# MXB344: Performance Review

This document is your opportunity to highlight aspects of your personal project contributions and rate the contributions of your team members. Responses to Sections 1-3 of this performance review will only be seen by the MXB344 teaching team and/or for teaching purposes (e.g. review of grade). Promoting your own achievements can be difficult, but this is not a place to be humble. Be honest and be proud of what you have achieved.

Write as much as you feel you need to in your responses.

## Section 1: Your Individual Performance

### Question 1

Describe the tasks completed on this project (presentation and the report) for which you were the main contributor. How did the completion of these tasks support the delivery of the coral cover model and addressing the main question?

Refer to the project description if necessary. Type your response in the box below.

|  |
| --- |
| I was the main contributor to the write-up and coding of the exploratory analysis as well as any slides and talks, during the presentation, to do with the exploratory analysis. The completion of these tasks supported the delivery of the coral cover model and addressing the main question through finding which variables should be included from the data set and which ones should not. Additionally, the correlation plots uncovered the interactions between loan amount and interest rate and loan amount and annual income which allowed us to model the data accordingly, by omitting annual income and including an interaction term between loan amount and interest rate. Furthermore, the plots for the logit of proportion for the continuous variables confirmed that a logistic regression model (of the GLM and GLMM) should be use. Finally, the plot for the proportion of repay failure and the random effects (time of loan issue and address state) determined that we should use a GLMM model since the random effects does have an effect on the proportion of repay failure. |

### Question 2

Which of these tasks, if any, demonstrate your understanding of generalised linear and/or generalised linear mixed effects models?

Type your response in the box below.

|  |
| --- |
| The plotting to test if the logit of the proportion of repay failure had a linear relationship with the continuous variables demonstrated that I knew the assumptions of logistic regression. Addiotionally, plotting for the proportion of repay failure against the random effects demonstrated that I understand that a GLMM should be used if the random influence the proportion of repay failure, I.e., the proportion of repay failure is different for each issue date and address state. |

### Question 3

Are there any tasks you completed that you believe show exemplary resourcefulness, creativity, technical skill, and or depth of knowledge? Identify and explain.

Type your response in the box below.

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| --- |
| The plots mentioned in Question 1 and 2 of this performance review showed that I have good knowledge of GLMMs, GLMs and logistic regression models. Additionally, I had to do novel coding due to the data being set up differently or some bugs that occurred in the coding due to the nature of the data or the lack of data points for certain sections, I.e. having to remove certain address states and issue date from the logit(proportion) vs continuous variables graphs sorted by time and address state or having to change the data to a numerical and back to a data frame for some parts or changing a column to an integer to get some functions to work as intended. These bug fixes show that I am resourceful, and that I have a good amount of technical skill. |

## Section 2: Group Performance

In this section, you are asked to rate the performance of your team members along the following criteria:

**a. Working in a team** = Attitude, co-operation, being supportive, reliability and contribution.

**b. Communication** = Verbal and written skills, maintaining contact with team mates, listening skills and ability to provide feedback.

**c. Workload management** = Meeting deadlines, participating and contributing equally, and communicating about workload

**d. Quality of work** = Problem solving ability and contributing work that is organised, complete, scientifically and academically sound.

**e. R code development** = Developing and implementing code for R.

**f. Overall** = How would you rate this person’s contribution to your team over the course of completing the project?

Please given an honest (i.e. not unreasonably harsh nor unreasonably generous) account of everyone's contributions. See template for each team member below (next page).

### Question 4

Team Member #1 Name: Nicholas Gecks-Preston

Please rate team member #1 on each of the following, using an ‘x’ in the appropriate box:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Excellent | Very good | Satisfactory | Unsatisfactory | Negative or no input |
| Working in a Team | x |  |  |  |  |
| Communication | x |  |  |  |  |
| Workload Management |  | x |  |  |  |
| Quality of Work | x |  |  |  |  |
| R Development |  | x |  |  |  |
| Overall | x |  |  |  |  |

Make any additional comments in the box below.

|  |
| --- |
| Additional comments: Most things were excellently done by him, especially when Nich neatened the R report by adding all my code into scripts as well as his polishing the report. Furthermore, his writing on the soap is engaging and effectively summarises what we did. However, there were some issues with the github and R that did cost a bit of time, but this was then fixed. And it did take him a bit more time than I like for him to get started on the work but when he did, he got it on time, just too little time for editing. |

Team Member #2 Name: Ben Msambya

Please rate team member #2 on each of the following, using an ‘x’ in the appropriate box:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Excellent | Very good | Satisfactory | Unsatisfactory | Negative or no input |
| Working in a Team |  | x |  |  |  |
| Communication |  | x |  |  |  |
| Workload Management | x |  |  |  |  |
| Quality of Work | x |  |  |  |  |
| R Development | x |  |  |  |  |
| Overall | x |  |  |  |  |

Make any additional comments in the box below.

|  |
| --- |
| Additional comments: Most things were excellently done by him, his coding and work on the extended model (GLMM) are great and he shows excellent understanding of the coefficients in the model as well as the random effects. However, he didn’t communicate too much with the team with the changes he made, thought when something was very important, he did let us know. |

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Team Member #3 Name:

Please rate team member #3 on each of the following, using an ‘x’ in the appropriate box:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Excellent | Very good | Satisfactory | Unsatisfactory | Negative or no input |
| Working in a Team |  |  |  |  |  |
| Communication |  |  |  |  |  |
| Workload Management |  |  |  |  |  |
| Quality of Work |  |  |  |  |  |
| R Development |  |  |  |  |  |
| Overall |  |  |  |  |  |

Make any additional comments in the box below.

|  |
| --- |
| Additional comments: |

## Section 3: Overall Performance

### Question 5

How do you anticipate you’re your colleagues at the Department of Biodiversity, Conservation and Attractions would react to your completed project? Would they be:

* Upset - The project has failed to deliver a model that can be applied in practice or has failed to address at least one of their key concerns. Alternatively, the project may have failed to do any of these is a way they can readily understand.
* Satisfied - The project delivered a model and addressed their key concerns in a way that made sense to them.
* Impressed - The project delivered a model and addressed their key concerns in a way that made sense to them. The quality of work was of the highest calibre.
* Delighted - The project delivered all they asked for and would have exceeded their expectations in doing so. The project included a degree of research or innovation.

Give your answer and make justification in the box below.

|  |
| --- |
| The project answered all the key concerns effectively. We found a better model, found that the random effects did influence credit risk, we found that verification status was not important for the model, and we used all the variables that were important to the model through analysing the data we were given. The code was done with great quality, and everything was greatly executed. All the code ran smoothly and everything in the code was explained. We had a clear and concise exploratory analysis, model fitting for the logistic GLM and model fitting for the logistic GLMM. We didn’t include any research to guide us on which variables were more important than the other and we didn’t do anything new. |

Signed by all group members:

Member #1:



Member #2:

Member #3: