

**36102 iLab 1**

**Spring 2019**

**Assessment Brief**

**Assessment Summary:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Deliverable** | **Description** | **Type** | **Weight** | **Due** |
| 1. **Project Design Journal** | Part A: Learning Goals and Weekly entries  Part B: Interim Status Report  Part C: Project Design Journal | Individual | 40 | 12 Aug 9 am  23 Sep 9 am  17 Oct 9 am |
| 1. **Project Showcase** | Client briefing  Supporting documentation | Individual | 30 | 17 Oct 6pm  4 Nov 9 am |
| 1. **Professional Showcase** | Publicly presentable output | Individual | 30 | 4 Nov 9 am |
| **Total** | | | **100%** |  |

**Additional Information:**

* All assessments are to be submitted via Canvas, please check Assessments folder for further details
* Submissions must have a title page with subject named, student name(s) and IDs, date of submission and the title of the assessment
* All submitted files should follow this naming format:

*StudentName\_AssignmentName\_Date* (*JaneSmith\_Assignment1PartA\_21032018.docx*)

* Tables, figures and appendices are not included in the size limit
* Use embedded objects instead of linked objects for the content sourced externally
* Consistent referencing is mandatory (Harvard UTS style preferred) for all externally sourced material
* You can apply for an extension for up to 1 week via email with a valid reason (work, travel or hardware issues are not valid reasons)
* Extensions for more than 1 week require a formal [application](http://www.uts.edu.au/current-students/managing-your-course/classes-and-assessment/special-circumstances/special) for extension
* Extension requests submitted after the due date will not be considered or approved
* Unless extension arrangements are made, each late submission is penalised 10% per each day after the due date
* Assignments submitted on the same day, but after the due time are penalised 5%
* All marks and feedback comments will be recorded in Review

**Student-Developed Marking Criteria**

iLab1 is the first capstone subject in the MDSI course and provides a platform for students to integrate and apply learnings from the subjects already completed and from work experience to their projects.

As part of this subject, students will have the opportunity to include individual marking criteria tailored to their individual learning goals and chosen projects for each assessment, which are negotiated with subject coordinator.

This approach aims to maximise the value of the iLab1 learning experience, giving the students more opportunity to participate in goals setting and evaluation of their learning success.

Students are expected to define their own assessment goals within the set subject learning objectives (SLOs) and course intended learning outcomes (CILOs) associated with each student-defined criteria.

Students are expected to set ambitious goals for themselves and articulate the expected performance for Credit, Distinction and High Distinction levels. Each performance goal within criteria should include basic and stretch targets.

As a rule, fulfilment of all basic target learning objectives within the performance criteria qualifies for Credit mark, while achievement of stretch targets deserves Distinction. Extension beyond the ambitious stretch targets deserves High Distinction.

Students will be assisted in defining their performance goals and marking criteria.

The final version of the student-developed criteria is to be approved before the submission of related assessments.

**Assessment task 1: Project Design Journal**

**Weight:** 40%

**Length:** 14-20 pages

**Individual Assignment**

**Due:**

* Part A: Learning Goals and Weekly entries 12 August, 9 am
* Part B: Interim Status Report 23 September, 9 am
* Part C: Project Design Journal 17 October, 9 am

**Task:**

Throughout the semester students will be required to maintain a design journal (within their CICAround blogs) recording their project work, activities and ongoing reflections. This will also include regular blog posts in CIC-Around, peer reviews and discussions.

A template (see appendix) is provided to assist with this assessment, providing the starter stimulus for student thinking and writing. The journal will be used as a tool to set the goals for iLab and client project, record activities and provide status reports on progress.

**Part A: Learning Goals and Weekly Entries**

**Length:**  3-6 pages, plus blog posts

**Weight: N/A**

**Due: 12 August, 9 am**

This is the preparation step, designed to establish the goals, practices and communication channels that will assist the students in managing their iLab1 work.

Students are expected to post regular blogs, outlining their goals, plans, activities and progress.

For this first part of Assessment 1, you have been asked to begin to articulate two tailored criteria that are unique to your professional learning you expect to develop as you work on your iLab project. This goes back to the questions you were asked at the start of the semester about your learning objectives. Exploring your learning objectives in relation to the Graduate Attributes and the core data science competencies, for instance, can inform this ongoing reflection.

The focus is on identifying the elements relevant to each of the pre-set criteria. You will also start the process of wording your own criteria to cover learning goals that are important to you but not necessarily covered in the pre-defined criteria.

For developing your criteria keep in mind how you are developing your capacity in relation to the subject objectives related to stakeholders and teams (5, 6 & 7). For example:

* What does it mean to be a professional in a client-centred context?
* How can you contribute to, and deliver, a project as a highly functioning team member?
* What does it mean to think about key drivers in the client’s business context and their implications for the data project?

You are also expected to record discoveries, milestones and challenges in your blog posts, as well as read and comment on other students’ entries.

