

**Take-home Assignment for Round-2 selection:**

Your take-home assignment is to create a prototype ‘digital twin’ that generates responses to your incoming emails with a PDF document attachment. The responses your prototype generates should embody your own unique writing style and incorporate any available context and related knowledge about the underlying thread, based on the attached PDF and other related emails on the same thread.

The extent to which you decide to build out your response is left to your discretion, though ideally your response should include the following:

- I. Source and ‘executable’ code for your prototype solution. You may decide whether to:
 - A. Submit your prototype code as an executable file (for Mac) or a web app. Else you may demo the code running on your computer if you are invited for Round-2.
 - B. Incorporate a UX in your prototype, or run your code from a command line.
 - C. Incorporate any backend components in your prototype, or discuss them in your presentation (below).

- II. A presentation (pdf, ppt, or video), highlighting the following aspects of your work:
 - A. Underlying solution architecture and system design for your prototype solution, including the front-end, back-end technologies incorporated.
 - B. The Cloud and AI/ML technology stack, Development tools (like copilots and LLM’s) and any other resources you employed in building the prototype, and what you would employ given more time.
 - C. Your plan/approach to address following aspects to operationalize the prototype
 - The market opportunity for your product
 - Scalability, Client data Security, Ease of deployment and use
 - Inference time cost
 - Anticipated challenges in deploying this solution at scale and resources needed to address them.
 - How have/would you employ ML, LLMs and Agents in your solution?
 - Any other considerations you’d have in building/deploying your solution.

To demonstrate your hands-on expertise in relevant areas, you could consider employing multiple agents and AI/ML techniques beyond making LLM API calls!

Please note that the purpose of this assignment is for you to provide us a glimpse of your product and systems thinking while tackling a business problem and prototyping it. That said, the time and effort you decide to invest in this exercise is entirely at your discretion.

Kindly submit your response via email @ engage@easeverticalai.com by the specified date.
Good luck!