# **COURSE REPORT**

Course CS4248 - NATURAL LANGUAGE PROCESSING		
Academic Year/Sem	2023/2024 - Sem 2	
Department	COMPUTER SCIENCE	
Faculty	SCHOOL OF COMPUTING	

Note: Class Size = Invited; Response Size = Responded; Response Rate = Response Ratio

Raters	Student
Responded	165
Invited	309
Response Ratio	53%

Instructors of large courses (500+ students) can now benefit from an AI-powered tool developed by ODI in collaboration with PVO. This tool analyzes qualitative student feedback to provide quantitative summaries, offering valuable insights alongside the traditional reports. Access the summary <u>here</u>. For inquiries or suggestions on improvement, please contact Ms ONG Mui Hong (Director TEL) at muihong@nus.edu.sg

## 1. Overall opinion of the course

Distribution of Responses

What is your overall opinion of the course?		
Very good (51) Good (74) Average (23) Poor (10) Very poor (7) [ Total (165) ]	31%	
0	50%	100%
Statistics		Value
Response Count		165
Mean		3.9
Median		4.0
Mode		4
Standard Deviation		1.0
Positive Feedback		76%

### **Rating Scores**

Question	De (COI SC	ept Avg MPUTER IENCE)	Fa (SCH CON	ac Avg HOOL OF IPUTING)	Dep Activi (COI SC LE (Lev	ot Avg by ty & Level MPUTER IENCE- CTURE el 4000))	Fac Activi (SCH COM LE	c Avg by ty & Level HOOL OF IPUTING- CTURE el 4000))	Cours (2320	e Average -CS4248- L)
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
What is your overall opinion of the course?	3.9	0.9	3.9	0.9	4.0	0.9	3.9	0.9	3.9	1.0



## 2. Expected Grade

Distribution of Responses



### **Rating Scores**

Question	De (COI SC	ept Avg MPUTER IENCE)	Fa (SC <del>I</del> CON	ac Avg HOOL OF IPUTING)	Dep Activi (COI SC LE (Lev	ot Avg by ity & Level MPUTER IENCE- CTURE el 4000))	Fac Activi (SCł COW LE (Lev	c Avg by ty & Level HOOL OF IPUTING- CTURE el 4000))	Cours (2320	e Average I-CS4248- L)
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The grade that I am most likely to get in the course is:	4.2	0.8	4.2	0.7	4.2	0.7	4.2	0.6	4.1	0.6



## 3. Difficulty Level of the course

Distribution of Responses



### Rating Scores

Question	De (COI SC	ept Avg MPUTER IENCE)	Fa (SCł CON	ac Avg HOOL OF IPUTING)	Dep Activi (COI SC LE (Lev	ot Avg by ty & Level MPUTER IENCE- CTURE el 4000))	Fac Activi (SCH COM LEt (Lev	: Avg by ty & Level IOOL OF PUTING- CTURE el 4000))	Cours (2320	e Average I-CS4248- L)
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
I rate this course as:	4.0	0.8	3.8	0.8	3.7	0.8	3.7	0.8	4.3	0.6



# **COURSE LEARNING OUTCOMES**

1. Understand the core concepts in natural language processing (NLP), including language models, word embeddings, neural networks, sentence parsing, and semantic representations.



## 2. Identify sources of ambiguity in NLP.



### 3. Select appropriate techniques to solve an NLP task.



## 4. Evaluate and compare the performance of solutions to an NLP task.

Evaluate and compare the performance of solutions	to an NLP task.	
All the time (32) Most of the time (97) Sometimes (32) Never (4) 2%	6 6 6	
0	50%	100%
Statistics		Value
Response Count		165
Mean		3.0
Standard Deviation		0.7

