Test Project and Report

Test Project and Report



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| **Submitting** a file upload | | **File types** pdf, odt, and docx | | |
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**Overview**

The goal of this work is to help you engage with **one** of the five topics covered in the module more deeply. It also gives you experience of Test Project work, where you begin with a Test Project outline and a guide, but take charge of your own exploration of the Test Project and write a report about what you did, how you did it, and what you found.

**Submission**

The coursework must be submitted to zip & PDF file . You must submit:

A PDF document containing your Test Project report (2500 words maximum excluding any references and brief appendices) to this `.





**Instructions**

The format of the Test Project for each topic is the same: you should develop an artefact (model, design, code, game, notebook, etc.), and write a Test Project report about the work you did.

The task description for the topic (see below) describes a scenario and the artefact you should develop. It includes guidance on the core elements that the artefact should include as well as possible extensions and avenues to explore. The task description may also include a starting point (e.g. a data set or framework). The format of the report is the same for all topics. Your report should comprise the following sections:

**Cover Page**

****

Name



Your Name



**Abstract** (50 - 200 words strict)



A summary of the work done including any results and findings.



**What Was Done and How**

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A description of the work done at a high level, including descriptions of design, implementation, testing strategies as appropriate.



A rationale for the approach taken and any decisions made, taking account of the wider context of contemporary topics in computing as appropriate.



References, quotes and examples of existing research and practice relevant to the approach taken and the artefact produced.



Should use diagrams, tables, images and code snippets with captions to appropriately support text.



**Results and Evaluation**

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A clear description of the final artefact.



An evaluation of how well the artefact meets the task description.



**Conclusions**

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A summary of the work done.



Suggestions for future work.



Personal reflection on how the Test Project went.



Evaluation and reflections should include positive and negative aspects.



**References**

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Full references for any quotes, figures, code or other external sources used.



A standard and consistent format will full bibliographic data.



Appropriate use of in-text citations.



**Appendices (optional)**

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Brief appendices may be included that contain additional material such as diagrams and tables.



The report should be 2500 words excluding the cover page, references and (optionally) brief appendices. The standard tolerance of ±10% on word count applies. Falling significantly below the word limit makes it harder to include all the required content to achieve Criteria. The task description includes

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Test Project and Report

guidance on what you might include in the main What Was Done and How section of the report since this varies across topics.

**Task**

You have been assigned **this.** There are more opportunities to explore all topics further in Stage 3 through specific modules and Test Project work.

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[**Task Description for Data Science**](https://ncl.instructure.com/courses/39977/pages/task-description-for-data-science)

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The task description includes guidance on what to include in the main sections of the report.

The following table indicates the breakdown of Test Project to each aspect of the report.

|  |
| --- |
| **Description** |
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|  |
|  |
| Artefact |
|  |
| **Report** |
| **Elements:** |
|  |
| Cover Page |
| and Abstract |
|
|  |
| What Was |
| Done and How |
|
|  |
| Results and |
| Evaluation |
|
|  |
| Conclusions |
| and Future |
| Work |
|  |
| References, |
| Form and Style |
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**Test Project and Report**

