Data Warehouse Models and Approaches - 17301

Assessment Handbook

2020/21 Students

Level 7, Semester A

(20 Credits)

Student Name	
Email Address	
Course	Group
Module tutor	
	Protocol: module staff will reply to student questions within a reasonable time but this will
•	thin office hours only. Students are advised to check this Handbook and also to see if there ne announcements or FAQ answers that deal with their enquiry before contacting staff.

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1 Assessment

Formative Assessment Opportunities

Each set of advanced reading and seminar event is a formative assessment activity. You will be given as well opportunity to upload your assessment for feedback before submitting the final version.

Summative Assessment Outline

The important element of L7assessment is that it must allow the opportunity to carry out "critical evaluation" of the ideas and concepts. Therefore, we will be looking for evidence that you can not only collect, present and discuss ideas (which you will probably have already done in your first degree), but also that you can "think critically" about what these findings mean in a particular situation— such as by considering what might happen if these ideas are applied in a particular situation, environment or application area. Therefore, you should expect the allocation of marks to reflect this—there will be relatively few marks for the "facts", and most marks for the critical evaluation of the effect of these "facts". Since there will also be a page limit / word count, you should approach your work accordingly: be brief about the background (use citations and references); spend more effort on the effect of these ideas. Remember, we will have an agreed "marking scheme" and we have to apply it in the same way to all students.

A Note on Assignment Submission

The required assignment work for this module must be submitted electronically via the appropriate VLE upload link – this applies to the original submission and to any deferral or reassessment work. Do not email attachments to the module team's mail addresses, or hand in a paper (printed) copies of the work, they will not be accepted. Familiarity with the VLE process and any problems with VLE upload are each student's responsibility to address, and you must make yourself familiar with the procedures in good time, so that you are able to meet the submission requirements. You are reminded that it is your responsibility to ensure that your work is submitted on or before the due date.

Turnitin

Your work will be automatically processed by the Turnitin software, which reports on the similarities between this and other texts accessed via the Turnitin database. This database includes published material; work from students at other universities across the world, and assignment work submitted in earlier deliveries of this module at this University. Your attention is also drawn to the section "What is the percentage reported by Turnitin below which work is not plagiarised?".

School of Computing, Creative Technologies and Engineering

1.1 Assignment 1 - Coursework 1

Module name and CRN			Data warehouse	e/mart Models and Approaches	- 17301
Module Leader			Sanela Lazarevs	ki	
Semester	Α	Level	7	Approx No of Students	15

ASSIGNMENT TITLE: Specification and Design of a Data warehouse/mart System

Assignment 1: Design of a DM/DW systems

ASSIGNMENT WEIGHTING:

Assignment 1(50%)

HAND-OUT DATE: September 2020 SUGGESTED STUDENT EFFORT: 50 hours

SUBMISSION DATE: 7th November 2020 upload via VLE by 22.00

Deliverables Assignment 1: see next page

SUBMISSION INSTRUCTIONS: upload via VLE

FEEDBACK MECHANISM:

Assignment 1 individual and general feedback within 3 weeks via VLE.

LEARNING OUTCOMES ADDRESSED BY THIS ASSIGNMENT:

LOs 1 & 2 assessed

NOTES: This is an individual assessment. Submission of an assessment indicates that you, as a student, have completed the assessment yourself and the work of others has been fully acknowledged and referenced.

By submitting this assessed work, you are declaring that you are fit to submit, and you will therefore not normally be eligible to submit a request for mitigation for this work.

If your result is recorded as Non-Submission or your mark for this assessment and for the whole module is below 40%, you will have opportunity to take reassessment and deferral is w/c 5th July 2021 (see Reassessment information below). If you are granted deferral through the mitigation process, you may attend the reassessment demonstration with a full range of marks available.

1.2 Assessment Details

Your role is to act as a Data warehouse/mart consultant for a case study. The assignment should be written up as a report providing a literature overview of the project and referencing scripts and other documents as necessary.

