

<b>Project Overview</b>	
Objective	<b>Develop Predictive Models:</b> Build robust machine learning models that predict changes in lifestyle indicators influenced by COVID-19 based on demographic, economic, and behavioral data.
Scope	Collecting diverse datasets encompassing demographic information, economic metrics, and behavioral data during the COVID-19 pandemic.
<b>Problem Statement</b>	
Description	<p>Predicting lifestyle changes due to COVID-19 is not just a technical endeavor but a critical step toward understanding and responding to the broader societal impacts of the pandemic. By leveraging data-driven approaches, this project contributes to informed decision-making and proactive strategies in managing public health and social well-being during and beyond the COVID-19 era.</p> <hr/>
Impact	The impact extends beyond technical advancements in predictive modeling. It has the potential to inform policy decisions, improve healthcare delivery, support community resilience, and contribute to understanding the broader societal implications of the COVID-19 pandemic on lifestyle behaviors.
<b>Proposed Solution</b>	

Approach	The main approach is to develop a predictive model that not only forecasts lifestyle changes influenced by COVID-19 but also provides valuable insights for mitigating its impact on individuals and communities.
Key Features	<ul style="list-style-type: none"> <li>• <b>Infection Rates:</b> Number of COVID-19 cases per capita in specific geographic regions or communities.</li> <li>• <b>Vaccination Status:</b> Percentage of population vaccinated against COVID-19, including type of vaccine administered.</li> </ul>

### Project Initialization and Planning Phase

Date	20 June 2024
Team ID	740002
Project Title	Life Style Change Due To Covid Prediction
Maximum Marks	3 Marks

### Project Proposal (Proposed Solution) report

Predicting lifestyle changes induced by COVID-19 can provide valuable insights into how individuals and communities adapt to global crises. By leveraging machine learning techniques and data-driven approaches, this project aims to contribute to our understanding of these changes and support evidence-based decision-making in public health and policy domains. This proposal outlines a structured approach to developing and deploying a predictive model for lifestyle changes due to COVID-19, aiming to deliver actionable insights and tools for stakeholders concerned with health and well-being in the context of the ongoing pandemic.

	These features should encapsulate various aspects related to both COVID-19 dynamics and lifestyle behaviors.
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### Resource Requirements

Resource Type	Description	Specification/Allocation
<b>Hardware</b>		
Computing Resources	CPU/GPU specifications, number of cores	T4 GPU
Memory	RAM specifications	8 GB
Storage	Disk space for data, models, and logs	1 TB SSD
<b>Software</b>		
Frameworks	Python frameworks	Flask
Libraries	Additional libraries	scikit-learn, pandas, numpy, matplotlib, seaborn
Development Environment	IDE	Jupyter Notebook, pycharm
<b>Data</b>		
Data	Source, size, format	Kaggle dataset, 614, csv UCI dataset, 690, csv