**Project Title:** Covid-19 Cases Analysis

**Phase 1: Project Definition and Design Thinking**

**Project Definition:**  world thinks about coronavirus disease that which means all even this pandemic disease is not unique. The purpose of this study is to detect the role of machine-learning applications and algorithms in investigating and various purposes that deals with COVID-19. Review of the studies that had been published during 2020 and were related to this topic by seeking in Science Direct, Springer, Hindawi, and MDPI using COVID-19, machine learning, supervised learning, and unsupervised learning as keywords. The total articles obtained were 16,306 overall but after limitation; only 14 researches of these articles were included in this study. Our findings show that machine learning can produce an important role in COVID-19 investigations, prediction, and discrimination. In conclusion, machine learning can be involved in the health provider programs and plans to assess and triage the COVID-19 cases.

**Design Thinking:**

* 1. Project Objectives: The COVID-19 pandemic demonstrates that every country remains vulnerable to public health emergencies
  2. Analysis Approach: Each group selected one problem related to one of their specific challenges and formulated it as a question.
  3. Visualization Selection: visual-deep learning diagnosis, COVID-19, chest CT, volume rendering, MIP, classification model, explainable DL.