## Project Design Phase-I Proposed Solution Template

| Date          | 19 September 2022                                |
|---------------|--|
| Team ID       | PNT2022TMID10525                                 |
| Project Name  | Project – University Admit Eligibility Predictor |
| Maximum Marks | 2 Marks  |

## **Proposed Solution Template:**

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

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | A student will have to go through many obstacles to select the best universities or schools for education. Most of the students require to submit applications to the colleges where they may have little chances of being accepted. As a result, students from lowincome backgrounds experience a tension and anxiety as they not only lose money for applying to college but also lose a sense of selfconfidence.  |
| 2.    | Idea / Solution description              | It takes a lot of time and effort to conduct university and college research, which is one of the requirements for applying to universities. This problem, which is a major one for students, has not yet been resolved. There are reputable websites that rank the top colleges and universities according to factors like location, cost of attendance, degree offered, and major, but none of them utilise a machine learning algorithm to do it. As a result, we conducted this research to partially address that problem using data mining approaches. |
| 3.    | Novelty / Uniqueness                     | The university application procedure is a timeconsuming effort. Students must put up a lot of effort and perseverance to finish the entire application procedure. If students were relieved of the responsibility of choosing the top schools and institutions for their applications, life would be much simpler for them.  |

| ı  |                                       | 1  |
|----|---------------------------------------|--|
| 4. | Social Impact / Customer Satisfaction | The findings of this study do not apply to all college graduates from every major. This method was unable to predict and recommend universities to students of every major due to informational constraints in the dataset. However, all majors can benefit from the statistical data mining methods used in this study. Universities that don't have enough data on the student's selected major will inform the user that there isn't enough information to make a projection.   |
| 5. | Business Model (Revenue Model)        | Financial gain from this project can be derived from the students' entrance costs, but they want to first choose in their predicted college. Nevertheless, it is what this research does in order to anticipate. This issue has been dealt with in this research by modelling a recommender system based on different classification techniques. Thegradcafe.com provided the necessary info. Based on this data set, several models were developed, and the best one—along with a few others—suggests universities to students, thereby increasing the likelihood that they will get admitted from that list. |
| 6. | Scalability of the Solution           | This issue has been dealt with in this research by modelling a recommender system based on different classification techniques. The GPA, GRE (Verbal and Quant), and TOEFL scores of the student have been utilised as classification criteria to choose the best university for that student. The best university has been predicted using K nearest neighbours, and more related institutions have been found using K means clustering. The likelihood of an individual student being admitted to a given university has been predicted using support vector machines and random forests.                    |