In this part of the assessment, the students are expected to complete the following:

* At least one blog entry in CICAround, focusing on:
  + 1: Project Goals
  + 2: Your own project activities, reflections, planning and work in progress
  + 3: Interim project status report
  + 4: Professional development outcomes
* Link to this blog to be included in the submission to Canvas.
* Develop (draft) student-developed marking criteria.
* Develop an initial draft of the “Part A” (the first column “Identified Elements”) in the Design Journal Template. Students should include 3-5 elements for each criteria, specifying clear goals and objectives with regards to their project and learning.
* Submit the Design Journal to Canvas and CIC-Around

After submission, each student should read and comment on at least two student entries, providing and receiving peer feedback on submissions.

This part of the assessment is not marked, but the peer review will provide formative feedback. This feedback is expected to provide strong and useful input for students and assist in completing the remaining parts of the design journal.

**Part B: Interim Status Report**

**Length:**  6-8 pages, plus blog posts

**Weight: 20%**

**Due: 23 September, 9 am**

In this part of the assessment will continue your work on the design journal, continuously reviewing your progress and publishing your insights in CICAround.

In Part B, you are expected to start developing evidence of your progress against your goals, objectives with regards to your project and learning.

You will need to complete and submit the second column “Developing Evidence” in your design journal. Students are expected to use peer feedback and improve on Part A of their journal, completing the earlier drafted components and including the evidence of progress.

**Part C: Project Design Journal**

**Length:**  14-20 pages, plus blog posts

**Weight: 20%**

**Due: 17 October, 9 am**

The final component of your design journal focuses on the achieved outcomes with evidence. The template will guide how you extract evidence about achievements and insights you are documenting in your posts.

Your iLab project serves as the site for your learning and your professional development this semester. Your project design journal serves as a vehicle for this learning and the assessment criteria help you drill down into your learning goals.

**Assessment Criteria (Parts B and C):**

|  |  |  |  |
| --- | --- | --- | --- |
| **SLO** | **CILO** | **Assessment Criteria** | **Weight** |
| 1 | 1.1 | Evaluated data challenges and selected appropriate approaches to data discovery | 20 |
| 1 | 1.2 | Identified key concepts, frameworks or processes to utilise for problem solving | 20 |
| 1 | 5.1 | Considered and applied legislation and standards for managing data in stakeholders’ context | 20 |
| 2 | 5.2 | Created tailored criteria to evaluate your own professional development regarding stakeholder requirements and work as part of high-functioning teams | 20 |
| 2 | 5.2 | **Self-developed criteria** associated with:  Embracing ethical responsibilities in contrasting patterns and predictors for data discovery for the development of data science capabilities  within organisations. | 10 |
| 2 | 5.2 | **Self-developed criteria** associated with:  Embracing ethical responsibilities in contrasting patterns and predictors for data discovery for the development of data science capabilities  within organisations. | 10 |
| **Total** | | | **100%** |

**Assessment task 2: Project Showcase**

**Weight: 30%**

**Length:**  TBA

**Due:**  **17 October, 6pm**

**Individual assessment**

**Task:**

Students will present the outcomes of their work on the data challenge they have undertaken on behalf of their chosen client.

Students will produce a multimodal narrative summarisation of the knowledge gained from their data investigations throughout the semester so that they can deliver advice in story form to their client.

The format and size of this summary will be discussed between students, their clients and mentors. It is student’s responsibility to organise the appropriate method for delivery of this presentation, in agreement with their client(s). This might include a presentation at client’s site, in class, online, via video etc.

The submission for this assessment will consist of client presentation and a written status report. Students are expected to submit (on Canvas) the following:

* Presentation slides
* Status report document covering the following components:
  + Project description
  + Client/organisation description
  + Goals and achievements
  + Approach to delivery
  + Reflection on performance and project outcomes
  + Reflection on learning
  + Demonstration of the achieved results (for example data visualisation)
* Presentation video (if presentation was not delivered in class)

Both the presentation and the status report are expected to contain a sample of data visualisation.

Mentors will collect anonymous feedback from the client on each student and incorporate it in the overall assessment evaluation.

While project outcome, relevant value and client feedback are very important components of the assessment, the key focus should remain on the learning progress. Projects should be seen as a tool and platform for learning, rather than the sole focus of the iLab work.

Note: For the projects where a team of students worked together, each student is expected to equally participate in the presentation and submit all components of the presentation to Canvas. Each student is expected to deliver their own original progress report and assessment submission

**Assessment Criteria:**

|  |  |  |  |
| --- | --- | --- | --- |
| **SLO** | **CILO** | **Assessment Criteria** | **Weight** |
| 2 | 4.1 | Communicates advice to the client as a multimodal synthesis of the project’s value for their organisation | 20 |
| 3 | 3.2 | Explains the rationale for the combination of problem solving approaches that weaves together selected data science and data engineering strategies (including statistics and data formulations, visual explorations and machine learning techniques exploration | 20 |
| 3 | 3.1 | Synthesises problem solving approaches (including statistics and data formulations, visual explorations and machine learning techniques) and rationale for the project | 20 |
| 4 | 1.3 | Applies transdisciplinary frameworks to develop the data science capabilities of the client organisation taking account of relevant regulatory frameworks | 20 |
| 4 | 5.2 | Evaluates the team processes, including opportunities, challenges, solutions put in place, lessons learnt and implications | 20 |
| **Total** | | | **100%** |

**Assessment task 3: Professional Showcase**

**Weight: 30%**

**Length:**  Negotiated with subject coordinator

**Due: 4 November, 9 am**

**Individual assessment**

**Task:**

In this final assessment of this first capstone subject, students showcase their new skills and new knowledge by producing an account for a public audience. In this way the student is able to launch themselves into the data science field through their work.