# WHAT I LIKE / DISLIKE ABOUT THE COURSE

## What I liked about the course:

Comments
Content, slides and delivery of lecture content.
Taught NLP classes followed CS244n, which is a in a good and systematic manner. I feel quite organized while taking this course.
Individual assignments to test my understanding on the topic
Very interesting topics that are for the most part well explained. Assignments have a good breadth of coverage and styles.
Interesting Content
Covers state of the art, includes some elements of math but not too math focused but more on concepts. Good mix of mathematics, cs and linguistics as well.
NLP is an up and coming field and the professor has gave me a good foundation on how to approach NLP problems with relevant techniques used in the industry today.
NLP is very useful
I learnt a lot from this course. We are given plenty of opportunities to practice what we learnt in the course project and assignments. It was a rigorous, fun and engaging course.
It teaches us about the fundamentals of a very interesting field in data science.
Projects
Very applicable to current CS landscape since NLP is one of the most popular AI topic since ChatGPT, and the lecture provide a clear motivation and complete explanation of the developments in NLP
Good introduction to NLP
Interesting content
Variety of topics covered
Covered many different aspects of the field, with many different avenues for learning such as assignments, projects and tutorials
It is well-designed and well-structured, lecture slides are also great with many illustrations
Like the content of the lecture as well as passion of the lecturer in delivering the content
Lectures are engaging.
I feel the content was taught really well and was in line with what I was hoping to learn from the course
Lectures and tutorials are fun, project is challenging.
The concepts taught
Strong real-world applications
Very interesting and useful content
Intuitive content and really got me interested in NLP

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Exposure to state of the art technologies in NLP The content is interesting and relevant to the current context. Great Profs - Chris and Min! They made me curious about NLP and encouraging me to explore more Good depth of NLP covered - basics until latest developments. Lecture slides are clear and self-contained (need not refer external material a lot) In-lecture activities. Very upto date! Lectures and Prof the lecturer, the TA Lecture were great (I attended L1). Very interesting and relevant topics discussed Nothing The course is well structured, and is interesting The content is very interesting and insightful Content covered is interesting and useful lecturer explains the concepts well. Good coverage of NLP breadth Very useful and entails applicable concepts Content is interesting. Assignment 2 was fun. I'm not sure if the difficulty of Assignment 3 was adjusted due to feedback, but I appreciated the change in difficulty level compared to Assignment 1. The contents are really useful. Learn a lot of interesting knowledge and apply cutting-edge technology Interesting concepts Lots of cool and important things, made me realise I know next to nothing Notebooks were very helpful Lots of relevance to modern NLP technologies Got to learn about NLP. Prof Chris is good at explaining interesting topics, good intro course of nlp Good intro to NLP. The lectures by Chris are great, but the assignments' marking is not very reasonable, some marking is very unclear on where were the points deducted (one of the comments I received was missing something and deducted half of the points for that part, even though I have done very detailed and comprehensive analysis and explanation of that part including almost all concepts taught in lectures related to this part. It was very disappointing and the marking make many of us feeling like our effort put into this course as well as our interest of NLP are wasted) and project team matching was guite a disaster, some of the team members were not contributing enough and they gave negative feedback to the members who were doing the work for them :( Very stressful time due to this project and some assignments' marking interesting topics, new concepts Dives into a lot of concepts including current trends in machine learning. Project aspect was fun too, really enjoyed having some hands on experience. The lectures were well taught CS4248, Natural Language Processing, offers a comprehensive exploration of the field, significantly broadening my understanding of language processing techniques and advanced machine learning models. Through in-depth discussions on topics like tokenization, word embeddings, and the latest advancements in ML models such as transformers, the course has greatly expanded my horizon and piqued my interest in the field of natural language processing. This newfound knowledge has not only enriched my academic experience but has also opened up a myriad of possibilities for future career paths in the field of AI and machine learning.

Additionally, the inclusion of a project component in the course provides valuable hands–on experience, allowing us to apply the concepts learned in class to real–world scenarios. This practical aspect of the course enhances our learning by providing opportunities for active engagement and experimentation, ultimately reinforcing our understanding of the material.

easy to grasp, biweekly tutorial with no midterm.. one of best module.. however it comes with a price.. difficult assignements

Gives a very broad perspective on NLP without focusing much on just one thing, just as it is meant to be

It has exposed me to many foundational concepts with regards to Natural Language Processing as well as recent developments relating to LLMs (like ChatGPT). There were many mentions of how each concept is also applied in the field, giving us not just theoretical knowledge but also some practical insights as well.

The assignments were very relevant. The workload was just right. The project was good once we figured out what we wanted to do.

The NLP is my interested area so I like the course.

Good coordination of lectures, tutorials, assignments, and online discussions. These components work holistically to promote my learning of the subject.

Project aspect is quite interesting and allows for exploration.

