## PROJECT DESIGN PHASE -1 Proposed solution template

Date	24 September 2022
Team id	PNT2022TMID29589
Project id	University Admit Eligibility Predictor
Maximum marks	2 Marks

## **Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

SI NO	Parameter	Description
1	Problem Statement (Problem to be solved)	Every year thousands of college graduates apply for the master and PhD programs in US universities from all around the world. Applying to US universities is not an easy task, it involves many steps and procedures to follow. Choosing the right universities or colleges is definitely an another hurdle students have to face. Many students apply for the universities in which they have little chance of acceptance. This leads students of poor economic backgrounds to frustration and anxiety as they only lose surplus amount of money just for applying to those universities

	Idea / Calutian	University and Callege research being and next
2	Idea / Solution	University and College research being one part
	description	of the university application process is itself an
		arduous and lengthy task. This issue being a big
		problem for students have not been solved till
		now. There are recognized sites which filters
		the best universities and colleges based on the
		location, tuition fees, major and degree but
		none of them have use machine learning
		algorithm to solve the issue. Hence, we have
		done this research project to solve that issue to
		some extent with the use of data mining
		techniques.
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3	Novelty / Uniqueness	University Application process itself being a
		tedious task Students needs lots of endeavor
		and determination for completing overall
		application process. It would definitely be
		easier for students if they get relief from step of
		selecting best suited universities and colleges
		for application.
4	Social Impact / Customer	Results of this project are not applicable to
•	Satisfaction	college graduates of each and every major. As
		there was limitation of information on dataset
		this system could not predict and recommend
		universities to students of every major.
		Nevertheless, the statistical data mining
		techniques used in this project can be
		applicable to all majors. If any universities have
		insufficient data on the major chosen by the
		student it will return insufficient data for
		prediction to the user.
5	Business Model (Revenue	From this project, financially can earn from the
٦	Model)	students admission fees but while they want to
		first select in their selected college in
		prediction. Although which is done by this
		project for prediction. In this project, this
		problem has been addressed by modeling a
		recommender system based on various
		classification algorithms. The required data was
		obtained from thegradcafe.com. Based on this
		data set, various models were trained and one
		best and some other similar properties carrying
		universities are suggested for the students such
		that it maximizes the chances of a student
		getting an admit from that university list.
	Scalability of the Solution	·
6	Scalability of the Solution	In this project, this problem has been
		addressed by modelling a recommender system
		based on various classification algorithms. To
		predict the best University for the particular
		student his/her GPA score, GRE (Verbal and
		Quant) Score, TOEFL score has been used as

	attributes for classification. K nearest
	neighbour has been used to predict best
1	University and K means clustering has been
	used to find more similar universities. Support
	Vector Machine and Random forest has been
	used to predict the admission chance of
	particular student on specific University