**INFS2603: Group Assignment**

This assignment is graded upon 100 marks and counts for 30% of the available marks for the course

**Table of Contents**

[1.0 Background 3](#_Toc21520319)

[2.0 Scenarios 3](#_Toc21520320)

[2.1 Driver Retention in the Sharing Economy 3](#_Toc21520321)

[2.2 Building a B2B Marketplace for the Education Sector 4](#_Toc21520322)

[2.3 Creating Social Impact using Digital Technologies 5](#_Toc21520323)

[2.4 Student Lifecyle Management System 5](#_Toc21520324)

[3.0 Requirements 6](#_Toc21520325)

[4.0 Learning Outcomes Addressed 7](#_Toc21520326)

[5.0 Submission Details 8](#_Toc21520327)

[5.1 Part A Submission: 8](#_Toc21520328)

[5.2 Part B Submission: 9](#_Toc21520329)

[5.3 Proper Academic Conduct 9](#_Toc21520330)

[5.4 Professional Group Work 10](#_Toc21520331)

[5.5 Late Submission 11](#_Toc21520332)

[6.0 Marking Criteria 11](#_Toc21520333)

[7.0 References 13](#_Toc21520334)

**Table of Tables**

[**Table 1 Learning Outcomes Addressed** 8](#_Toc21488832)

# **1.0 Background**

This assignment endeavours to give you an opportunity to apply theory to practice, by having you and your group take on the role of Business Analysts (BA) for a given scenario. You will be presented with four case scenarios sourced from consulting firms, start-ups and non-profit organisations. By employing your own bespoke method of Business Analysis your group will identify a focal problem/challenge/opportunity and create a low fidelity design prototype of the solution. The idea is this: given a set of business analysis tools and methods that you’ve been introduced to in this course, the task at hand is for you to craft an approach/framework/methodology and use it in the context of analysing and designing a digitally-enabled solution that addresses the chosen problem/challenge/opportunity.

Note:

* The group assignment consists of two components: a **7500** **word (max)** **written report (25%)** and a **10-minute** **group pitch + demo** **(5%).**
  + **The written report will be submitted in TWO PARTS:** 
    - **Part A which is due in Week 6 (5%) 16:55PM 26th October (Saturday) 2019**
    - **Part B which is due in Week 9 (20%) 16:55 PM 11th November 2019**
  + The **Design Prototype Pitch** will take place in **Week 10 tutorials – details will be provided in a separate document**.
  + **Feedback for the Group Assignment released on the 25th of November 2019**
* Overall, the group assignment is worth **30% (5% Part A, 20% Part B, 5% Design Prototype Pitch) of your course marks**.

# **2.0 Scenarios**

A total of **four scenarios** have been presented in this section. As a group, you will have to choose **ONE scenario** and build a **Low Fidelity Design Prototype** of the information system.

*Note: in the description below I’ve used the terms system, information systems, apps, applications interchangeably – they refer to the same concept.*

## **2.1 Driver Retention in the Sharing Economy**



Intramover, an up and coming startup based in India operates a two-sided platform where a customer or a small and medium enterprise (SME) or a large enterprise (LE) can book last-mile deliveries (that is transportation of goods to the doorstep) – what you would call an “uber for moving goods”. These bookings can be one-off, on-demand bookings: for example, if a customer needed to move a sofa bed from house A to house B, they can use the app and request a driver to come pick up and deliver the goods. Or, they could be contracts (typically negotiated and defined between SMEs, LEs and Intramover) where for a given number of days, and given number of days in a week, last-mile deliveries from a warehouse to a customer’s doorstep are managed by a fleet coordinated by Intramover.

The demands are serviced by delivery associates (or drivers) signed up on the platform. The average driver on the platform is not highly educated (typically up to Grade 7) and barely speaks English. The drivers are not employees of the company but are “gig workers” (similar to Uber drivers). Since the company’s founding in 2014, Intramover has expanded its operations across 22 cities in India with nearly 1500 drivers on their platform. Currently, Intramover is preparing for its next growth phase and considering how they can retain drivers on their platform better as they continue to face stiff competition from other similar startups and incumbents such as DHL and FedEx.

Intramover has approached you to design a digitally-enabled solution that would encourage drivers to stay with your platform and not switch to their competitors. Intramover is also aware that a number of driver-centric platforms have come under intense scrutiny for unethical practices and therefore wants to adopt a more ethical approach to incentivising driver. The main goal of the project is to improve driver motivation and retention on the platform through an appropriate digitally-enabled solution.

Challenges:

1. Drivers are not very well educated, and only have a functional knowledge of using smart phones.
2. Different drivers do different kinds of work on the platform. That is, on-demand and contractual work.
3. A highly competitive business environment.