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|  | | |  |  |  |  | |  |  |  |  | Test Project and Report | | | | | | | |  | | |  |  | | | | |  | |  | |  |  |  |  | | | | |  |  |  | | | |
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|  | **Criteria** |  | | | | |  | | | | | |  |  |  |  |  |  |  | |  | **Ratings** | | | | | | | |  | |  | | | | |  |  |  |  | | | |  |  |  | |  |  |  |  |  |  |
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|  | Artefact |  | | | | |  | | | | | | |  |  | |  |  | | | | | | |  |  | | | | | | | | | | |  |  | | | | | |  |  | | | | |  |  | |  |
|  |  |  |  |  |  |  |  |  |
|  |  | **Outstanding** | | | | | **First** | | | | | | |  | **Upper Second** | |  | **Lower Second** | | | | | | |  | **Third** | | | |  | |  | | | | |  | **Borderline** | | | | | |  | **Fail** | | | | |  | **Missing** | |  |
|  |  | As with first | | | | | Comprehensive | | | | | | |  | Good solution / | |  | Reasonable | | | | | | |  | Some attempt to | | | | | | | | | | |  | **Fail** | | | | | |  | No significant | | | | |  | Missing or | |  |
|  |  | class but | | | | | solution / design | | | | | | |  | design | |  | solution / | | | | | | |  | address the main | | | | | | | | | | |  | Minimal | | | | | |  | attempt at the | | | | |  | Inaccessible. | |  |
|  |  | demonstrates a | | | | | addressing main | | | | | | |  | addressing all | |  | design | | | |  | | |  | task criteria; notes / | | | | | | | | | | |  | attempt to | | | | | |  | main task | | | | |  |  |  |  |
|  |  | particularly | | | | | task criteria and | | | | | | |  | main task | |  | addressing | | | | | | |  | comments / | | | | | | | | | | |  | address the | | | | | |  | criteria; no | | | | |  |  |  |  |
|  |  | comprehensive | | | | | one or more | | | | | | |  | criteria and | |  | most of the | | | | | | |  | pseudocode may | | | | | | | | | | |  | main task | | | | | |  | comments. No | | | | |  |  |  |  |
|  |  | and well- | | | | | extensions. | | | | | | |  | attempting one | |  | main task | | | | | | |  | demonstrate some | | | | | | | | | | |  | criteria. No | | | | | |  | notes / | | | | |  |  |  |  |
|  |  | rounded solution | | | | | Follows good | | | | | | |  | or more | |  | criteria. | | | | | | |  | understanding of | | | | | | | | | | |  | notes / | | | | | |  | comments / | | | | |  |  |  |  |
|  |  | / design. | | | | | practice | | | | | | |  | extensions. | |  |  |  | |  |  | | |  | concepts / direction. | | | | | | | | | | |  | comments / | | | | | |  | pseudocode. | | | | |  |  |  |  |
|  |  |  | | | | |  | | | | | |  |  |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  | pseudocode. | | | | | |  |  |  | |  |  |  |  |  |  |
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|  | Cover Page |  | | | | |  | | | | | | | |  | | |  |  | | | | | | | | | |  |  | | | | | | | |  |  |  | | | | |  |  | |  |  | | |  |  |
|  | and |  |  |  |  |  |  | |  |  |
|  | **Outstanding** | | | | | **First** | | | | | | | | **Upper Second** | | |  | **Lower Second** | | | | | | |  |  |  |  | **Third** | | | | | | | |  |  | **Borderline Fail** | | | | |  |  | |  | **Fail** | |  | **Missing** |  |
|  | Abstract |  |  |  |  |  |  |  |  |  | |  |  |  |
|  | A precise and | | | | | A comprehensive | | | | | | | | A clear overview | | |  | A good overview of | | | | | | | | | |  | Basic overview of | | | | | | | |  |  | Minimal overview | | | | | | | |  | Little to no | |  | Missing. |  |
|  |  |  |  |  |  |  |  |  |
|  |  | comprehensive | | | | | overview of the | | | | | | | | of the work done | | |  | the work done but | | | | | | | | | |  | the work done but | | | | | | | |  |  | of work done, | | | | |  |  | |  | overview of | |  |  |  |
|  |  | overview of the | | | | | work done | | | | | | | | including any | | |  | does not mention | | | | | | | | | |  | omits results and | | | | | | | |  |  | some aspects may | | | | | | | |  | the work | |  |  |  |
|  |  | work done | | | | | including any | | | | | | | | results and | | |  | results and/or | | | | | | |  |  |  |  | findings. Title | | | | | | | |  |  | be unclear or | | | | |  |  | |  | done; entirely | | |  |  |
|  |  | including any | | | | | results and | | | | | | | | findings. Title | | |  | findings. Title page | | | | | | | | | |  | page contains | | | | | | | |  |  | incoherent. Title | | | | |  |  | |  | unclear or | |  |  |  |
|  |  | results and | | | | | findings. Title page | | | | | | | | page contains all | | |  | may contain errors | | | | | | | | | |  | errors or | | | | | | | |  |  | page contains | | | | |  |  | |  | incoherent. | |  |  |  |
|  |  | findings. Title | | | | | contains all | | | | | | | | information. | | |  | or omissions. | | | | | | |  |  |  |  | omissions. | | | | | | | |  |  | significant errors | | | | | | | |  | Title page | |  |  |  |
