

# API Assignment

## **Problem Statement:**

- Create Login API
- Create Tambula ticket Create API\*(No of tickets will be variable not a fixed number).  
Return a Unique id on the Creation of the ticket.
- Create a Tambula ticket fetch API to fetch all the ticket lists associated with the  
Respective ID with pagination.

## **Tambula Ticket Generator Rules:**

- The numbers 1 to 90 are used once only.
- In the first column are the numbers 1 to 9, the second column has numbers 10 to 19, etc, all the way to the 9th column which has numbers 80 to 90 in it.
- Every row must have exactly 5 numbers in it.
- In a specific column, numbers must be arranged in ascending order from top to bottom.
- All the numbers 1 to 90 are used only once in each set of 6 tickets.
- Each column must have at least 1 number
- Blank Cell fill by zero or "x"
- Each ticket must be unique from another ticket

## **Conditions:**

- **Database Use(MongoDB/MySQL)**
- **All injection type & DataBase attacks must be prevented**
- **Coding architecture & style must be Production Graded.**
- **Only Use Node.JS**

## **Considerations:**

Good APIS will be considered upon

1. **Response time of the API**
2. **Security Checks**
3. **Data Validations**

### Sample Ticket Array:

```
{
  "tickets": {
    "ticket1": [
      [0, 19, 0, 31, 0, 0, 61, 74, 85],
      [4, 14, 0, 0, 40, 0, 0, 77, 86],
      [0, 18, 25, 37, 0, 54, 64, 0, 0]
    ],
    "ticket2": [
      [2, 0, 23, 38, 0, 53, 0, 0, 83],
      [0, 13, 0, 0, 46, 59, 70, 79, 0],
      [6, 0, 29, 41, 49, 0, 68, 0, 0]
    ],
    "ticket3": [
      [0, 15, 0, 33, 45, 0, 0, 76, 81],
      [7, 12, 0, 0, 0, 52, 0, 75, 82],
      [0, 0, 22, 39, 0, 57, 66, 0, 89]
    ],
    "ticket4": [
      [8, 11, 20, 0, 0, 0, 0, 73, 84],
      [3, 0, 0, 34, 42, 51, 65, 0, 0],
      [0, 0, 0, 36, 48, 50, 0, 72, 88]
    ],
    "ticket5": [
      [1, 16, 27, 35, 0, 56, 0, 0, 0],
      [0, 17, 0, 32, 0, 55, 67, 78, 0],
      [5, 0, 28, 0, 43, 0, 69, 0, 87]
    ],
    "ticket6": [
      [0, 10, 21, 0, 44, 0, 60, 0, 80],
      [9, 0, 26, 30, 0, 58, 63, 0, 0],
      [0, 0, 24, 0, 47, 0, 62, 71, 90]
    ]
  }
}
```