Assignment 1: Data Warehouse/Mart Design Approach (50%)

- Identification of a case study and Data warehouse/mart Requirements: Identify 1-2 complementary sets of data for the given case study*. Produce a data dictionary for all data sets. Clearly present the source of the data. For the case study decide which 'stakeholder' for the project you intend to represent (e.g. Marketing Director, Project Manager, Quality Assurance Manager or Managing Director). Detail the strategy, objectives, requirements and reports for the data warehouse/mart to support the stakeholder, using examples to add clarity. 300 words. (10 marks)
- 2. **Data warehouse/mart Architecture and Methodology**: Conduct a critical literature review of significant and current authoritative sources on characteristics systems suitable for central data systems implementation. Critically evaluate the reasoning behind your decisions. 1500 words. (10 marks)
- 3. Data warehouse/mart Design: Design current system's structure and produce a Star Schema design for new systems based on the report defined in Task 1. Clearly documenting all aspects to support decision made for your current design and what data may be in your new system's Star Schema. Evidence of the data can be done in an excel for this task. 500 words discussion. (30 marks)

Make sure you read the marking schema.

1.3 Assignment 1 Deliverables

Submit one single file, a document file converted into PDF file. Please make sure that you upload/submit evidence, the screen shots that can be viewed easily, discussion for your arguments and where appropriate theory that supports it. Screen shots not easily viewed in this report will not be marked.

You MUST submit your work through VLE using the link set up by the tutor. Receipt of your work will be recorded. We reserve the rights to call a student for a VIVA, to clarify the submitted work.

Please note: Tutors will follow up any suspected plagiarism and unfair practice found after the submission date as per University policy. Late penalties will apply as per University regulations.

^{*}You can use a data set that you may have identified on a different module. Note that most online data sets are summarised/aggregated data files.

1.4 Assignment 2 - Coursework 2

Module name and CRN			Data warehouse	e/mart Models and Approaches	- 17301
Module Lead	Module Leader			ki	
Semester	Α	Level	7	Approx No of Students	15

ASSIGNMENT TITLE: Implementation of Data warehouse/mart System

Assignment 2: Implementation of the Star Schema design

ASSIGNMENT WEIGHTING:

Assignment 2(50%)

HAND-OUT DATE: September 2020
SUGGESTED STUDENT EFFORT: 50 hours

SUBMISSION DATE: 5h January 2021, upload report (with recording) via VLE by 22.00

Deliverables Assignment 2: see next page

SUBMISSION INSTRUCTIONS: upload via VLE

FEEDBACK MECHANISM:

Assignment 2 individual and general feedback within 3 weeks via VLE.

LEARNING OUTCOMES ADDRESSED BY THIS ASSIGNMENT:

LOs 3 & 4 assessed

NOTES: This is an individual assessment. Submission of an assessment indicates that you, as a student, have completed the assessment yourself and the work of others has been fully acknowledged and referenced.

By submitting this assessed work, you are declaring that you are fit to submit, and you will therefore not normally be eligible to submit a request for mitigation for this work. If your result is recorded as Non-Submission or your mark for this assessment and for the whole module is below 40%, you will have opportunity to take reassessment and deferral is w/c 5th July 2021 (see Reassessment information below). If you are granted deferral through the mitigation process, you may attend the reassessment demonstration with a full range of marks available.

Assignment 2: Data warehouse/mart Implementation (50%)

The next steps should be undertaken to support the data warehouse/mart requirements and reports for Assignment 1* (incorporating any appropriate feedback). Task 1 should be done in Ms Access or SAS EG or Oracle Apex 19.

- Data Integration and Ongoing Maintenance: Submit a modified Star Schema(SS) model from assignment 1, clearly making a record of changes. Forward engineer your model to implement your SS. Integrate the data into a data warehouse/mart store, following ETL approach taught in class. Provide code and documentation for the process, data and testing. The scripts should use industry standards. (30 marks)
- **2. OLAP**: Upload either a 'detail' table or the 'star schema' tables into software that supports OLAP (Apex, Excel or Tableau). Design and document Dimensions and Aggregates for the OLAP based on your data, implement pivot tables to demonstrate 'drill up' and 'drill down'.