|  |  | page contains all | | | | | information. | | | | | | | |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  |  |  | and omissions. | | | | |  |  | |  | missing. | |  |  |  |
|  |  | information. | | | | |  | | | | | |  |  |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  |  |  |  | | | |  |  |  | |  |  |  |  |  |  |
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|  | What Was |  | | | | |  | | | | | |  |  |  | |  |  | | | | | | | |  |  |  | | | | | | | | | |  |  |  | | | | |  |  | |  |  | |  |  |  |
|  | Done and |  | |  |  |  |  |  |  |  | |  |  |  |
|  | **Outstanding** | | | | | **First** | | | | | |  |  | **Upper Second** | |  | **Lower Second** | | | | | | | |  |  | **Third** | | | | | | | | | |  |  | **Borderline Fail** | | | | | | | |  | **Fail** | |  | **Missing** |  |
|  | How? |  | |  |  |  |  |  |  |  |  |
|  | As with first | | | | | Comprehensive | | | | | |  |  | Good description | |  | Okay description | | | | | | | |  |  | Basic description of | | | | | | | | | |  |  | Contains little | | | | |  |  | |  | Contains little | |  | Missing. |  |
|  |  |  | |  |  |  |  |  |  |  | |  |  |  |
|  |  | class but | | | | | description of | | | | | |  | | of work done; | |  | of work done but | | | | | | | |  |  | work done but may | | | | | | | | | |  |  | material | | | | |  |  | |  | material | |  |  |  |
|  |  | demonstrates | | | | | work done, with | | | | | |  | | some evidence | |  | some errors or | | | | | | | |  |  | contain significant | | | | | | | | | |  |  | addressing | | | | |  |  | |  | addressing | |  |  |  |
|  |  | innovative and | | | | | clear evidence of | | | | | |  | | of testing, with | |  | omissions. Minimal | | | | | | | |  |  | errors or omissions. | | | | | | | | | |  |  | work done and | | | | |  |  | |  | work done and | | |  |  |
|  |  | independent | | | | | testing, supported | | | | | |  | | some relevant | |  | supporting figures. | | | | | | | |  |  | Irrelevant or missing | | | | | | | | | |  |  | has substantial | | | | |  |  | |  | has substantial | | |  |  |
|  |  | work | | | | | by diagrams / | | | | | |  | | tables / | |  | Shows ability to | | | | | | | |  |  | supporting figures. | | | | | | | | | |  |  | errors and/or | | | | |  |  | |  | errors and/or | |  |  |  |
|  |  | significantly | | | | | tables / snippets. | | | | | |  | | diagrams / | |  | investigate | | | | | | | |  |  | Shows some ability to | | | | | | | | | |  |  | omissions. | | | | |  |  | |  | omissions. | |  |  |  |
|  |  | beyond taught | | | | | Shows ability to | | | | | |  |  | figures. Shows | |  | problems but | | | | | | | |  |  | investigate problems. | | | | | | | | | |  |  | Shows minimal | | | | |  |  | |  | Shows minimal | | |  |
|  |  |  | |  |  |  |  |  |  |  | |  |  |  |
|  |  | material. | | | | | investigate | | | | | |  | | ability to | |  | solutions not fully | | | | | | | |  |  | Demonstrates some | | | | | | | | | |  |  | ability to | | | | |  |  | |  | ability to | |  |  |  |
|  |  |  | | | | | problems | | | | | |  | | investigate | |  | thought through. | | | | | | | |  |  | understanding of | | | | | | | | | |  |  | investigate | | | | |  |  | |  | investigate | |  |  |  |
|  |  |  | | | | | thoroughly, | | | | | |  | | problems. | |  | Demonstrates | | | | | | | |  |  | concepts from taught | | | | | | | | | |  |  | problems. | | | | |  |  | |  | problems. No | |  |  |  |
|  |  |  | | | | | demonstrates a | | | | | |  | | Demonstrates | |  | some | | | |  | | |  |  |  | material but contains | | | | | | | | | |  |  | Shows minimal | | | | |  |  | |  | obvious | |  |  |  |
|  |  |  | | | | | thorough | | | | | |  | | understanding of | |  | understanding of | | | | | | | |  |  | significant errors or | | | | | | | | | |  |  | understanding | | | | |  |  | |  | understanding | |  |  |  |
|  |  |  | | | | | understanding of | | | | | |  | | concepts beyond | |  | concepts, mostly | | | | | | | |  |  | misunderstandings. | | | | | | | | | |  |  | of concepts | | | | |  |  | |  | of concepts | |  |  |  |
|  |  |  | | | | | concepts beyond | | | | | |  | | taught material. | |  | derived from | | | | | | | |  |  |  |  |  | |  | | | | |  |  |  | from taught | | | | |  |  | |  | from taught | |  |  |  |
|  |  |  | | | | | taught material. | | | | | |  | |  |  |  | taught material. | | | | | | | |  |  |  |  |  | |  | | | | |  |  |  | material. | | | | |  |  | |  | material. | |  |  |  |
|  |  |  | | | | |  | | | | | |  |  |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  |  |  |  | | | |  |  |  | |  |  |  |  |  |  |
|  | Results and |  | | | | |  | | | | | | | |  | |  |  | | | | | | | |  |  |  | | | | | | | | |  |  | | | | | | |  |  | |  |  | | |  |  |
