QBUS3820
Machine Learning and Data Mining in Business
Semester 1, 2020

Teamwork Instructions and Rules

1. Why This is Important

The ability to work effectively with others, whether they are colleagues in your immediate team, people in other areas of your company, the C-suite, clients, stakeholders, other businesses, government etc, is a critical skill for your career. That includes leadership skills and the ability to influence others to collaborate. It goes without saying that a high level of human cooperation is what enables our current standards of living.

Accordingly, employers universally rank teamwork as one of the top skills they expect from business graduates. Because of that, your coursework is structured in such a way that we are required by the Program Learning Outcomes and Graduate Qualities to develop and assess teamwork skills and related attributes such as cultural competence and influence, among others. This is all in addition to the technical aspects of the material.

2. What Are These Teamwork Skills?

As defined by the university:[1]

- Working effectively with people of different ages, gender, race, religion or political persuasion.
- Identifying the strengths of team members.
- Recognising own strengths and limitations.
- Clarifying team roles and performing agreed tasks.
- Demonstrating leadership as appropriate.
- Coaching, mentoring and motivating others.
- Giving and receiving constructive feedback.
- Resolving differences of opinion.
- Collaborating and contributing to team results.

[1] https://sydney.edu.au/careers/students/career-advice-and-development/employability-skills.html

3. Key Rules

- All team members are expected to make a meaningful contribution to the assignment.
- All team members are expected to make a meaningful contribution to the effective functioning of the group.
- All group members are expected to be able to explain everything that appears on the final version of the assignment. Remember that in a real job in this area, you would be expected to be competent at everything that is required by this group project.
- Marginalising any group member (e.g. excluding that member from communication) is completely unacceptable.

4. Self and Peer Assessment (Required)

You are required to submit a self and peer assessment online upon completion of the project (see further instructions on Canvas). The main goal of this assessment is to provide feedback on the performance of the team and individual feedback on your collaboration skills.

Feedback suggests that the problem of free riders (non-collaborative colleagues in group assignments) is one of the main frustrations that many students have about their university experience. A separate handout provides advice on dealing with free riders and other types of uncooperative team members, should the need arise. I strongly encourage you to try your best to resolve any conflict.

If the self and peer assessment process identifies a free rider, then a mark adjustment factor automatically calculated by SPARKPLUS will be applied for all group members. The free rider would have his or her mark decreased (by as much as 80% in extreme cases), and the rest of the group would have their marks increased.

5. Roles

In addition to the technical roles required to complete the assignment, best practice suggests that it is a good idea to establish certain roles towards the working of the team.

In student groups, it's often useful to designate a coordinator, recorder and checker. The coordinator checks with other team members before meetings to remind them of when and where they will meet and what they are supposed to do. In a meeting, the coordinator keeps everyone on task and makes sure everyone is involved. The recorder prepares the final submission to be turned in. The checker makes sure everyone understands both the solution and the strategy used to get it, and double-checks everything before it is handed in.

6. Working Efficiently

The efficient way to work on a project like this is to develop your "minimum viable product" as soon as possible.[2] Build a simple model, make a submission on Kaggle, and write a draft version of your report as soon as possible. Don't worry about the initial quality. Then the rest your work on the assignment is just to try to improve on what you currently have. Think iteratively, not linearly.

Many groups do the opposite.

Don't wait for your team member to completely finish something (like feature engineering, which can take weeks) before you start the next part. There's always something that you can do move things forward right now, or at least to help you do things more efficiently later.

[2] This is a popular technique for product development in the startup sector. From Wikipedia: A "minimum viable product (MVP) is a product with just enough features to satisfy early customers and provide feedback for future product development".