(10 marks)

3. Findings and Evaluation: Evaluate what are the current social and ethical issues of this type of implementation for the case study organisation. Report on any findings you have from the data and critically evaluate the process, methodology, methods and how appropriate is data warehouse/mart for this project.

(10 marks)

(1500 word)

Make sure you read the marking schema.

1.5 Assignment 2 Deliverables

Submit **one single PDF file via Turnitin.** This report must include the evidence for ALL of your assessment task, including all necessary evidence of code running, screen shots that can be viewed easily, discussion for your arguments and where appropriate theory that supports it. Screen shots not easily viewed in this report will not be marked. **Furthermore, in this report include a link for the recording, which is based on the implementation part (task 1-2)**. This recording will include the demo of code working, and not working. Further instructions on what to include in the recording will be provided prior the assessment submission. All ETL code must be submitted as part of the Appendix.

You MUST submit your work through VLE using the link set up by the tutor. Receipt of your work will be recorded. We reserve the rights to call student for a VIVA, to clarify the submitted work.

Please note: Tutors will follow up any suspected plagiarism and unfair practice found after the submission date as per University policy. Late penalties will apply as per University regulations.

2 Marking Schemas

2.1 Marking schema: Data warehouse/mart Approach (50%)

	Distinction 70%	Merit 60-69	Pass 40-59	Fail 0-39
Task1: Identification of a case study, Requirements and Reports (10 marks)	An excellent additional data sets chosen, suitable data (more than 2000 rows of data) and well understood. Links and details on the source data provided. Your position as stake holder on the project clearly identified and appreciated (applied to case study). An excellent strategy with supporting objectives and requirements. Excellent, appropriate, supported and DW/DM-type reports specified, in addition those provided in class when our case study used.Good justification why one approach used over another one. Excellent evidence of literature review and evidence, LeedsBeckett reference style included. (7-10).	A very good suitable data (more than 1000 rows of data) and well understood. Data source and URL submitted. Your position as stake holder on the project identified and appreciated (applied to case study). A good strategy with supporting objectives and requirements. 5 very good, appropriate, supported and DW-type reports specified with output. Evidence of literature review and evidence (6)	A good and suitable additional data used and well understood, data may be simple, issues not completely understood. Your position as stake holder on the project identified may not be as well appreciated. A strategy with supporting objectives and requirements. Reports specified are OLTP type, no simple output presented. Evidence of literature review and evidence. (4-5)	No additional data used. Little data or understanding by student Little understanding of the relevance of your stake- holder position. Little strategy or supporting objectives and requirements. Fe reports specified, OLTP type. No evidence of literature review and evidence. LeedsBeckett reference style not included. (0-3)
Task2: Data warehouse/mart Architecture options: (10 marks)	An excellent outline of DWA options applied to case study. A well chosen and supported approach selected. Clearly organised, explained. Excellent evidence of literature review and evidence, LeedsBeckett reference style included.	A good outline of DWA options for this task, well applied to case study. A suitable and supported approach selected. Variety of approached critically evaluated. Diagram of the system produced. Evidence of literature review and evidence.	A good outline of DWA options applied to case study. Approach selected lacks clear structure or understanding. Evidence of literature review and evidence.	No obvious approach undertaken. Little or poorly explained reasons for the approach. No evidence of literature review and evidence. LeedsBeckett reference style not included.

