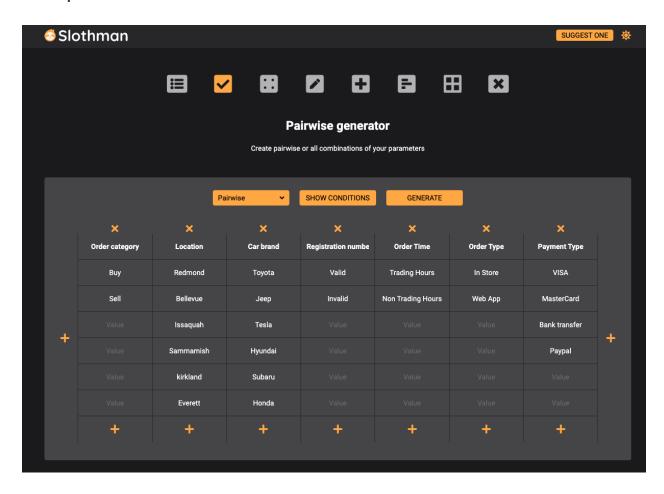
Assignment-2

Software specification: The following is the software specification for a car trading system where the users can trade their cars using a web application or by going to the store directly to buy or sell the car. Only the below mentioned locations and car brands are allowed. The trader can only buy or sell his car during the trading hours. Only the valid registration numbers are processed. The payment can be done only using VISA, MasterCard, bank transfer and Paypal.

Factors with different levels				
1)Order category	1. Buy 2. Sell			
2) Location	 Redmond Bellevue Issaquah Sammamish Kirkland Everett 			
3) Car brand	 Toyota Jeep Tesla Hyundai Subaru Honda 			
4) Registration numbers	1. Valid 2. Invalid			
5) Order Time	Trading hours Non trading hours			
6)Order Type	In-store Web App			
7) Payment Type	 VISA MasterCard Bank transfer Paypal 			

Tool Inputs:



Test Cases generated:

A	В	С	D	Е	F	G
			combinations			
Order category	Location	Car brand	Registration numbers	Order Time	Order Type	Payment Type
Sell	Bellevue	Jeep	Valid	Trading Hours	Web App	VISA
Sell	Issaquah	Tesla	Invalid	Non Trading Hours	In Store	Paypal
Buy	Sammamish	Jeep	Invalid	Trading Hours	In Store	MasterCard
Buy	Redmond	Tesla	Valid	Non Trading Hours	Web App	Bank transfer
Buy	Redmond	Jeep	Valid	Trading Hours	In Store	Paypal
Buy	Bellevue	Toyota	Invalid	Trading Hours	In Store	Bank transfer
Sell	Everett	Honda	Valid	Non Trading Hours	Web App	MasterCard
Buy	Issaquah	Subaru	Invalid	Trading Hours	Web App	VISA
Buy	Everett	Hyundai	Invalid	Non Trading Hours	In Store	VISA
Buy	kirkland	Honda	Invalid	Trading Hours	In Store	Paypal
Sell	kirkland	Jeep	Valid	Non Trading Hours	Web App	Bank transfer
Sell	Sammamish	Toyota	Valid	Non Trading Hours	Web App	Paypal
Sell	Issaquah	Hyundai	Valid	Trading Hours	Web App	Bank transfer
Sell	Redmond	Honda	Invalid	Non Trading Hours	In Store	VISA
Sell	Redmond	Subaru	Valid	Non Trading Hours	In Store	MasterCard
Sell	Issaquah	Toyota	Invalid	Trading Hours	Web App	MasterCard
Buy	Everett	Toyota	Invalid	Trading Hours	Web App	Paypal
Buy	Issaquah	Jeep	Valid	Trading Hours	In Store	Bank transfer
Sell	Bellevue	Tesla	Valid	Non Trading Hours	In Store	MasterCard
Buy	kirkland	Tesla	Invalid	Trading Hours	In Store	VISA
Sell	Everett	Tesla	Valid	Trading Hours	Web App	Bank transfer
Buy	Bellevue	Hyundai	Valid	Non Trading Hours	Web App	Paypal
Sell	kirkland	Toyota	Valid	Trading Hours	Web App	VISA
Sell	Sammamish	Tesla	Valid	Non Trading Hours	In Store	VISA
Sell	kirkland	Hyundai	Invalid	Non Trading Hours	In Store	MasterCard
Sell	Redmond	Toyota	Valid	Trading Hours	In Store	MasterCard
Sell	Sammamish	Subaru	Valid	Trading Hours	Web App	Bank transfer
Buy	Bellevue	Subaru	Valid	Trading Hours	Web App	Paypal
Buy	Redmond	Hyundai	Invalid	Non Trading Hours	In Store	MasterCard
Buy	kirkland	Subaru	Valid	Trading Hours	Web App	MasterCard
Buy	Bellevue	Honda	Invalid	Trading Hours	Web App	Bank transfer
Sell	Everett	Jeep	Invalid	Non Trading Hours	In Store	Bank transfer
Buy	Everett	Subaru	Valid	Non Trading Hours	In Store	Bank transfer
Buy	Issaquah	Honda	Invalid	Non Trading Hours	Web App	Paypal
Buy	Sammamish	Hyundai	Invalid	Trading Hours	In Store	MasterCard
Sell	Sammamish	Honda	Valid	Non Trading Hours	In Store	Paypal

The total number of combinations that can be possible are = 2^* 6^* 6^* 2^* 2^* 2^* 4 = 2304. By using pairwise combination techniques, the combinations can be drastically reduced to 36.

Examples:

- 1. The user in the Bellevue location is selling his car of brand Jeep with a valid registration number during the trading hours using a web app of payment type VISA.
- 2. The user in the Issaquah location is selling his car of brand Tesla with a invalid registration number during the non trading hours going to the store making a payment through Paypal.
- 3. The user in the Sammamish location is selling his car of brand Jeep with a invalid registration number during the trading hours going to the store making a payment through Mastercard.
- 4. The user in the Redmond location is selling his car of brand Tesla with a valid registration number during the non trading hours using a web app of payment type bank transfer.

References:

https://www.softwaretestinghelp.com/what-is-pairwise-testing/

https://slothman.dev/pairwise-generator/