**Project Design Phase-I**

**Proposed Solution**

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID25832 |
| Project Name | Smart Solutions for Railways |
| Maximum Marks | 2 Marks |

**Proposed Solution:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | * The passenger convenience in making ticket reservations through the counter is poor. * There will be no information about the ticket availability until all the ticket has booked. * The printed tickets may be erased or teared by moisture, which is a problem for the traveller. The usage of paper tickets was to blame for this. * The passengers will encounter the problem of being unable to reserve the preferred seat. * While travelling either with family or friends the seats were distributed randomly. so they can’t interact with each other properly as they thought. |
|  | Idea / Solution description | * The user can book tickets using the website, where they will receive a QR code which can be scanned instead of using tickets to retrieve the user's information. * By installing a GPS module inside the train, website can also display the train's real-time positions. The journey's location will be regularly updated on the website. * Additionally, the website enables users to reserve the desired seat. |
|  | Novelty / Uniqueness | * The webpage will offer the customer a QR code, which will cut down on paperwork. * It allows the user to reserve the preferred seat. * All of the client booking information will be saved in the database with a special ID which can be retrieved when the ticket collector scans the QR Code. |
|  | Social Impact / Customer Satisfaction | * There is no need going to the station to book tickets because they can be booked online, and the transaction process is also made simple. * All confirmations and cancellations will be sent to the consumer by provided email or mobile phone. |
|  | Business Model (Revenue Model) | * The user of this application can check the seat availability and they can select the seats to their convenience. * It makes the ticket booking simple for the clients to schedule daily shuttles and journeys, and it eliminates carrying around tickets. The customer can also view the train's current location. * For using the abovementioned facility, a specific amount of fees may be charged, particularly if a customer wants to reserve their preferred seat they must pay extra for an ticket. |
|  | Scalability of the Solution | * Elimination of physical paper tickets * While booking ticket in counter the clients had to carry cash and while booking E- ticket you are paying through online directly from bank or payment apps which makes work more easy for the clients. * This reduces the wastage of the papers and the environment. |