	T	T = .	1	1
Task3: Data	An excellent star schema and/or	Good star schema design as a	A star schema design as a	A SS implemented that
warehouse/mart	snow flake design as a single	single SS or series supporting	single SS or series – some	is based on specified
and Design	SS or series– fully supporting	objectives as defined.	objectives supported as	requirements or reports.
	objectives as defined. All design	Appropriate model identified,	defined. Some design issues	Design may be too wide
(30 marks)	issues identified, presented and	presenting the lifecycle of case	identified and addressed. Data	or narrow and require
	addressed. Documentation is	study data. Most design issues	source and URL submitted.	considerable further
	thorough and not open to	and solutions identified and	Documentation is thorough and	work on specification or
	interpretation (aimed at lead	addressed in relation of the DW	open to <i>little</i> interpretation	design.
	developer).	design and the ETL design.	(aimed at lead developer).	Few fit-for-purpose
	Theory reviewed and critically	Slowly changing dimension	Some of the documentation	documents produced.
	evaluated when making	discussed but not included in the	and decisions may require	
	appropriate choices for the	design, supported by the	further clarification (aimed at	
	design. Dictionary presented for	literature. Sample data presented	lead developer) No data	
	each data set is excellent.	of the SS. Documentation is	example. SCD type 1	
	Original work demonstrated, that	thorough and open to little	considered.	
	was not covered in class.	interpretation (aimed at lead		
	Excellent discussion supported	developer).		
	by the literature on the ongoing			
	data maintenance value and			
	issues for the DW/DM			
	implementation. SCD type 2 or 3			
	(or higher level or combination			
	of different types) implemented.			
	Self-report potential data-			
	integrity issues in their design			
	and how they can mitigate it in a			
	future design			

General Feedback:

2.2 Marking schema: Data warehouse/mart Implementation (50%)

	Distinction 70+	Merit 60-69	Pass 40-59	Fail 0-39
Task 1 Data Integration and Maintenance (ETL): 30 marks	Original work demonstrated, that was not covered in class. The data has been cleansed and merged into an appropriate data store. The process is well presented and documented and implemented using scripts in the main. Testing and error logs are included. Data Maintenance (SCD) implemented and evidenced as part to the solution. Only the data required for the stakeholder is included. Relevant academic and Industry-based literature evidence with comprehensive discussion. SCD type 2 or 3 (or higher level or combination of different types) has been successfully integrated as part of the system. Excellent implementation and discussion supported by the literature on the ongoing data maintenance value and issues for the DW/DM implementation. Self-report potential data-integrity issues in their design and how they can mitigate it in a future design and implementation. All relevant ETL code submitted	SS implemented. Changes to the original systems presented. The data has been cleansed and merged into an appropriate data store. The process is documented and implemented using some scripts. Testing and error logs are included. Scripts may not be reusable, some factors of ETL not considered. Only the data required for the stakeholder is included. SCD included using type 2 or 3. Very good literature evidence with discussion. Self-report potential data-integrity issues in the design and how it can mitigate it in a future design. Implementation part h video recording is of a very good quality.	SS implemented. Changes to the original systems presented. The data has been cleansed and merged into an appropriate data store. The data may be small scale or still lacking in quality. Some of the process is documented and implemented using some scripts. Scripts may not be reusable, some factors of ETL not considered. There is a lack of rigour, understanding or clear process. SCD partly included, type 1 considered. All (or lots of unnecessary) data included. Parts of the ETL code submitted in the appendix Implementation part - video recording is poor quality.	SS not implemented. No changes to the original systems presented. The data needed little cleansing or was very small scale. Some of the process is documented and implemented using some scripts. Scripts may be hard coded or not created. Some factors of ETL not considered. No recording/demo of code done. There is a lack of rigour, understanding or clear process. All (or lots of unnecessary) data inc'd. No Evidence that code runs successfully. Full set of ETL code NOT submitted in the appendix No evidence of literature review and evidence. LeedsBeckett reference style not included.
Task 2	in the appendix OLAP tasks completed to an	OLAP data appropriate.	OLAP data used appropriate	OLAP pivot table not demod.
OLAP	excellent level, designed and	Techniques used of an	and some techniques	Doesn't drill up and down, or