## **2.2 Building a B2B Marketplace for the Education Sector**



Finwego is an up and coming start-up incubated at Harvard Innovation Labs. Finwego provides tailored financial products and services to School teachers, School Management, School Staff and Vendors.

The broader aspiration of Finwego is to develop the School ecosystem and to this effect, Finwego’s management is exploring how business to business (B2B) ecommerce platforms can help enable interactions between ecosystem members. Finwego sees great potential in being a financial intermediary, i.e., providing working capital loans to both vendors and Schools for their purchasing needs and views a B2B marketplace as a medium through which it can further understand purchasing needs of Schools and vendor capacity and price points. Such insights would allow Finwego to create bespoke financial services and products to meet financial needs of School ecosystem members as and when their purchasing requirements arise.

Challenges:

1. A School’s typical purchase needs still aren’t known to the management
2. A School’s typical procurement process is still unknown to the management

For this scenario, you can consider understanding the School ecosystem in Australia or in any other International context to understand relevant business processes.

## **2.3 Creating Social Impact using Digital Technologies**

This scenario is quite open and generic in nature focussed on digital innovation and social impact. Advances in digital technologies are opening up new possibilities around how enterprises can create social value. Your system should either solve societal challenges with an innovative idea or support neighbourhood communities/not-for-profits or any other enterprise committed to solving social problems. That is, you need to develop and execute an innovative idea for a system (e.g., mobile app, offline application or website) that creates both business and social value or substantially helps organisations already working in the field. A social-business case needs to clearly demonstrate how your proposed system is actually adding value for the community and/or organisations, compared to existing solutions and systems, and how it is socially and economically sustained over time.

The system may centre on addressing societal challenges within an Australian or an International context. For instance, you could be looking at challenges such as public transport, waste management, homelessness, public health, rural education, environmental degradation, financial inclusion, gender equality, online bullying, sustainable livelihoods, immigrant integration, and so on. Most importantly, the social-business model should be digitally-enabled. That is, information and communication technology should play a central role in enabling and delivering business and social value. For instance, having a simple informative website does not make the business digitally-enabled. However, having an online marketplace, for example, would make the organisation digitally-enabled.

See for example challenges listed here for inspiration and ideas: <https://springboardchallenge.collectivecampus.io>

## **2.4 Student Lifecyle Management System**



A large public University is facing tough realities of meeting expectations to provide an engaging student experience. This meant that the University needed to modernise their marketing and service processes / systems to enhance the student experience. In addition, the University needed more information on the student journey to better understand their current marketing strategy by centralising their recruitment and marketing initiatives into one platform.

The University has approached Deloitte to not only implement a new Customer Relationship Management (CRM) system but to also replace the legacy Student, Finance and Budget Planning applications within the University. The CRM vision is to provide an exceptional service experience for the student that was intuitive, seamless and that included communication that was error-free. This also included the ability to provide the marketing team the capability to execute digital marketing campaigns. The result gave the University the capability to track the entire student journey from lead to prospect to applicant to student to alumni. The university would also like to adequately market to these individuals based on their current status and what their personal interests are.

The University aims to leverage digitally-enabled solutions to drive significant transformation across all aspects of the institution. The University envisions a reliable, high-quality system that would support the University’s marketing strategy and vision, including the ability to segment and market to prospects, students and alumni and providing exceptional service support for their students.

Some issues with the current system include the following:

* The University could not effectively market their various schools (e.g Business, Medicine, Engineering etc.). A major issue was the inability to track and report email campaigns and time taken for reporting was difficult with all aspects of marketing since the data was de-centralised.
* The current student service process could not effectively track student inquiries. These inquiries were being lost or deleted due to volume of requests. In addition, the University’s support staff lacked the tools and quick access to information in order to provide exceptional service. Students were often transferred to multiple University staff members in order to answer simple questions.

# **3.0 Requirements**

Your information system can be a mobile application, a web application, or a desktop application. The choice of framework/methodology to execute the project is left to you - it can be one single framework/methodology or a combination of frameworks/methodologies.

