Project Design Phase-I
Proposed Solution

Date	22 October 2023
Team ID	Team-592212
Project Name	Project - AI-Driven Optimization Of 5G Resource Allocation For Network Efficiency
Maximum Marks	2 Marks

Proposed Solution :

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Create an AI driven approach to allocate resources in 5G networks ensuring performance, across frequency bands and applications.
2.	Idea / Solution description	Random Forest based Resource Allocation
3.	Novelty / Uniqueness	The application of cutting-edge deep learning techniques to solve resource allocation challenges in 5G networks.
4.	Social Impact / Customer Satisfaction	It ensures the efficient and optimized resource allocation in 5G networks and improved network performance, reduced latency, and a seamless user experience, ultimately contributing to enhanced connectivity, productivity, and overall satisfaction for users and businesses, in urban and remote areas alike.
5.	Business Model (Revenue Model)	In order to generate revenue there are options. One way is to offer solutions for resource allocation. Another option is to license our models. Additionally we can provide consulting services to help optimize 5G network performance for businesses. These opportunities allow us to create value and generate revenue, within the telecommunications and technology sectors.
6.	Scalability of the Solution	The Resource Allocation solution based on Random Forest regression provides a built-in ability to easily adjust to the increasing requirements and intricacies of 5G

		networks and extensive telecommunications infrastructures.