PROJECT #4723:
AI CHATBOT FOR NUS ODPRT

- **Organisation**: NUS - Office of the Deputy President (Research and Technology) (ODPRT)

- **Project overview**: We are looking to refine/improve on an AI chatbot developed by two previous BT4103 Business Analytics Capstone teams. The AI chatbot should be capable of providing quick and accurate responses to a wide range of common inquiries from NUS staff pertaining to research related matters. The chatbot should be able to integrate seamlessly with existing systems, such as grants and/or contracts management systems.

- **Objectives**: To improve overall productivity and efficiency of ODPRT by automating manual workflows such as attending to common enquiries received by ODPRT via emails using an AI Chatbot.

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Scope of work:

As this is a continuation of the Capstone Project, we would like to further work on the ODPRT AI Chatbots that were developed by the previous teams.

With the current ODPRT AI Chatbots, we are looking to:

(1) improve the accuracy of the chatbot in answering user queries;

(2) include one more ODPRT unit's frequent received queries;

(3) perform analytics on user queries (e.g. common questions asked by users, questions that the chatbot unable to answer, etc.); and

(4) add the ability to upload and read documents (PDF/MS Word, Excel, PPT Doc format) attached by the user and redirect to the relevant other offices.

The main Project Deliverable is to have an accurate and functional Chatbot that can be implemented on ODPRT's website.

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- **Deliverables**: Accurate and functional Chatbot implemented minimally in ODPRT's website.

- **Project data sources:** Emails sent to ODPRT, Q&A relevant to ODPRT

- **Project platform and tools:**

   (1) Chatbot created using IBM Watson

   (2) Chatbot created using the following open-source technology stack: Frontend: React, Mantine Backend: Flask LLM: OpenAI, MISTRAL AI Databases: Chroma and Firebase Version Control: GitHub