**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 1 November 2022 |
| Team Id | PNT2022TMID12521  **Explore AS, differentiate** |
| Project Name | Project – Developing a flight delay prediction model by using machine learning |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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

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| --- | --- | --- |
| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | The main objective of the model is to predict flight delays accurately in order to optimize flight operations and minimize delays. |
|  | Idea / Solution description | Using a machine learning model, we can predict flight arrival delays. The input to our algorithm is rows of feature vector like departure date, departure delay, distance between the two airports, scheduled arrival time etc. |
|  | Novelty / Uniqueness | We then use decision tree classifier to predict if the flight arrival will be delayed or not. we compare decision tree classifier with logistic regression and a simple neural network |
|  | Social Impact / Customer Satisfaction | It makes the air transportation more efficient and saves more time for the passengers |
|  | Business Model (Revenue Model) | Using this model, we can create a revenue by giving appropriate solution about the delay to the people |
|  | Scalability of the Solution | This makes the people to take the action according to the delay and it improves time management, business value and more |