You are required to create a low fidelity design prototype and document your journey of creating the prototype through a written report and a presentation. There will be two deliverables:

1. A **7500-word** **written report** covering **parts a, b, c, d and e** of the requirements outlined below. The **report accounts for 25%** of your course marks:
   1. Part A submission will account for **5%** **(1500 words)** – this will cover Project plan and scenario deep dive.
   2. Part B submission of the report will account for **20%** **(6000 words)** – this will cover Project implementation approach, problem identification**,** solution identification and design prototype development**.**
2. A **10-minute group pitch** briefly covering **parts c & d** and focusing on **part e** of the requirements outlined below. The pitch **accounts for 5%** of your overall course marks.
3. **Project plan and scenario deep dive:** Create a system request from the perspective of the project sponsor for the chosen scenario. Conduct a deep dive into the chosen scenario and report your findings specifically identifying relevant business processes - this section should demonstrate your understanding of the business domain. Use project management tools to structure the project and create a project plan.
4. **Project implementation approach:** To implement the project, would you adopt a Waterfall Methodology? A Unified Process Methodology? An Agile Scrum framework? or a Design Thinking approach? Or a two/three-way mix of the approaches? Craft an approach using one, or a combination of approaches and justify your choice. Imagine this – you’re given a “toolkit” comprising of various tools and methods (such as personas, user story maps, empathy maps, Requirements Modelling, and so on) and frameworks/methodologies (such as Design Thinking, Agile, Unified Process) – from among these tools and approaches, pick and choose your tools and craft a framework for application of those tools. For example, Unified Process + Agile Scrum; Design Thinking + Agile Scrum and so on). This phase should cover:

* A brief discussion of the advantages and disadvantages of Unified Process, Agile Scrum, and Design Thinking.
* Identification of an approach along with the tools and techniques that shall be used in the project.

1. **Problem identification:** Using the approach that you created in (b), identify problems/opportunities/challenges relevant to the chosen scenario. This phase should include:
   * Application of the approach to elicit problems, supported by appropriate evidence of having applied this approach.
   * Identification of a well-scoped out problem/challenge/opportunity.
2. **Solution identification:** Using business analysis tools and methods, create suitable digitally-enabled solutions that tackles the identified problem. This phase should include:
   * Application of your approach to elicit solutions to the identified problem/challenge/opportunity, supported by appropriate evidence of applying this approach.
   * Identification of a solution that addresses the problem/challenge/opportunity identified previously.
3. **Design prototype development:** Using user interface design principles and techniques, create a design prototype of the solution. The design prototype should mimic the final user experience of the system, without necessarily implementing in code. This phase should include:
   * A design prototype that realises the functional and non-functional requirements as identified as part of the solution.

# **4.0 Learning Outcomes Addressed**

|  |  |
| --- | --- |
| Course Learning Outcomes | Program Learning Outcomes |
| On successful completion of the course, you should be able to: | This course helps you to develop the following Program Learning Outcomes: |
| Articulate and explain the roles and responsibilities of business analysts. | PLO 1: Business knowledge |
| Analyse business problems and elicit user requirements using Agile Scrum framework and Design Thinking methodology. | PLO 1: Business knowledge  PLO 2: Problem solving  PLO 5: Responsible business practice  PLO 6: Global and cultural competence  PLO 7: Leadership development |
| Evaluate and apply UML notations to model business processes within organisations. | PLO 1: Business knowledge  PLO 2: Problem solving |
| Create effective user interfaces for various interaction environments using design principles. | PLO 1: Business knowledge  PLO 2: Problem solving  PLO 5: Responsible business practice |
| Create and document low fidelity prototypes of business information systems. | PLO 1: Business knowledge  PLO 3: Business communication  PLO 5: Responsible business practice  PLO 6: Global and cultural competence |
| Apply Agile Scrum project management techniques to work collaboratively in groups. | PLO 3: Business communication  PLO 4: Teamwork  PLO 6: Global and cultural competence  PLO 7: Leadership development |

**Table 1 Learning Outcomes Addressed**

# **5.0 Submission Details**

## **5.1 Part A Submission:**

Using Moodle Turnitin, each group should submit a single **MS WORD** document (no other formats such as PDF allowed – **a 5-mark penalty applies**) that includes:

1. A fully completed and signed (by all group members) cover sheet (available on Moodle).
2. The main body of the document **should not exceed 1500 words OR 6 pages**; Cover Page, Appendices and References are not included in the word count. There is a **2-page limit** on the appendices. Table of Contents not required.
3. A valid group assignment cover-page should preface the report. Digital signatures of any form are not allowed.
4. A full set of references used to prepare the document (excluded from the word count).
5. Indicate the word count of the main body on the document.
6. **The document should conform to the following formatting requirements**: Font size 12, Times New Roman, single-spaced, with 1-inch margins all around (similar to the formatting followed in this document). A **5-mark penalty** applies to assignments that do not conform to these specifications.

Please note that **ONE** submission per group is required. Multiple submissions from the same group will be considered an invalid submission.

