**Dataset** [Transactions](https://docs.google.com/spreadsheets/d/e/2PACX-1vSlL24YgT6Y67Wcw7neXZMU1-4t2Xj_0-esTydQsLfCe4U45nGUJdaX5c72sEB3Mh01PrZZ8phkLweX/pub?gid=0&single=true&output=csv)  
You have the payment transactions data for Feb 12, 13 and 14 hour-wise in a CSV file. Below is a description of different columns in the data set

|  |  |
| --- | --- |
| **Column** | **Description** |
| hr | Start hour of the transaction |
| mid | Merchant Identifier |
| t | Total number of transactions |
| success | Total number of successful transactions |
| pg | Payment Gateway, who collect money on behalf of the merchant |
| pmt | Payment Method Type such as cards, UPI etc., |
| sub\_type | The subtype of the payment option chosen by the customer |
| bank | The customer bank account from which the money is sent |

success rate = success\*100/t

### **1.1 Some merchants reported the issue of the huge drop in success rate. Which combination of dimensions caused the issue and in which time period?**

Explore the data and visualization (using dplyr, ggplot) to understand when the issue (possibly a significant number of failures in transactions) happened and which combination of dimension (pmt, pg, bank and sub\_type) has the impact.   
  
*Type your code and explanation below*

### **1.2 How could we have detected this issue before the merchant reported?**

Almost all the merchants expect us to detect the issue before they detect or their customers detect. What are your thoughts on how this can be accomplished?

*Explain with code/pseudo-code*

**2. Build an intuitive dashboard to visualise metrics (success rate, volume) across dimensions keeping design aesthetics in mind.**

*Share your shiny app url and thought process of opting for specific UI components and plot(s)*