# ISYS5007: Data Management Plan

# Part A: Assignment Description

### **Brief Description**

Write a data management plan for **ONE** of the data science project scenarios given below (in Part B).

#### Instructions

Using the provided Assignment-2 template document, write a data management (DM) plan. Your assignment should be written in your own words and include proper in-text citations and referencing.

Your data management plan should identify data sources and articulate a reasonable approach to data acquisition, cleaning, integration, archival and analysis as applied to your chosen scenario. Consideration should be given to hardware/software and processing requirements. Consider using measured, estimated, or simulated data to demonstrate the kind of data that you anticipate this project will use.

From a high-level perspective describe in English how you anticipate this data will be analysed. You may consider using pseudo code to illustrate this or use Python or a similar programming language if you have the necessary skills. Note that actually analysing data is not a requirement for this assessment.

The goal of this assessment is to demonstrate

- expectations related to data volume, velocity, and variety, veracity, and value
- planning for content, format and metadata
- a reasonable approach to project governance
- recommendations for data storage, publication, archival, and retirement
- strategies to guarantee data quality, security, and privacy
- application of the data towards data analysis and how it meets the scenario's goals

#### Due Date

You assignment is due no later than 11:59pm, on Sunday May 14.

## **Submission Guidelines**

Your assignment should be (recommended) 1,500 words – excluding references and/or appendices.

Submission of you Data Management Plan will be a MS-word document via Turn-It-In, no later than 23:59 Sunday 14th of May.

### Marking Criteria/Rubric

This DM Plan is worth 30% of your overall mark for ISYS5007-Data Management. The marking criteria table/rubric is presented below. Take the time to compare the tasks listed, what they are worth and how they are marked.

#### Marking Criteria/Rubric (Summary)

Rubric/Marking Criteria																
Group No		Below expectations					Above 6				ехре	pectations				
& Student names/Nos		ND					С			D		HD				
Criterion	sub	0%	25%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%	Tot
1. Summary & Approach Outline	10	0.00	2.50	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	
2. Application of 5V's	20	0.00	5.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	
3. Application of Types of Data	20	0.00	5.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	
4. Management of Governance, Lifecycle, Quality	20	0.00	5.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	
5. Application of Data Analysis to Project	20	0.00	5.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	
6. Writing & References	10	0.00	2.50	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	
NOTES	XXX	Final mark (%)														

# Part B: Data Management Plan - Scenarios

Scenario 1: A Plan to better identify and track volunteers at Perth Observatory

The Perth Observatory is a not-for-profit organisation run entirely by volunteers. For lots of reasons, the organisation needs to develop an effective way to track if and when specific volunteers are onsite to do volunteer work at the observatory in Bickley.

Scenario 2: A Plan to identify, monitor and warn of shark activity

There is a perception in Australia and around the world that Perth has some of the highest rates of shark attacks on swimmers in the world. The department of fisheries needs to develop a plan to identify and monitor shark activity close to populated beaches in Perth in order to build a robust warning system.

#### Scenario 3: Setting up a dark kitchen in Perth

Select a suitable location to establish, set up and run a dark kitchen in Perth.

NOTE: Dark kitchens are restaurant quality kitchens that have a delivery only food/service.

Scenario 4: Implementing a Smart-bin system in the City of Kalamunda

The city of Kalamunda wants to implement a smart-bin system within a 2km radius of the Kalamunda town centre.

Scenario 5: Implementing Smart-Park system at Curtin

Curtin wishes to provide a smart-park service/application that uses its existing CCTV technology and a smart-phone application to advise to staff and students arriving onto campus in cars where there are available parking spaces.

Good luck, Dr Shirlee-ann Knight

~ End of Assignment Outline document~