10 marks	appropriate. Original work	advanced level. Demonstrates	demonstrated. Data not	missing data columns. No
	demonstrated, that was not	drill up and down. Very good	prepared, nor discussion	Evidence that code runs
	covered in class. Relevant	literature evidence with	considered around preparation	successfully.
	academic and Industry-based	discussion.	importance. Solution does not	
	literature evidence with		demonstrate drill up and down,	
	comprehensive discussion.		or missing data columns.	
Task 3	An excellent report of the	A good, well structured,	A structured and supported	A report on the DW project
Social and	findings, well structured,	supported report critiquing the	report critiquing the DW project	linking with A weak bibliography.
Ethical	supported report critiquing the	DW project with relevant	with relevant academic and	Many errors in referencing
impact and	DW project with relevant	academic and Industry-based	Industry-based literature. A	
reflection	academic and Industry-based	literature. Social and Ethical	varied, relevant, current and	
	literature. Social and Ethical	issues consideration relevant	appropriate bibliography.	
10 marks	issues consideration uses	and based on current	Referencing in text lacks of	
	excellent set of examples,	research. Other technologies	consistency.	
	based on current research. A	considered, such as data	-	
	varied, relevant, current and	lakes. Research evident. A		
	appropriate bibliography. LBU	varied, relevant, current and		
	Harvard referencing in text	appropriate bibliography.		
	correctly applied.	Referencing in text very good.		

General Feedback:



Module nam	ne and C	RN	Data ware	house/mart Models and Approa	ches 1	7301
Module Lead	Module Leader			Sanela Lazarevski		
Semester	Α	Level	7	Approx No of Students		15

ASSIGNMENT TITLE: Designing Data warehouse/mart System

Reassessment task: Enhance the original assessment tasks. An oral presentation will be organised only if necessary. As part of your submission, you are expected to submit a *summary sheet listing all changes you've made to the original piece of work*; this can be easily tracked using the Word, 'tracking' facility.

ASSIGNMENT WEIGHTING: 50%

HAND-OUT DATE: September 2020 SUGGESTED STUDENT EFFORT: 50 hours

SUBMISSION DATE: is w/c 5th July 2021

Deliverables Assignment 1: see original assignment

SUBMISSION INSTRUCTIONS: upload via VLE

FEEDBACK MECHANISM:

Assignment 1 individual feedback within 3 weeks via VLE.

LEARNING OUTCOMES ADDRESSED BY THIS ASSIGNMENT:

LOs 1 & 2 assessed

NOTES: This is an individual assessment. Submission of an assessment indicates that you, as a student, have completed the assessment yourself and the work of others has been fully acknowledged and referenced.

By submitting this assessed work, you are declaring that you are fit to submit, and you will therefore not normally be eligible to submit a request for mitigation for this work.

If your result is recorded as Non-Submission or your mark for this assessment and for the whole module is below 40%, you will have opportunity to take reassessment and deferral is w/c 5th July 2021 (see Reassessment information below). If you are granted deferral through the mitigation process, you may attend the reassessment demonstration with a full range of marks available.

3.2 Re-assessment - Coursework 2

Module name and CRN			Data warehous	se/mart Models and Approach	es 17301	
Module Lead	Module Leader			Sanela Lazarevski		
Semester	Α	Level	7	Approx No of Students	15	

ASSIGNMENT TITLE:

Implementation of Data warehouse/mart System

Reassessment task: Enhance the original assessment tasks. An oral presentation will be organised only if necessary. As part of your submission, you are expected to submit a *summary sheet listing all changes you've made to the original piece of work*; this can be easily tracked using the Word, 'tracking' facility.

ASSIGNMENT WEIGHTING: 50%

HAND-OUT DATE: September 2020 SUGGESTED STUDENT EFFORT: 50 hours

SUBMISSION DATE: is w/c 5th July 2021

Deliverables Assignment 2: see original assessment

SUBMISSION INSTRUCTIONS: upload via VLE

FEEDBACK MECHANISM:

Assignment 2 individual and general feedback within 3 weeks via VLE.

LEARNING OUTCOMES ADDRESSED BY THIS ASSIGNMENT:

LOs 3 & 4 assessed

NOTES: This is an individual assessment. Submission of an assessment indicates that you, as a student, have completed the assessment yourself and the work of others has been fully acknowledged and referenced.

By submitting this assessed work, you are declaring that you are fit to submit, and you will therefore not normally be eligible to submit a request for mitigation for this work.

If your result is recorded as Non-Submission or your mark for this assessment and for the whole module is below 40%, you will have opportunity to take reassessment and deferral is w/c 5th July 2021 (see Reassessment information below). If you are granted deferral through the mitigation process, you may attend the reassessment demonstration with a full range of marks available.

