**Factory Challenge – Calendar Dice**

**Introduction:**

This test plan describes the testing approach and resources required to test the “calendar dice”

**Test strategy:**

To run the most important tests which will test the set of dice required to cover all the dates of the month starting from “01” to “31”

Let’s assume a dice set combination, which will test all the dates of the month.

Here, we have 10 digits to cover: 0123456789 and 2 dice has 6 positions each, with a total of 12 positions covering 10 digits

We have dates “11” and “22”, which require that both dice have “1” and “2” in it. To cover “01, 02, 03……09” and “10, 20, 30”, we need a “0” on both the dice as all the digits can’t be taken on a single dice.

Now the dice looks like,

Dice 1:

**{0, 1, 2, \_, \_, \_}**

Dice 2:

**{0. 1. 2. \_, \_, \_}**

We have 3, 4, 5, 6, 7, 8, 9 numbers to be covered in left out 6 places

Place any 3 digits from the set into **Dice1** and remaining 4 digits into **Dice2** (By giving “6” or “9” in a single space)

So, finally the Dice set looks like:

Dice 1:

**{0, 1, 2, 3, 4, 5}**

Dice 2:

**{0. 1. 2. 6, 7, 8} (OR) {0. 1. 2. 9, 7, 8}**

**Tests we can execute:**

To test this set of dice, we need 31 test cases. But this scenario can be tested by validating 2 simple approaches

**The most important tests to validate the dice set combination are:**

Approach 1:

0 to 5 and 7 to 8 are the mandatory digits in 11 places, and 6 or 9 can be taken by one face,

And 0, 1, 2 digits should be covered in both the dice

Approach-2:

[33, 44, 55, 66, 77, 88, 99, 69, 96] should not be the combination from both the dice

And digits “6” and “9” should not be taken at a time in a single dice.

Please see the below User Interface to validate the calendar dates:

<https://mannan468.github.io/>