The topic and form of the work as well as the intended target audience are negotiated with the subject coordinator, but should build on work that the student undertakes in their design journal throughout the semester.

As part of this assessment, the students are expected to demonstrate their learning progress and achievements in this subject, as well as to reflect on their skills, abilities, experience and project performance.

While the exact format and size of the submission will be negotiated between students and their mentors, the following elements are expected to be covered in each submission:

* Professional profile overview, covering skills and experience
* Comparison between starting skills/abilities and the results after iLab
* iLab learnings and project outcomes and their relevance to professional development
* Project results overview, reflection on performance, feedback from client, identified areas for improvement
* Strategy for next steps in developing or promoting public professional profile

**Assessment Criteria:**

|  |  |  |  |
| --- | --- | --- | --- |
| **SLO** | **CILO** | **Assessment Criteria** | **Weight** |
| 1 | 4.2 | Appropriate strategy for establishing a public profile as a data science professional | 50 |
| 2 | 4.1 | Integration of iLab outcomes into workplace and professional development goals | 50 |
| **Total** | | | **100%** |

**Appendix: SLOs and CILOs**

**Subject Learning Objectives (SLO):**

|  |  |  |
| --- | --- | --- |
| **Code** | **Description** | **Short description** |
| 1. | Evaluate dynamic real-time data flows and identify the challenges of big and sparse data for understanding and acting on a system. | Complex Systems Challenges |
| 2. | Contrast patterns and predictors for data discovery for the development of data science capabilities  within organisations. | Complex Systems Analysis |
| 3. | Explore concepts, frameworks and processes from other fields for their relevance to data science theory and practices in data driven experiments. | Creative Analytical Sensemaking |
| 4. | Construct a bricolage of problem solving approaches involving statistics and data formulations, visual explorations and machine learning techniques to discover deeper insights. | Problem Solving & Enquiry |
| 5. | Deliver advice to stakeholders in the form of a multimodal narrative synthesis of the knowledge gained from data investigations, bridging the gap between data and human insight. | Communicating Value |
| 6. | Apply relevant legislation and regulation and an understanding of stakeholders’ values to develop “privacy by  design”. | Ethical Leadership |
| 7. | Utilise understanding of team dynamics in complex  organisational settings to design a team that can build and successfully deliver real-life and complex data driven projects. | Leadership |

**CIC Gradate Attributes (GAs) & Course Intended Learning Outcomes (CILOs)**

|  |  |
| --- | --- |
| **Graduate Attributes** | **Course Intended Learning Outcomes** |
| **1. Sociotechnical systems thinking** | **1.1 Understanding relationships & processes within systems** |
| **1.2 Exploring and testing models and describing behaviours of complex systems** |
| **1.3 Making predictions and informing data discovery** |
| **1.4 Making the invisible visible** |
| **2. Creative, analytical and rigorous sense making** | **2.1 Critiquing trends and theoretical frameworks** |
| **2.2 Exploring, interpreting and visualising data** |
| **2.3 Understanding uncertainty, ambiguity and complexity** |
| **2.4 Designing & managing data investigations** |
| **3. Create value in problem solving and inquiry** | **3.1 Developing strategies for innovation** |
| **3.2 Examining and articulating data value** |
| **3.3 Working together** |
| **4. Persuasive and robust communication** | **4.1 Developing communication skills** |
| **4.2 Engaging audiences** |
| **4.3 Informing decision making** |
| **5. Ethical citizenship and leadership** | **5.1 Becoming a reflective data practitioner** |
| **5.2 Embracing ethical responsibilities** |
| 5.3 Leading data science |

*CILOs applicable to this subject are highlighted in bold, others greyed out*

**Assessment 1 Template: Design Journal**

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment Criteria** | **Part A:**  **Identified elements** | **Part B:**  **Developing evidence** | **Part C:**  **Achieved outcomes with evidence** |
| Evaluated data challenges and selected appropriate approaches to data discovery |  |  |  |
| Identified key concepts, frameworks or processes to utilise for problem solving |  |  |  |
| Considered and applied legislation and standards for managing data in stakeholders’ context |  |  |  |
| Created tailored criteria to evaluate your own professional development regarding stakeholder requirements and work as part of high-functioning teams |  |  |  |
| **Self-developed criteria** associated with:  Embracing ethical responsibilities in contrasting patterns and predictors for data discovery for the development of data science capabilities  within organisations. |  |  |  |
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