate with existing hospital or clinic systems to provide seamless access to patient records and history, ensuring continuity of care.

Prompt 3 Product Overview:

This proposal outlines the development of a healthcare application aimed at improving the efficiency and accessibility of healthcare services. The app will integrate artificial intelligence (AI) to manage medical profiling, scheduling, and report generation. It will focus on reducing wait times for patients, improving overall healthcare delivery, and streamlining hospital operations. By automating and prioritizing tasks that traditionally consume significant staff resources, the application will ensure timely care and enhance the quality of service provided to patients.

Without giving the AI our specific objectives, it generated an overview that had an objective we did not want, such as the telemedicine consultations as seen in Prompt 2. But after providing the objectives, the product overview for Prompt 3 was concise, yet contained almost the same details as our own product overview.

10. Did you perceive that the AI model gained and maintained contextual understanding during the conversation? E.g. did you keep having to remind the model of something introduced early on? What context did it remember and what context did it forget?

The AI model did maintain contextual understanding during the conversation. Starting from prompt 1 and continuing the conversation with the model to remove bullet points than include more about are project objectives and systems worked well. The model was able to maintain the details from the previous prompt while adding what was asked of it well.