Assignments are fun too (basically you get to implement stuff you learnt in lecture).

interesting content

maybe nothing

### What I did not like about the course:

#### Comments

The TA's were often very rude, unresponsive in the discussion forums in response to assignments.

The assignments in themselves was very time consuming and not enjoyable to do, would have preffered more structure here instead of arbitrary assignments

Although efforts to streamline the project was taken , having a team size of 6 caused massive problems due to coordination issues. In general the expectations of the project itself seems more like a 6k research output than a 4k mod.

The fact that all in lecture discussions was conducted in canvas caused my inbox to be filled with a lot of spam messsages , a different app could instead be used.

Overall good, but it's just we didn't get as many budget as CS244n students got in project. In other words, I hope later batches can get more support for their projects. Since for large dataset project we are unable to run our model freely. For our project, it took me around 100 sgd for running paperspace lol.

Group project.

Workload is very heavy – 3 assignments back to back, with assignment1 being difficult, 2 being kaggle which leads to a "toxic" competition – ends up consuming way too much time. Project is also a little too open–ended, which is good for a higher level module to have freedom, but might need a little more support and clarity on possible "directions" at the start.

1. The sheer amount of workload: 3 assignments, 5 tutorials, one big project, one finals. It is frankly ridiculous.

2. Structure of the project: NLP projects can range from very basic to very advanced (even groundbreaking), and given the time constraint it is largely based on the skills that students have coming into this module (which is also largely varied). There is no possible way to fairly grade this project.

3. Over-emphasis on algorithms, not enough case studies/showcasing of applications

Assignment is unclear and TA in charge is reluctant to clarify the question afraid of leaking the answer.

Very heavy workload

For assignment 2, I am still unsure whether taking 50% of the test set from kaggle as the final score is good, because it seems that it caused a lot of fluctuations in final scores compared to before.

the assessments are not very structured

NIL

The workload of projects and 3 assignments is very heavy

Too much workload for assignments and projects, equivalent of 2 modules worth of work

Workload

Project requirements were unclear until much later. I think students would be able to plan the structure of their projects better if the project report template was released much earlier, or at least the detailed descriptions of the grading rubrics.

Assignment 1 had several ambiguities that have been pointed out in the forums. The tutor responding on the forums was not very helpful either.

Notation in the slides was confusing sometimes and I had to refer to other university's notes to understand the formulae. I think it

could be made clearer by having text boxes or a separate slide that explains what each symbol stands for.

Unclear expectations for assignment 1, vague questions / many mistakes. Heard the assignment is a legacy one, if it's been out for so long how come mistakes were not corrected ?

Lack of support from TAs to help with consultation on assignments / tutorials. For people with lesser experience, more help is needed to bridge the gap. We pay the money to receive the education but can't get help on consultation / support. Maybe this mod has been for smaller groups but due to the recently overwhelming enrollment these issues come up. One TA handles 3 tutorial groups and can barely handle replies, while the online tutorial group has no TA?! ... It is basically no different from self learning a udemy course & supplemented from the Stanford FREE online lecture notes & textbook.

Where is the help from the teaching team? Tutorials have many calculation errors as well. Not to mention, many of the answers are too vague/not clearly expressed in English. Questionable that this course has been running for a while but such errors are not corrected.

One of the TAs were quite rude with his answers in explaining on canvas to several students for assignment 1. Why is it only mostly 1 TA answering questions? This only discourages students from asking questions. Of course, ever since questions were replied rudely, our discussion forum has been quiet. No one dared to post questions.

Other mods have tutorial group chats with questions posted there and handled. Maybe it's better to have groups allocated to different TAs?

For students that can't keep up have to wait 2 weeks for the lecture recordings to be up.. please support online learning. for students who live far especially. Other modules have done it successfully, even providing live streaming. How is the 5% participation marks calculated ? For students that switch around group 2 and 1 lectures can we trust the admin knows our participation ? Edited (so many people started to complain that they released lecture videos on time in the later weeks! Also, at a very late period, they remembered the online tutorial group did not have a tutor and also created tutorial videos! It is unfair that the students have to suffer the consequences)

Mismatch in difficulty between lectures and tutorials, many of the answers are not even gone through. Should let the students prioritize questions to be gone through first then provide the recordings on the questions not gone through. They can be reused for subsequent semesters as well.