Understanding Your Assessment Responsibilities

Mitigation and Extenuating Circumstances

If you are experiencing problems which are adversely affecting your ability to study (called 'extenuating circumstances'), then you can apply for mitigation.

The University operates a fit to sit / fit to submit approach to extenuating circumstances which means students who take their assessment are declaring themselves fit to do so.

Late Submission

Without any form of extenuating circumstances, standard penalties apply for late submission of assessed work. These range from 5% to 100% of the possible total mark, depending on the number of days late.

Cheating, Plagiarism and Other Forms of Unfair Practice

Academic misconduct occurs when you yourself have not done the work that you submit. It may include cheating, plagiarism, self-plagiarism, collusion and other forms of unfair practice.

Please review the regulation https://www.leedsbeckett.ac.uk/public-information/academic-regulations/

4 Frequently Asked Questions

What do I need to do to pass the module?

Experience has shown that there is a strong relationship between attendance at sessions and final mark, therefore making sure you attend the timetabled sessions is an essential first step. However, "attending" is not enough: you should also take part in the sessions, by listening and taking notes, and by thinking about the issues raised and asking (oral answering) questions when appropriate.

As noted above, the range of material covered by the module is presented in a number of different ways – as lectures, as tutorial work, as suggested reading, remember that the lecture notes provide a starting point for your study, and do not provide the full depth or breadth of material you will need – higher-level study is about being able to read around the subject, follow up references and filling in the gaps. You will need to do all these activities to succeed; the module material is designed that way. Do not forget the assignment either – there is a penalty system for late hand-ins which will be enforced. Every year some students end up getting reassessed because they hand work in late, and the penalty take their mark from a "pass" to a "fail" grade.

What if I am unsure about how best to study the material?

Everyone has an individual approach to study, so you should try to find the best one for you. However, the University has a comprehensive set of study skills material on the skills for learning website http://skillsforlearning.leedsmet.ac.uk/. This is recommended reading for all our students, but there are particular sections of interest if this is your first experience of studying at Leeds Metropolitan University. As a minimum, you should expect to attend all the

scheduled sessions, take part in the activities, and — most importantly — be prepared by looking at the material on VLE **before** the scheduled session.

What do I do if I do not understand something in a session?

Please ask. If the question comes to mind during the session, then ask at that time. The chances are that others in the group are also having the same problem and will be grateful for you for asking it. If the question comes to mind outside the session, then contact us by email, we will either reply by email, or give a general answer in the class.

What is this "postgraduate level" that the lecturers keep talking about?

This is a module on a postgraduate award, if you complete the award successfully, you will become a Master of Science. One of the skills which a Master of Science is expected to possess is the ability to apply knowledge and findings from one application to a different situation – especially one which has not been considered before. This is sometimes called *transferrable skills*. This involves finding out what the current situation / application area is and making a personal assessment of its importance, then deciding how the information gained can be applied to the new problem – what needs to be changed, what the expected effects of that change might be, etc. This is postgraduate thinking, it is important because it allows you to apply knowledge to situations different from those in which the information was presented and in a way which has not been done before, so you are expanding the set of useful applications of that information. Since most of the time, you will not be in the "text book" situation, this is a very useful skill to have.

What sort of work should I be submitting?

The assignment specification will give you details of what is required, but in general, you should ensure that your work answers the question as set out (we have a marking scheme which we have to follow, and can only give marks when the question is being answered). You will be told elsewhere about ensuring that work is your own (the skills for learning website can help with this too). If you are unsure, then please ask us. Whilst we cannot give you the answer to your coursework before you submit it, we will be able to tell you if you are working in the right direction, at the correct level etc. You should also take advantage of any formative assignment work. Formative assignments are things like tutorial questions, or the questions found at the end of chapters in recommended text books, you should try to answer these and discuss your answers with us, that way you can get some idea that the style and level of detail in your work is appropriate.

What feedback about my progress will I get?

