

Assignment: Industry Sandbox Group Project (25%)

Term 3, 2022

This is a real industry project partnered with IAG (not just another assignment)!

You have opportunities to talk to and receive feedback from industry partners in this project. Outstanding milestone and final solutions will be shared with industry partners. The solutions that your team created to the industry challenges could make a real-world impact.

Summary

1. Objectives:

- a) Expanding your learning experience by working on real industry challenges with support from peers, academics, and industry practitioners
- b) Providing opportunities for you to develop skills (e.g. teamwork, communication, problem-solving skills) required for success in your future career by solving complex challenges in a collaborative setting
- c) Empowering you to solve real-life problems and get recognised by industry partners
- d) Supporting you to generate evidence on your creative solutions to real-world problems and employability skills for your professional profile to impress future employers

2. Tasks:

- a) In this project, you and your classmates will form a team to create feasible solutions to a real industry challenge provided by industry partners.

3. Assignment Format: Group Assignment

- a) Team size: 4-5 students
- b) Team formation method: self-select (i.e. you choose your own team)
- c) Team members: you can form a team with students from or outside of your tutorial. However, undergraduate (postgraduate) students are expected to form a team with other undergraduate (postgraduate) students only. Note as long as you all enrolled in the same course code (ACTL4305 or ACTL5305), you are allowed to form as one group.

4. Marking: 25 Marks (25% of the course total mark)

- a) 10 Marks: *Progress Submissions (Formative assessment)*
 - Marks will be awarded based on participation and completion of milestone tasks.
 - Milestone feedback will be provided to support the development of your final solution.
- b) 15 Marks: *Final Solution Submission (Summative assessment)*

5. Deadlines:

- a) Team Formation: Monday, 5:00 pm 25 September (Sydney Time)
- b) *Progress Submissions*: see Progress Submission section
- c) *Final Solution Submission*: Sunday, 11.59 pm 13 November (Sydney Time)

Industry Challenge Group Project: Assignment Details

"Firms have now resolved that university results are not necessarily a reliable means of identifying good new talent ... firms need (graduates who can) ... understand the needs of clients and applying creativity to identify holistic solutions."

- The Australian Financial Review, 22 July 2020

1. Overview

The project aims to enhance your career-focused learning experience by bringing in real-world scenarios and real industry challenges into the classroom, creating a safe space for you to explore, collaborate and make changes.

The assignment is intended to promote problem-based learning (PBL) in which you learn about a subject by working in teams to solve real-life problems. It is also intended to develop your skills in research and problem-solving, your ability to present your ideas concisely and coherently, and to work in groups.

Solving real-life problems is an inherently complex and messy process, but such a process also offers plenty of learning opportunities. You will learn about collaboration, working through problems persistently, seeking creative solutions, and being comfortable with changing paths where necessary.

In this sandboxed assignment (see [Sandbox Education Program](#)), you will have a safe space to experiment, to fail and to try again because we value the process as much as the outcome. The assignment is designed to reward you for your ongoing engagement, persistence and resilience in solving real industry challenges, as well as the quality of your final solution.

Your experience in this project will be helpful in your transition into the professional environment – you will be prepared to leverage your existing knowledge and skills, while at the same time identify and act on knowledge and skill gaps, to respond to new challenges and seize emerging opportunities coming your way.

2. Team Formation

In this project, you and your classmates will form a team to create feasible solutions to a real industry challenge.

You are expected to form your own teams (team size: 4-5) via the "Assignment Group Self-selection" link on Moodle before the Team Formation Deadline - **Sunday, 25 September, 5:00 pm (AEST)**.

You can form a team with students from or outside of your tutorial. However, undergraduate (postgraduate) students are expected to form a team with other undergraduate (postgraduate) students only.

You may use the **[Student Common Room]** Channels on MS Teams to assist with team formation (e.g. to recruit members for your team or to request to join a team). You are strongly recommended to have a group meeting with all potential team members (using *MS Teams* group chat/video call or other platforms) to make sure that all team members are happy with the team formation before finalising your team formation in the Team Formation link.

You are strongly recommended to form your own teams. Students who fail to do so by the Team Formation Deadline will be randomly allocated to teams.

