

Model Development Phase		
Date		06 July 2024
Team ID		739824
Project Title		SmartLender – Envisioning Success: Predicting University Scores With 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
world_rank	It represents the global ranking of a university according to various university ranking systems.	No	Data leakage, Inflated performance, Limited generalisation
institution	It's a category corresponds to a unique institution.	Yes	Capturing brand value, Proxy for Unmeasured factors, Potential performance gains.

country	It's represents the country where a university or institution is located.	Yes	Regional difference,Resource Availability,Global reputation.Regional analysis
national_rank	It's represents the ranking of a university within its own country.	Yes	Relative performance,Contextualization,Identifying National Champions,National level analysis.
quality_of_education	It's represents the overall quality of education provided by a university.	Yes	Core Education Mission,Student Experience,Future success Indicator,Multifaceted Concept.
alumni_employment	the employment outcomes of a university's alumni.	Yes	Measures of Graduate success,Attractiveness to prospective students,Industry connections and Reputation,outcome-oriented rankings.
quality_of_faculty	the expertise, experience, and qualification	Yes	Driving force of research and education,Attracting top students,Knowledge creation and Dissemination.

	s of a university's faculty members.		
publications	It is represents the research output and academic productivity of a university's faculty and researchers.	Yes	Measure of Research Productivity,Attracting Research funding and talent,Dissemination of Knowledge.
influence	the impact and reputation of a university on a global scale.	Yes	Thought Leadership and Reputation,Attracting Diverse Stakeholders,Holistic Rankings.
citations	the impact and influence of a university's research output, measured by the number of times its publications are cited by	Yes	Indicator of Research Quality,Measuring research impact,Assessing research quality,Research-Intensive Rankings.

	other researchers.		
broad_impact	Represents the extent to which a university's research and activities have a broad, far-reaching impact on society, economy, and environment.	Yes	Holistic Assessment, Attracting Diverse Stakeholders, Reflecting Societal Relevance, Identifying socially engaged universities.
patents	which can be an indicator of the university's innovation and research output.	Yes	Innovation and Commercialization, Industry Collaboration and impact, Attracting Entrepreneurial Talent.
score	It's represents the overall performance or ranking of a university	No	It is target variable not a feature, Defeats the purpose, Data leakage and Circularity.
year	the specific year or time	Yes	Capturing trends and changes, Adjusting for time-specific factors, Longitudinal

	period associated with the university data.		analysis.
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