Model Development Phase Template

Date	25 June 2024
Team ID	739973
Project Title	A Comprehensive Measure of Well-Being: The Human Development Index Using Machine Learning
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning

Country	It provides a comprehensive overview of a nation's development status based on the HDI, highlighting both achievements and areas needing improvement.	Yes	The Human Development Index (HDI) provides a comprehensive measure of a country's development status beyond just economic indicators, Multi-Dimensional Approach, policy Guidance, public Awareness, etc…
HDI Rank	It measures countries average acheivements in three aspects	Yes	HDI ranking is a valuable tool for assessing and comparing human development levels worldwide, highlighting the multi-dimensional aspects of well-being, and guiding policies towards improving the lives of people globally.
HDI	To compare and rank countries based on their level of human development	Yes	HDI is a powerful tool for assessing and tracking human development progress across countries, emphasizing the importance of health, education, and living standards in enhancing people's capabilities and quality of life.

Life expectancy	One of the key factor to measure country's level of human development	Yes		Life expectancy is a crucial component of the HDI because it captures essential aspects of human development related to health and well-being. It underscores the importance of healthcare, nutrition, and socio-economic factors in determining life expectancy levels.

Mean years of schooling	Overall schooling in the year	Yes		Mean Years of Schooling , it captures the educational achievements of a population, reflects investments in human capital development, and influences long-term socio-economic outcomes.
Gross National Income	it provides insight into the economic resources available to individuals within a country.	Yes		It complements health and education indicators by providing a broader perspective on economic well-being and living standards, guiding policies and interventions aimed at enhancing overall human development.
Change in HDI Rank 2010-2015	change in HDI rank for the country's development trajectory in the year 2010-15	Yes		Changes in HDI rank are a testament to a country's commitment to improving the well-being of its citizens through strategic investments in health, education, and economic development.

Gender Development Index value	It is a specific aspect of the Human Development Index (HDI) that focuses on gender disparities in development outcomes.	Yes	It specifically measures gender disparities in key dimensions of human development. It underscores the importance of promoting gender equity as a fundamental aspect of advancing societal well-being and economic prosperity.
Employment in agriculture (% of total employment) 2010-2014	Understanding the dynamics of agricultural employment within the Human Development Index framework	Yes	By enhancing agricultural productivity, reducing poverty, and improving livelihoods, countries can achieve significant progress towards broader human development goals and improve the well-being of their populations.
	helps policymakers prioritize investments and interventions that promote inclusive and sustainable development for agricultural communities worldwide.		

Total Unemployment (% of labour force) 2015	It directly impacts the economic, social, and psychological well-being of individuals and societies.	Yes	Unemployment significantly affects human development by influencing economic stability, education outcomes, social wellbeing, and policy responses. Addressing unemployment challenges through effective policies and interventions is essential for promoting inclusive growth, reducing poverty, and enhancing overall human development outcomes worldwide