|  | Evaluation |  |  |  |  |  |  | |  |  |
|  | **Outstanding** | | | | | **First** | | | | | | | | **Upper Second** | |  | **Lower Second** | | | | | | | |  |  | **Third** | | | | | | | | |  | **Borderline Fail** | | | | | | |  |  | |  | **Fail** | |  | **Missing** |  |
|  |  |  |  |  |  |  |  | |  |  |  |
|  |  | As with first | | | | | Demonstrates how | | | | | | | | Describes how | |  | Mentions the | | | | | | | |  |  | Little mention of | | | | | | | | |  | Minimal mention of | | | | | | |  |  | |  | Little to no | |  | Missing. |  |
|  |  | class but | | | | | well the solution | | | | | | | | well the solution | |  | solution working. | | | | | | | |  |  | solution working. | | | | | | | | |  | solution working. | | | | | | |  |  | |  | evaluation. | |  |  |  |
|  |  | arguments are | | | | | works with | | | | | | | | works. Sound | |  | Some evaluation | | | | | | | |  |  | Some evaluation | | | | | | | | |  | Minimal evaluation. | | | | | | |  |  | |  | Any material | |  |  |  |
|  |  | particularly | | | | | evidence. | | | | | | | | and logical | |  | but may not be | | | | | | | |  |  | but comes to weak | | | | | | | | |  | Any material included | | | | | | | | | |  | included is | |  |  |  |
|  |  | insightful and | | | | | Comprehensive | | | | | | | | evaluation. | |  | consistently | | | | | | | |  |  | or unconvincing | | | | | | | | |  | is unsuccessful and | | | | | | | | | |  | weak or | |  |  |  |
|  |  | well evidenced. | | | | | and mature | | | | | | | |  |  |  | convincing. | | | | | | | |  |  | conclusions. | | | | | | | | |  | unconvincing. | | | | | | |  |  | |  | incoherent. | |  |  |  |
|  |  |  | | | | | evaluation. | | | | | | | |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  |  |  |  | | | |  |  |  | |  |  |  |  |  |  |
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|  | Conclusions |  | | | | |  | | | | | | | |  |  | |  |  | |  |  | | | | | | | |  | |  | | | | | |  |  |  | | | | |  |  | |  | | |  |  |  |
|  | and Future |  |  |  | |  |  | |  |  |  |  | |  |  |
|  | **Outstanding** | | | | | **First** | | | | | | | |  | **Upper Second** | |  |  | |  | **Lower Second** | | | | | | | |  | | **Third** | | | | | |  |  | **Borderline Fail** | | | | |  |  | | **Fail** | | |  | **Missing** |  |
|  | Work |  |  |  | |  |  | |  |  |  |  | |  |  |
|  | A | | | | | A comprehensive | | | | | | | |  | A clear summary of | | | | |  | A good | | | |  |  |  |  |  | | Basic summary | | | | | |  |  | Minimal | | | | |  |  | | Little to no | | |  | Missing. |  |
|  |  |  |  |  |  |  |  |  | |  |  |  |  | |  |  |
|  |  | comprehensive | | | | | summary of the work | | | | | | | |  | the work done; | |  |  | |  | summary of the | | | | | | | |  | | of the work | | | | | |  |  | summary of | | | | |  |  | | summary of the | | |  |  |  |
|  |  | summary of the | | | | | done; clear | | | | | | | |  | good suggestions | | | | |  | work done; | | | |  |  |  |  |  | | done; some | | | | | |  |  | work done; | | | | |  |  | | work done; | | |  |  |  |
|  |  | work done; | | | | | suggestions for future | | | | | | | |  | for future work. | |  |  | |  | okay | | | |  |  |  |  |  | | simple | | | | | |  |  | suggestions for | | | | |  |  | | suggestions for | | |  |  |  |
|  |  | clear and | | | | | work. Demonstrates | | | | | | | |  | Demonstrates some | | | | |  | suggestions for | | | | | | | |  | | suggestions for | | | | | |  |  | future work are | | | | |  |  | | future work are | | |  |  |
|  |  |  |  |  | |  |  |  |  | |  |  |  |
|  |  | precise | | | | | reflective thinking on | | | | | | | |  | reflective thinking, | | | | |  | future work. | | | | | | | |  | | future work. | | | | | |  |  | unclear or | | | | |  |  | | unclear or | | |  |  |  |
|  |  | suggestions for | | | | | how the Test Project went, | | | | | | | |  | may miss positive | | | | |  | Some reflective | | | | | | | |  | | Little or no | | | | | |  |  | incoherent. | | | | |  |  | | incoherent. Little | | | |  |  |
|  |  | future work. | | | | | including positive and | | | | | | | |  | or negative aspects. | | | | |  | thinking with | | | | | | | |  | | reflective | | | | | |  |  | Minimal | | | | |  |  | | to no reflective | | |  |  |  |
|  |  |  | | | | | negative aspects. | | | | | | | |  |  |  |  |  | |  | significant gaps. | | | | | | | |  | | thinking shown. | | | | | |  |  | reflective | | | | |  |  | | thinking. | | |  |  |  |
|  |  |  | | | | |  | | | | | |  |  |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  |  |  | thinking shown. | | | | |  |  | |  |  |  |  |  |  |
|  |  |  | | | | |  | | | | | |  |  |  |  |  |  |  | |  |  | | |  |  |  |  |  |  | |  | | | | |  |  |  |  | | | |  |  |  | |  |  |  |  |  |  |

