**Design Thinking for A.I. Solutions**

**Assignment 2**

**Research Question:**

1. What are the most common challenges faced by hospital management in allocating rooms to COVID-19 patients during a surge in admissions?
2. What existing technologies or practices are currently employed in hospitals to manage patient room allocations, and how effective are they in addressing the surge in COVID-19 cases?
3. What are the key features and functionalities that hospital administrators consider essential in an application for managing patient room allocations during a healthcare crisis like the COVID-19 pandemic?

**Interview Question:**

1. Can you describe the biggest challenges you faced in managing patient room allocations during the peak of the COVID-19 pandemic?
2. What tools or systems are currently in place to assist in patient room allocations, and how effective have they been in handling the surge in COVID-19 cases?
3. In your opinion, what features or functionalities would be crucial in an application designed to assist hospital management in allocating rooms to COVID-19 patients during a crisis situation?

**Database:**

1. COVID-19 Hospitalization and Emergency Department Statistics, 2022–2023

<https://www.cihi.ca/en/covid-19-hospitalization-and-emergency-department-statistics>

Description: The quantity of verified COVID-19 cases and typical stay days allow for analysis of the bed/room occupancy.

1. Number of hospitals in Canada as of 2021, by province and employer status

<https://www.statista.com/statistics/440920/number-of-hospital-establishments-in-canada-by-employer-status-and-province/>

Description: It may figure out how many hospitals are needed to manage COVID-19 and if there are enough to accommodate every patient.

1. Hospital Beds Per 1000 (population) in 2021

<https://www.ontariohealthcoalition.ca/wp-content/uploads/Hospital-Beds-Per-1000-2021-Canada..pdf>

Description: It shows hospital beds per 1000 population in 2021 to estimate of the healthcare infrastructure's capacity to handle the medical needs of the population.