In the 10th Edition of the Concise Oxford Dictionary "feedback" is defined as

...information given in response to ... a person's performance of a task, etc.

Therefore, the nature and volume of feedback depends on the nature and volume of the evidence you provide us about your "performance". If this evidence is restricted to the assessed work, then feedback will be similarly restricted. If you attempt the non-assessed material, or produce your summaries of the supplementary materials, and show it to us, we will give feedback on that as well.

What kind of marks will I get?

You should have the scheme and course information given to you at induction which gives these details, but remember we mark on a scale of 0-100%, and that 40% is the minimum to pass a particular piece of assessment, 60% gives a "merit" mark and 70% a "distinction". Marks of 80 and above are awarded to work which is very exceptional, showing all the merits of

postgraduate level work – critical thinking, good application of source material to the problem, clearly thought-out recommendations for further work etc. etc.

When will I get my results?

Your coursework marks and feedback will be returned within the University guidelines, but note that any mark is provisional until the relevant examination committees have met to agree the marks.

What happens if I do not pass (or do not submit) the assessed work?

The University regulations should be referred to for full information about the reassessment / deferral procedure. Mark of less than 40% is fail. Please note though, that the reassessment work is of equally challenging standard to the original, and therefore requires the same level of application and effort, and that any reassessment (whether through a substandard mark in the first attempt, or through a non-submission which has not been sanctioned by the extenuating circumstances committee) will be awarded a mark of, at best 40%.

What is the percentage reported by turnitin below which work is not plagiarised?

There is no such thing! The turnitin software produces a "similarity index" and identifies where the matched material has been found. We then use this information – together with other information about your assignment (such as changes in writing style and in text font, size and colour; references to diagrams, sections or cited material which do not appear in the work submitted; phrases like "in this chapter" and claims to have implemented some software in an unlikely location, or statements that the work being presented is part of a larger project, or that extensive surveys have been carried out) to form a judgement on whether we suspect that plagiarism has occurred. That judgement takes into account the seriousness of the suspected plagiarism – for example it is generally thought to be "worse" to attempt to claim someone else's results and conclusions than to plagiarise others' presentation of factual information. Ultimately, you know whether the work you submit is your own. Your respect for yourself, for your fellow students and for the reputation of the course should govern your behaviour.

5 The Case Study: NYAirline

The current system to deal with complaints and understand customers experience is managed over a number of different data sources, Oracle database and spreadsheet. The airline is recognising that one of the key factors of the customer complaints are flights delay due to the weather, which is unforeseen circumstances, but also the way complaints are managed by the airport staff. Complaints raised by passengers are recorded against flights, passengers are required to raise a complaint against each flight if they miss connections due to delays.

NYAirline have a number of KPI's (Key Performance Indicators) you could consider. Choose one of the following KPIs to address in your Assignment.

KPI 1: Deliver a quality service

This KPI is concerned with the quality of their service to provide a good flight experience to customers. In order to investigate the quality of their service they wish to investigate the outcomes of flights.

Examples of the types of reports they would like are:

- Number of flights which are delayed per year per airport
- Number of cancelled flights per year due to the bad weather

You are expected to add four of our own reports to fit this KPI.

KPI 2: Ensure customer satisfaction

This KPI is concerned with ensuring that customer complaints are dealt with adequately and do not cause customers to not use them again. Examples of the types of reports they would like are:

- Number of customer complaints per year per airport
- Total number of compensation per complaint type per year

Task: You are expected to add four of our own reports to fit this KPI complimenting existing or new data sets.

You may decide to come up with our own KPI. More of your own initiative with the task around this case study will bring you higher marks.

- The file flights_2015_3000 contains about 3000 rows of data for flights in the year 2015 available to NYAirlines.
- The file Flights_2016_2000 contains about 2000 rows of data for 2016.
- The complaints system data correlates to the data in flights files for 2015 and 2016*.
- The file 'Weather data 2015 to 2016' contains weather data for those years.

^{*}Important note: Consider add your own data for the complaints systems for year 2016 and 2017, as part of one of the two data sets you are expected to identify for this assignment.