Project Design Phase-I
Proposed Solution Template

Date	09-October-2022
Team ID	PNT2022TMID14436
Project Name	Project – University Admit Eligibility Predictor
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	A student has to choose the right university or college to attend. The majority of students apply to universities where they have a slim chance of being accepted. This leads students of poor economic backgrounds to frustration and anxiety as they only lose a surplus amount of money just for applying to those universities.
2.	Idea / Solution description	The university application process, which includes research, is itself an arduous and lengthy process. This issue being a big problem for students has not been resolved. While there are recognized sites that filter universities and colleges based on location, tuition fees, major, and degree, none of them uses a machine learning algorithm to solve the problem. Hence, we have done this research project to solve that issue to some extent with the use of data mining techniques.

3.	Novelty / Uniqueness	In addition to the application process itself being a challenging one, students require a great deal of dedication and effort to complete the overall application process. If students were relieved from the step of selecting the best colleges and universities to apply to, it would definitely make their life easier.
4.	Social Impact / Customer Satisfaction	Graduates who might be confused about their future with respect to university admissions can benefit from this predictor. Students can apply to universities based on their chances of eligibility.
5.	Business Model (Revenue Model)	Financially, this project could benefit from the students' admission fees but they may want to select their college in advance. However, that is what this project does 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. The data set was used to train various models and one optimal model and some similar property-bearing universities were recommended so that a student's chances of getting into the university were maximized.
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 a student, his or her GPA, GRE (Verbal and Quant) Score, and TOEFL Score are used as attributes. K nearest neighbour has been applied to predict best 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.