## **5.2 Part B Submission:**

Using Moodle Turnitin, each group should submit a single **MS WORD** document (no other formats such as PDF allowed – **a 5-mark penalty applies**) that includes:

1. A fully completed and signed (by all group members) cover sheet (available on Moodle).
2. The main body of the document **should not exceed 6000 words OR 18 pages**. Cover Page, Table of Contents, Appendices and References are not included in the word count. ALL OTHER CONTENT form the main body of the report. There is an **8-page limit** on the appendices.
3. A valid group assignment cover-page should preface the report. Digital signatures of any form are not allowed.
4. A table of contents covering main sections, figures and tables should preface the document (excluded from the word count).
5. A full set of references used to prepare the document (excluded from the word count).
6. Indicate the word count of the main body on the document.
7. **The document should conform to the following formatting requirements**: Font size 12, Times New Roman, single-spaced, with 1-inch margins all around (similar to the formatting followed in this document). A **5-mark penalty** applies to assignments that do not conform to these specifications.
8. Please note that **ONE** submission per group is required. Multiple submissions from the same group will be considered an invalid submission.

If you have any questions about interpreting the assignment and its requirements, please make use of the LiC’s consultation sessions (information of time and venue is available in the Course Outline). To avoid confusion and misunderstanding, we **will** **not** be answering assignment-related questions **over email**. Please use the discussion forum on Moodle for all assignment related queries. This will benefit the entire student cohort. Only assignment group administration specific questions will be answered via email.

## **5.3 Proper Academic Conduct**

The university regards plagiarism as a form of academic misconduct and has very strict rules regarding plagiarism. For UNSW policies, penalties, and information to help you avoid plagiarism see: http://student.unsw.edu.au/plagiarism as well as the guidelines in the online ELISE tutorials for all new UNSW students: http://subjectguides.library.unsw.edu.au/elise.

A SIGNED cover page provided on Moodle must accompany submission of Group Assignment. Digital signatures are **not** allowed. Signature on the cover page **must match** the one you used to sign in for your workshop attendance. Missing cover page or cover page without proper signature will be considered an invalid submission till such time a valid submission is made. Late submission penalties apply in this scenario.

## **5.4 Professional Group Work**

The membership in groups is at your discretion. It is your responsibility to join a group. The teaching staff will not "assign" people to groups. If you do not join a group, you are still expected to complete the assignment in full and no allowance in marking standards is made for the fact that the assignment becomes a solo effort in this case.

Groups must plan, schedule and conduct activities in due time. Groups must meet on regular basis (at least once per week) while the assignment is being undertaken and keep a record (diaries, meeting minutes) of such meetings. The groups must ensure that all members are involved in the completion of the assignment. The work is to be divided equally among the group members. All group related project management work should be done using Trello. Each group must add their respective tutors to the assignment board.

All group members are expected to work diligently. Group members should contribute in a useful and constructive way to the teamwork. Deadlines should be kept, and work should be delivered at a professional standard. If problems emerge in your group, then these problems should in the first instance been openly be discussed in the group (different members might have different views) and resolutions should be agreed on. If internal arrangements repeatedly fail to remedy the situation, then you should bring the issues to the attention of the LIC.

The LIC may call a meeting of the group in which each group member will be asked to describe in detail his or her input into the assignment and provide supporting documentation of this effort using individual diary, group diary, meeting notes, emails. Note: non-university platforms such as Facebook messages, texts, Whatsapp Messages will not be considered. If group members are found to be making inadequate effort or delivering poor quality, then they will be counselled to improve their effort. If sufficient improvement is not made despite group efforts and LIC interventions, then the mark of under-performing group member(s) may be moderated to reflect the relative lower input into the assignment. Note that the inability of resolving conflicts without involving the LIC does not reflect well on the group’s project management and teamwork skills.

All group members are expected to behave professionally. Group members must treat fellow group members with politeness and respect. If problems emerge in your group, then these problems should in the first instance been openly be discussed in the group (different members might have different views) and resolutions should be agreed on. If internal arrangements repeatedly fail to remedy the situation, then you should bring the issues to the attention of the LIC. The LIC may call a meeting of the group in which each group member is to present their viewpoint. The LIC may take action as appropriate, including expelling a group member for poor or inappropriate behaviour. If you are expelled from a group by the LIC, you are still expected to complete the assignment in full and no allowance in marking standards is made for the fact that the assignment becomes a solo effort in this case.

**Note: the inability of resolving conflicts without involving the LiC/Tutor does not reflect well on the group’s Teamwork Management component of the assessment.**

A **peer evaluation form** will be made available via UNSW Review. All group members are expected to **fill in their evaluations by the end of Week 10**. Peer evaluations will be considered as an input into assessing the **Teamwork Management** component of your assignment.

## **5.5 Late Submission**

You are advised to keep a copy of each submission. In line with school policy, the late submission of assignments **carries a penalty of 10 marks** for that assignment per day of lateness (including weekends and public holidays), unless an extension of time has been granted.

An extension of time to complete an assignment may be granted by the LiC in case of misadventure or illness. Applications for an extension of time should be made to the LiC **within 3 working days of** **the submission date via the Special Consideration route**. You will be required to substantiate your application withappropriate documentary evidence such as medical certificates, accident reports etc. Please note that work commitments and computer failures are not considered sufficient grounds for an extension.

# **6.0 Marking Criteria**

The following criteria will be applied to marking the assignment:

* + 1. **Project plan and scenario deep dive (20%)**

*When marking this section, the marker will consider the extent to which this section:*

* 1. demonstrates knowledge of using appropriate project management concepts such as work breakdown structures and Gantt charts
  2. makes effective use of Trello as a project management tool
  3. demonstrates understanding of the business domain underpinning the chosen scenario
  4. showcases evidence of having consulted a wide range of information sources to formulate an understanding of the business domain
     1. **Project implementation approach (10%)**

*When marking this section, the marker will consider the extent to which this section:*

* 1. demonstrates knowledge of Agile Scrum approach OR
  2. demonstrates knowledge of Design Thinking OR
  3. demonstrates knowledge of Unified Process Methodology OR
  4. demonstrates knowledge of a combination of either of the approaches referenced above
  5. identifies and justifies a relevant approach to tackle the project.
  6. identifies and justifies the use of tools and methods to be incorporated in the approach.
  7. states appropriate assumptions to fill in knowledge gaps

1. **Problem/Challenge/Opportunity identification: (20%)**

*When marking this section, the marker will consider the extent to which this section:*

* 1. demonstrates knowledge of the problem domain under consideration.
  2. demonstrates knowledge of the application of business analysis tools and techniques to problem identification.
  3. provides arguments in support of the problem/challenge/opportunity chosen.
  4. provides counter-arguments to strengthen proposed changes.
  5. demonstrates knowledge of conducting feasibility analysis.
  6. states appropriate assumptions to fill in knowledge gaps.

1. **Solution identification: (20%)**

*When marking this section, the marker will consider the extent to which this section:*

* 1. demonstrates knowledge of the application of business analysis tools to solution identification.
  2. identifies relevant technical and organizational risks associated with the proposed solution.
  3. describes and justifies the solution identification method adopted.
  4. demonstrates knowledge of functional and non-functional requirements.
  5. demonstrates an understanding of the requirements analysis strategies relevant to the problem domain.
  6. demonstrates an understanding of the requirements gathering techniques relevant to the problem domain.
  7. showcases evidence of having conducted requirements determination.
  8. states appropriate assumptions to fill in knowledge gaps.

*Note: For administrative reasons, please do not engage users or organisations NOT personally known to you for eliciting problems and solutions. Use only secondary data that is publicly available (for e.g., websites, social media content, business press articles and so on). Where data is not available, please make appropriate assumptions.*

1. **Design Prototype: (20%)**

*When marking this section, the marker will consider the extent to which design prototype:*

* 1. demonstrates knowledge of user experience design.
  2. demonstrates knowledge of user interface design.
  3. demonstrates knowledge of creating design prototypes using appropriate tools and methods.
  4. faithfully implements the solution identified in the previous section.
  5. states appropriate assumptions to fill in knowledge gaps

1. **Written Presentation (5%)**

*In judging the quality of the presentation of a report, the marker will consider to extent to which the report:*

* 1. follows a professional writing style and is logically structured.
  2. follows the formatting requirements outlined in this document.
  3. follows the Harvard-style formatting for references and bibliography.
  4. includes a signed and dated copy of the provided coversheet.
  5. conforms to the word and page limit constraints

1. **Teamwork Management (5%)**

*In judging the quality of the presentation of a report, the marker will consider to extent to which the report:*

* 1. demonstrates an understanding of teamwork and what is required to create and manage a well-jelled team
  2. documents how the group managed and resolved internal conflict
  3. demonstrates measure taken by the group to mitigate risks
  4. documents how team performance and expectations were managed through the course of the project

*Note: the inability of resolving conflicts without involving the LiC/Tutor does not reflect well on the group’s Teamwork Management component of the assessment.*

# **7.0 References**

If you are using external sources (for e.g., company websites, annual reports and so on), please remember to properly cite **the sources** used to prepare the assignment. For information on how to acknowledge your sources and reference correctly, see: <https://student.unsw.edu.au/harvard-referencing>.