3. Project Deliverables

I. Final Solution Submission (15 Marks)

- Submission Deadline: **Sunday, 11:59pm 13 November 2022 (Sydney Time)**
- Only ONE Final Solution Submission is required per team.
- Project information and requirements: see **Project Briefs** on Moodle.
- Your Final Solution Submission should include:

- 1) Submission Cover Page (available on Moodle) signed by ALL team members.
 - 2) A ten-minute project solution video
 - 3) Project summary (1 page + references)
 - 4) *Reproducible codes with brief instructions on how to use them (such as RMarkdown files or R scripts with a readme file) (this item will NOT be assessed directly)*
- + *Optional supplementary materials (e.g. written documents, presentations, web-based materials, videos, prototypes, functional programs, or other forms of media that you want to include in your submission to demonstrate your solutions or achievements) that you want to share with the industry partners.*

- Marking criteria: See Assessment Criteria on the last page.

II. Progress Submissions (10 Marks)

Objectives:

Progress Submissions are designed to support and facilitate your team's progress towards the delivery of your Final Solution by decomposing the final submission deliverables into two milestone tasks for your team to complete throughout the term.

Marking:

Marks for the Progress Submissions will be awarded based on participation and completion (i.e. similar to the award of marks for the StoryWall Discussion Questions) of the milestone tasks.

This design aims to provide a safe environment for your team to explore different solution options and receive ongoing feedback from your peers, academics, and industry partners before submitting your Final Solutions.

Only ONE Progress Submission is required per team per milestone task.

Marking criteria:

As a formative assessment task, the Progress Submissions are designed to encourage your team to work on your project on a regular basis and provide ongoing feedback. You don't need to get the best solution right away, what counts is that your team makes a sincere attempt and learn as much as possible from the feedback.

To receive full marks for this component (10 marks), your team need to complete the two milestone tasks.

You are strongly encouraged to attempt the milestone tasks with your best effort to ensure that you make solid progress towards the final solution, to receive useful feedback before your final submission, and to utilise all the opportunities for your team and solutions to get recognised by the industry partners.

Milestone Tasks:

Milestone	Milestone Tasks	Marks	Milestone Due Date	Vote Due Date
1.	Team Introduction + Pitch Video for Task 1 (max 4 mins) <ul style="list-style-type: none"> - Please introduce your team members (max 2 mins) - Your pitch video should explain your exploratory data analysis, such as data quality checking, data visualization, manipulation, and getting data ready for next steps. - (Optional) You could also include your initial strategy (plan) to tackle Task 2 and Task 3. 	5	5:00 pm 5 Oct (Wednesday) Week 4	9:00 pm 6 Oct (Thursday) Week 4
2.	Pitch Video for Task 2 and Task 3 (max 6 mins) <ul style="list-style-type: none"> - Your pitch video should explain how to model the pure premium for each of two coverages (Property Damage and Business Interruption) and how to take the association of the two coverages into consideration. - (Optional) You are also encouraged to include your initial model outcome interpretation, model comparison, validation, testing, and any results/conclusion that you can make. 	5	5:00 pm 26 Oct (Wednesday) Week 7	9:00 pm 27 Oct (Thursday) Week 7

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To complete a milestone task, your team need to:

- 1) **Share:** Share your team's milestone submission in the designated [MS Teams](#) Milestone Submission Channel (to be opened in Teams) by 5:00 pm of the due date (for Milestone Tasks 1-2), and
- 2) **Vote:** Select two milestone submissions in the designated channel that your team like the most from other student teams by 9 pm of the next day of the submission due date (for Milestone Tasks 1-2).

Please note, detailed guidelines regarding the milestone submissions and designated submission+voting channels for each group will be announced on [MS Teams](#).

4. Project Support

I. Resources:

Resources and supporting materials (e.g. Examples & 'How to' guide) are available on Moodle to help your team produce project deliverables (e.g. videos, problem statement, Poster/infographic) and complete the milestone tasks.

II. Consultation and Advice:

If your team needs help or advice on your project, please feel free to book a time to talk to your Project Advisor – Fei Huang (Lecturer).

Consultation timeslots and booking tools will be announced on Moodle.

III. Opportunities to Engage with Industry Partners:

- Project Introduction Webinar + Sandbox Sharing Session (Week 3): Industry partners will join us during our Workshop. The Webinar is designed for the industry partners to share their experiences and perspectives of the challenges in the assignment and answer your questions.
- Mid-project check-in meeting (Week 7): one mid-project check-in meeting will be scheduled after week 6. Meeting details will be announced on Moodle.
- Project Debriefing Session (week 10): Industry partners will provide a guest lecture debriefing this project.
- Milestone Submissions: top milestone submissions voted by students will be sent to industry partners for review and feedback.
- We also have a designated [MS Teams Channel for Sandbox Q&A](#). You are welcome to use it whenever you have a question to ask. Please *@IAG Industry Partners* when asking your questions.
- Invited Onsite Presentation at IAG Sydney Office: top groups will be invited to present at the IAG Sydney Office.