One of the mentors suggested an ambitious scope. Being the first time takers in the mod, we just went along with it, to only realize the scope could be made smaller. After talking to other groups, seems like some of the mentors are not very clear on the rubrics as well. Maybe more effort is needed to relay the practicalities on managing scope & expectations for this 35%.

It's a really good course, but there are gaps that made me regret taking the mod. Given a chance, I would not want to take this mod.

The magnitude of workload - Project on top of 3 back-to-back assignments makes it difficult to juggle everything

The expected workload of this course was way beyond that of other level 4000 CS courses with very demanding and timeconsuming assignments, project and lectures. As such, it will be good to warn students early in the lecture of this and give them a good idea of the amount of effort needed to keep up or excel in this course. Also, I personally felt that the project could be released earlier in the semester even if not much content has been covered by then, as it will allow project teams to warm up to each other and start exploratory work early. As the nature of the project is very broad, starting the project late after covering more topics in lecture does not help much as the bulk of the knowledge needed for the project is from self–exploration and research, which benefits from having more time.

Project of the course feels not very organised, a lot of administrative details are hard to find

Poorly designed assignments, ineffective TAs.

I will write a relatively long comment in hopes that it will be helpful, although it is simply my own experience of the module and may not be representative. Thank you for reading this and hopefully keeping some of these in mind for future semesters.

I feel that the administration of assignments and the structure of the project was very poorly done. Adding to that, the rigidity of the lecture / tutorial attendance, coupled with the workload required for the project and assignments, made the module incredibly time consuming (even in relation to other 4k CS mods).

The phrasing of the questions in assignment 1 was ambiguous at times, resulting in quite a lot of confusion and numerous questions on the forums that dragged out the process of completing it. It should also be seen as necessary that any changes to questions should be made as an announcement and not left for students to stumble upon in the forums. Additionally, the feedback given was unhelpful and unnecessarily difficult to parse. Feedback was split into numbered parts that corresponded with different aspects that were looked out for during marking, possibly this corresponded to different rows in the marking rubric. However, the mapping between the number and what was actually being looked out for was not given in the feedback, nor uploaded as a

document, but only made available in the separate Google forms for mark appeals. Obviously, mark appeals is not the primary reason for providing feedback, and should not be the primary way to understand the feedback. Lastly, the fact that not a single test case was allowed to be disclosed (even after the grading and feedback was done) made it near impossible to actually identify what went wrong and how we can improve.

Moving forward, I feel that these things can be optimised with comparatively little work done by the teaching team in relation to the benefit of the students, and in relation to the trouble that all the students would otherwise have to face.

The project design itself compounded any team dynamics issues that arose, and I have also heard from my friends in other groups similar sentiments. I do not think that allowing to sound out to the project mentor or the prof about team dynamics issues should be seen the main solution to team issues, as there are definitely barries to sounding out, as it will in practice not be anonymous, even if it is means that a person will have to decide between scoring badly and carrying their team. I think that there are simple project design decisions that could be undertaken to mitigate these issues (of course with certain tradeoffs that the module coordinator must weigh).

Firstly the size of the group could be reduced as although it will lead to a potentially less ambitious project, it also reduces the severity of having poor teammates (doing the work of the other pair is a lot more manageable than doing the work of 4 other people) Secondly, although the open ended nature of the project encourages exploration, which is important. It also makes it very difficult to have a clear team direction in the absence of a decent and actually workable team. I think it will be good to have some safer suggested ideas / directions that teams may undertake as a backup. I do not think the purpose of this project should be to have a wide variety of projects at the end, but to encourage depth of understanding, and providing these directions will help keep some groups in line with this aim.

Thirdly, intermediate milestones. I think it will be a lot more helpful to have a proposal at the beginning, instead of an intermediate milestone where feedback is only given at the end of Week 9 (which leaves next to no time to adjust) The TA and Lecturer feedback seemed to be pointing in completely different directions, we had a fairly supportive TA, but received feedback from the prof that our project direction needed to change drastically, this resulted in a drastic pivot very late in the semester

In short, it feels like the project was designed with the scope, depth and flow of an FYP in mind, but carried out with an assumption that a 1 year project split among 6 people can be completed in 2 months.

