# TEMPLATE FOR INVESTIGATION REPORT v31jul2018

## FOR (CSDA) FYP SEMESTER 2

**Cover Page** 

Acknowledgement

**TABLE OF CONTENTS** 

#### **CHAPTER 1: INTRODUCTION TO THE STUDY**

- 1.1 Background to the project
- 1.2 Problem statements
- 1.3 Rationale
- 1.4 Potential benefits
  - 1.4. 1 Tangible benefits
  - 1.4. 2 Intangible benefits
- 1.5 Target users
- 1.6 Scope and objectives
  - 1.6. 1 Aim
  - 1.6. 2 Objectives
  - 1.6. 3 Deliverables Functionality of the proposed system
  - 1.6. 4 Nature of Challenges
- 1.7 Overview of this report

Briefly describe what the reader will find in each of the chapters - be sure to mention the key points / findings that are there.

#### 1.8 Project Plan

Project Plan for FYP Semester 1

### **CHAPTER 2: LITERATURE REVIEW**

Materials should be from academic publications, journals, conference proceedings and books as far as possible.

- 2.1: Introduction
- 2.2: Domain research
- 2.3: Comparison on existing study and/or System(s) (with similar features)
- 2.4: Summary

#### **CHAPTER 3: TECHNICAL RESEARCH**

- 3.1: Programming language chosen (Provide at least two (2) for comparison purpose) (this section is optional)
- 3.2: IDE (Interactive Development Environment) chosen
- 3.3: libraries chosen / Tools chosen
- 3.4: Database Management System chosen (Provide at least two (2) for comparison purpose) (this section is optional)
- 3.5: Operating System chosen
- 3.6: Web Server chosen (this section is optional)
- 3.7: Web browser chosen (this section is optional)
- 3.8: Summary

#### **CHAPTER 4: METHODOLOGY**

#### 4.1 Introduction

#### 4.2 Methods

Identify the right methodology (Show the detail approach utilized in this study)

- Data selection
- Data pre-processing
- Transformation
- Modelling (Algorithms)
- Evaluation metrics.

NOTE: All the phases should contain detail explanation along with the proper justification on the methods / techniques used. Application of these techniques should be presented in Chapter 5.

4.3 Summary

#### **CHAPTER 5: DATA ANALYSIS**

#### 5.1 Introduction

- 5.2 Initial data exploration (Data Summary Individual attributes measurement scale, STD, Missing values, Frequency, etc.)
- 5.3 Data Cleaning (Missing values, Outliers, Transformation, Normalization, Data Reduction)
- 5.4 Data Visualization (Univariate, Bivariate, Multivariate)
- 5.5 Hypothesis (If applicable)
- 5.6 Reports and Dashboard (If applicable)
- 5.7 Modelling/Data driven product (Implementation with detail explanation on the optimization or techniques employed in the model construction)
- 5.8 Summary

#### **CHAPTER 6: Results and Discussion**

6.1 Introduction

6.2 Results and discussion (Should highlight the performance of the model using different evaluation metrics and compare your accuracy with existing studies)

#### **CHAPTER 7: CONCLUSIONS AND REFLECTIONS**

What was achieved at the end of the project?

Were you able to do enough investigation / research with regards to what you want to achieve?

Were there any gaps in your research and design – areas where you may want to further explore and improve?

#### **REFERENCES**

This is a reference list, so every source listed here must have a corresponding citation in the body of the report.

#### **APPENDICES**

```
First 2 pages of turnitin report.

FYP Poster - A3 size (colour)

Log sheets (a minimum of 6 meeting log sheets; 3 for semester 1 and 3 for semester 2)

PPF (Photostat copy)

PSF (Photostat copy)

Ethics form (Photostat copy)

Gantt chart for the whole FYP (detailed)
```