School of Mathematics and Statistics
Applied Data Science (MAST30034)
Team Review and Self Reflection

Due date: 28th of October at 2359 AEDT

Student Name: Lang (Ron) Chen
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Group Number: 08

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Team Member vs Effort

Student Names	Amount of Work Contributed (100%)
Un Leng Kam	25%
Lang (Ron) Chen	24%
Henry Huang	17%
Qirui Li	17%
Yujie Li	17%

Team Review and Self Reflection

In this Project, I gained valuable skills in Data Science teamwork, leadership and learnt better Data Science work habits. Though I have previously worked in the industry via internships, most work I previously undertook were individual, and any cooperation with others were at a high level (i.e. working with a data engineer to put models I built onto dashboards). This Project was the first time I worked at depth with teammates on a large project, forcing me to keep my code clean, keep the file output names/directory structure to an agreed format and learn to communicate each part of my work clearly to partners working on the same component as myself. Whereas during internships I often was led by others when undertaking projects, in this Project I found the opportunity to step up and take responsibility for the whole team, gaining valuable experience of the challenges in being a Data Science team leader - a career trajectory I aim to head down. As the strongest group member in terms of Data Science/Finance theory, and also a good time manager, I was in charge of designing the high level specification for how we should solve the final BNPL ranking problem and engineering the components that contributed to it. I also set out deadlines for each component of the work (and often managed deadlines for each group member). I found dividing our team into two sub-groups of 3 and 2

successful, as we could work on non-consecutive components of the project in parallel, which was more efficient than 5 people working on one thing, or everyone working on different things (because there were not enough different tasks for everyone to do). Moreover, in discovering that often in Data Science singular solutions to smaller tasks (such as this Project's Fraud Predicting's codework) could not be divided between two people within a subgroup because there just isn't enough non-consecutive work to be completed, I developed the strategy of always creating two solutions to a problem - one slightly inferior compared to the other - but this would allow both person to have work to do whilst ensuring that even if the main plan turned out unsuccessful it would not severely setback our timeline (i.e. this was how Qirui and I worked together when tackling fraud and growth rate). I also learnt lots of good Data Science habits from my teammates, such as doing extensive EDA before feature engineering, taking the time to learn to use ready-made solutions instead of hard-coding everything on my own, and researching how others tackle the problem before starting the project instead of diving straight into it and developing my own strategies for every facet of the project.

During our project, we held efficient bi-weekly meetings chaired by myself, one in person and one via zoom. When any in-meeting communication was not sufficient to clear ambiguities, we communicated on WeChat, a platform which we also used to arrange additional meetings. To ensure each of us would work together efficiently, I made a short speech before the start of the first meeting reiterating widely acceptable norms to ensure everyone was on the same page (i.e. being honest with each other about progress and not being afraid to ask questions when unsure). We then together came up with protocols which became the backbone of our teamwork, including code style and method of code/file transportation, and elected each member into administrative roles such as Meeting Minute Keeper, Scrum Master, Github manager etc. Another method we adopted to ensure teamwork was the three-day deadline system, using short deadlines to ensure everything was bite-sized and did not build up to create a huge bottleneck for other members of the group. Overall, having experienced no final-week rush, I believe our groupwork was productive, harmonious and successful.

In our groupwork, the only disagreements were academic. Consensus were reached via open and frank discussions - sometimes lengthy, but always ending with all convinced and agreeing to the solution. Topics that were extensively and rigorously discussed included the initial presentation of the final model plan, persona variables and the layout of the final powerpoint, all which the solution was better because of our dialogue.

Overall, I am grateful for and impressed by the support and immense contribution of each of my dedicated teammates, whom from each I have learnt so much from. Although the proportion of work contributed were never going to be exactly evenly split, without any one of my teammates, the completion of this project would have been impossible, let alone to the high standards we ultimately achieved.