IV. Dealing with Group Issues and Conflict Resolution:

Conflict is almost inevitable when you work with others. People have different viewpoints and, under the right set of circumstances, those differences may escalate to conflict. It is common that most groups experience issues at some time. What matters is how you handle that issue or conflict. This will determine whether it works to the team's advantage or contributes to its demise.

Conflict is not necessarily a bad thing, though. Healthy and constructive conflict is a component of high-functioning teams. Conflict arises from differences between people; the same differences that often make diverse teams more effective than those made up of people with similar experience. When people with varying viewpoints, experiences, skills, and opinions are tasked with a project or challenge, the combined effort can far surpass what any group of similar individuals could achieve. Team members must be open to these differences and not let them rise into full-blown disputes.

Understanding and appreciating the various viewpoints involved in a conflict are key factors in its resolution. These are key skills for all team members to develop. The important thing is to maintain a healthy balance of constructive difference of opinion and avoid negative conflict that is destructive and disruptive.

One of the objectives of this project is to help you build communication and conflict resolution skills. The following resources are included to support you:

- [Guide to Group Work](#)

- [Identifying Group Issues](#)
- [Dealing with Group Work Issues](#)

Conflict Resolution - Optional Peer Review

If you experienced a significant unequal contribution in a team, there would be an option for your team to initiate a Peer Review Process for your group project. However, this should only be used as a last resort. You are strongly encouraged to negotiate a resolution yourselves within the team before initiating this formal review.

This is a completely optional process for conflict resolution - teams where all members made equal contributions to the project do NOT need to undertake this exercise.

The details of the Optional Peer Review Process is available on Moodle.

School of Risk and Actuarial Studies

ACTL4305/ACTL5305

Actuarial Data Analytic Applications

Assessment Criteria - Final Solution Submission

The Final Submission Package (including videos and project summary) will be assessed holistically against the following rubrics.

Criteria	Below Expectations <50% (FL)	Meets Expectations 50% - 74% (PS - CR)	Exceeds Expectations ≥ 75% (DN - HD)
Application of relevant business knowledge and skills to identify a problem and provide a solution (4 marks)	<ul style="list-style-type: none"> Does not apply relevant business knowledge sufficiently, accurately to identify or address problems. Does not synthesise relevant knowledge or skills; or show their application to problem solving. 	<ul style="list-style-type: none"> Applies relevant business knowledge largely accurately (only minor errors) and sufficiently to identify and solve problems. Provides some (incomplete) synthesis of relevant knowledge and skills, with application to problem solving. 	<ul style="list-style-type: none"> Insightfully and accurately applies relevant business knowledge innovatively to identify and solve problems. Appropriately integrates and synthesises relevant knowledge and skills, with application to problem solving.
Development of a feasible solution to a well-articulated problem (7 marks)	<ul style="list-style-type: none"> Does not develop a valid solution justified by analysis, theory and/or research. Does not reference sources appropriately/accurately in reference list. 	<ul style="list-style-type: none"> Develops a plausible and realistic solution, although it may contain some weaknesses or over-simplification, and/or limited justification. Does not sufficiently consider or evaluate differing perspectives or acknowledge limitations and constraints of own solution. References sources accurately in reference list. Referencing shows some research. 	<ul style="list-style-type: none"> Develops a creative and feasible solution suitable for real-life application. The solution proposed is well-supported by analysis, evidence, theory, or research. Considers and evaluates differing perspectives and alternative strategies (if appropriate) and acknowledges limitations and constraints of own solution. References sources accurately in reference list. Referencing shows extensive research.
Communication (4 marks)	<ul style="list-style-type: none"> The solution submission is poorly structured and unclear. Does not engage the audience or have a sufficiently professional delivery (e.g. videos and project summary). Does not use tools/technologies effectively (e.g. videos, visual aids). 	<ul style="list-style-type: none"> The solution submission is clear and well structured. Achieves some audience engagement through a sufficiently professional delivery (e.g. videos and project summary). Generally, uses tools/technologies effectively (e.g. videos, visual aids) 	<ul style="list-style-type: none"> The solution submission is professional, innovative and engaging, suitable to be shared with the audience in the industry. Engages the audience effectively through a professional delivery (e.g. videos and project summary). Uses tools/technologies very effectively (e.g. videos, visual aids)