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|  | | |  | | Test Project and Report | | |  | |  |  |  | |
|  |  |  | |  | |  |  | |  | |  | |  | |  |  |
|  | **Criteria** |  | |  | |  | **Ratings** | |  | |  | |  | |  |
|  |  |  | |  | |  |  | |  | |  | |  | |  |  |
|  | References, |  | |  | |  |  | |  | |  | |  | |  |  |
|  | Form and |  |
|  | **Outstanding** | | **First** | | **Upper Second** | **Lower Second** | | **Third** | | **Borderline Fail** | | **Fail** | | **Missing** |  |
|  | Style |  |
|  | Report | | Report is a | | Report is well | Report is | | Report is messy | | Report is | | Report is | | Unreadable, |  |
|  |  |  |
|  |  | considered | | pleasure to read, | | presented and | generally well | | and not well | | unstructured and | | incoherent | |  |  |
|  |  | publication | | nicely presented, | | structured, few | presented but the | | structured. | | difficult to read. | | and | |  |  |
|  |  | quality. No | | well structured, | | spelling or | structure may be | | Significant | | Substantial | | unstructured. | |  |  |
|  |  | spelling or | | very few spelling | | grammar | unclear. Some | | spelling and | | spelling and | | Substantial | |  |  |
|  |  | grammar | | or grammar | | mistakes, proper | spelling or | | grammar | | grammar | | spelling and | |  |  |
|  |  | mistakes. | | mistakes, proper | | use of figures, | grammar | | mistakes and | | mistakes. No | | grammar | |  |
|  |  | Comprehensively | | use of figures, | | etc. Uses at least | mistakes, or | | improper use of | | use of | | mistakes. No | |  |
|  |  |  |  |
|  |  | referenced. | | etc. Uses multiple | | one reference and | improper use of | | figures. Any | | references. | | use of | |  |  |
|  |  |  | | references and | | follows one of the | figures. Any | | references are | |  | | references. | |  |  |
|  |  |  | | consistently follow | | standard | references are | | poorly formatted | |  | |  | |  |  |
|  |  |  | | one of the | | schemes. | inconsistently | | and miss relevant | |  | |  | |  |  |
|  |  |  | | standard | |  | formatted or | | bibliographic | |  | |  | |  |  |
|  |  |  | | schemes. | |  | missing | | information. | |  | |  | |  |  |
|  |  |  | |  | |  | bibliographic | |  | |  | |  | |  |  |
|  |  |  | |  | |  | information. | |  | |  | |  | |  |  |
|  |  |  | |  | |  |  | |  | |  | |  | |  |  |
|  |  |  | |  | |  |  | |  | |  | |  | | Total points: 1 | |
|  |  |  | |  | |  |  | |  | |  | |  | |  |  |

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