## **Projects & Experience in Data Analytics**

**Data Analytics Projects – National University of Singapore**

* **Power Pivot Sales Data Visualization:** Created interactive pivot charts and tables for customer sales performance analysis.
* **Power BI Sales Dashboard:** Designed dynamic dashboards highlighting KPIs, customer segments, and sales trends.
* **Orange Data Mining – Heart Diagnosis:** Applied classification and regression algorithms for predictive healthcare analytics.
* **Capstone Project:** Integrated **Power Pivot, Power BI, SQLite, and Orange** to analyze multiple datasets, performing end-to-end data cleaning, modeling, visualization, and predictive analytics.

In Business Intelligence Application Development, the project involved **Tableau** to showcase the cases related to COVID-19 and differences between COVID-19 case before vaccination and reflect how the number has changed.

**Freelancing Projects**

**Involved in freelance testing (September' 2020 -January' 2021)**

Android-based mobile application by Singapore based developer - This mobile app is for the children aged 7-14 years old to gain basic computer knowledge. The application had to go live in 'January' 2021. The developer wanted test cases to cover installation of mobile applications, individual test cases to test the features/options like students to select the details and origins of computer hardware, software and programming languages, program and structure of program, programming exercises using Python and also a quiz for the kids using the application.

The testing involved navigation across the mobile application for the above mentioned learning material provided in the application by using various menu options. The testing involves application stability testing and reporting any issues of application crashing.

The test cases had information like test scenarios, relevant test cases for the scenario,expected and actual result. Also provided documentation of test cases and scenarios with output as evidence attached.

**Developed ATM Simulator application using Java (January' 2023-April' 2023)**

After taking online lessons, I embarked on application development using Java. This application is an ATM simulator which displays balance and various other options to capture the account holder information and ATM transaction details. Used SQL Workbench database to store the relevant application data, customer, and the transaction details.

**Developed vehicle loan insurance application using Java (July’ 2024-September’ 2024)**

This simple application takes input of vehicle type and loan amount and calculates the insurance for the vehicle. The insurance calculation is based on the value of vehicle amount slabs and rate for the slab set for 4-wheelers and 2-wheeler vehicles. The activity also involved unit testing and fixing the bugs identified during testing.

**Developed sample travel management system using Java (October’ 2024-to date)**

This sample application gathers input from traveller/booking agent for the personal details, planned travel date, destination country/city, flight/train, first class/second class, accommodation for single/double and airport tax details where applicable. Based on the inputs, the application displays various tourist option for the destination chosen by the traveller. On selection of the destination, the amount is displayed with receipt. The interactive graphic user interface was developed using JFrame. Various methods designed to validate the input data and retrieve the destination tourist details. The activity involves test case preparation, testing and documentation with evidences. Based on the test findings, the program was fixed.