Group project requires students to demonstrate good knowledge about state-of-the-art models for language processing, which is extremely challenging since I had to read up so many papers regarding the model and try out so many things.

participation grades are too tedious (pre lecture and in lecture)

The lecturers do not upload lecture recordings in time in order to encourage students to attend classes. Lecture recordings are essential to me as I have a hard time concentrating in class and might miss information which requires me to rewatch lectures. This aspect has caused me setbacks in my learning.

Disproportionately large workload

too much workload :")

Assignments and project could benefit from clearer instructions and more information on grading breakdown

Nil

The workload is too much and the lecture timings are too early for people who don't stay on campus. 3 hours is also a bit long for the lecture slot.

Assignment–1 had a lot of ambiguity in the questions.

Each project mentor had different set of expectations, which forces some teams to work 10X than other teams to get even the bare minimum marks for the project components. Expecting us to come up with research problems and solve them in 4 weeks is not fair while other teams mentored by a different person were fine with simpler projects and awarded more marks.

The replies of one of the TAs to other students for assignment-1 discouraged me from ever asking a question in the discussions forum:

TA name: TAY YING JIE, ISAAC

sample replies my fellow students got from this TA in the discussion forum:

"I suggest, reading the question properly"

"I am not a bug fixer...."

"its literally just your thought process"

and more such unhelpful and sorta rude replies that berate the students who are asking questions.

Poor assignment and unbearable workload. Detailed comment please see nusmods.

Assignment heavy. Project are formed in sub teams.

There should be more instructions for the project. Some assignments are not well designed. The tutorials should include some

hands on coding excercises

#### Assignments

- badly designed and highly ambiguous

- unable to understand and learn where the code/explanations went wrong since no answer script is given

the workloads

Very workload of having Project + Assignment 3 + Finals all cramped at the back of the semester.

3 hour lectures are too long

1. The course is completely worthless, and the content taught is utterly useless for students in any aspect, including leetcode, kaggle, company interviews, or academic research. Course A1 attempts to imitate leetcode contests, A2 tries to mimic Kaggle competitions, and the project aims to simulate academic papers.

2. The course workload is 3–4 times that of other courses and requires additional tutorials, but the credits earned are the same as other courses, and the grades are much lower compared to other courses.

3. There are no breaks during the class, and there are significant gaps between the content taught, the assignments, and the exam material.

4. The instructor constantly harasses students using emails and announcements on canvas.

5. Literally everyone is complaining that this course is a complete mess.

6. The assignment descriptions are utterly unclear, and I have never seen assignments with so many discussions.

7. As an NLP course, it barely covers LLM and strongly discourages the use of LLM in assignments and exams. It's worth noting that courses like ES5000, ES5001A, and some IT and DSA courses even allow the use of ChatGPT during exams.

Second half of the course was super math heavy and filled with over–convoluted equations that serves to distract the main concept. Additionally, lectures are way too long for any productive learning. e.g. after the 1.5 hr mark, it starts to be tiring, especially during the second half of the semester where every slide is just math symbols.

The workload is on the heavier side

Most of the assignments, are vague on the requirements and grading, we have no idea we have done wrong

Projects are also very lack of guidance, as someone without much prior knowledge, we stucked on even discussing what to do for projects. I had a hard time working on the project as I spend a lot of time meeting with teammates but we are all so lost. I would suggest that in future iterations, at least provide some examples (e.g. sample from past iterations)

Project component was not well organized. Students barely had any information to start with (even basic information such as objectives, deadlines and deliverables of the project itself). Will be very helpful if there is a document published to the students which has all the required project details in it, so we can refer to the document when unclear on things.

Assignments are time-consuming, especially for part time students

High workload

Quite high workload

- The course was not the best administratively, especially for Tutorial Group 15.

- Assignment 1 killed me; I felt like the lectures did not prepare me for it at all.

- Formation of project groups took quite long, which lessened the amount of time we have to do the project. Advice from the student mentor ended up being different from professor, which resulted in a late change in direction.

- Lack of past year papers / practice questions - I have no idea what to expect for the finals.

The TAs seems not so responsible.

Sometimes uploading records is late, and due to internship reasons, I am unable to keep up with the course progress and find it difficult to return to the normal pace.

Assignment 1 was badly done and graded in my opinion. It is very unfair that we have to pass the testcases even though the BPE outupt is based on the number of loops

Tutorials too short in terms of both time and questions and infrequent, more would be better because I am not sure I fully understand a lot of the content

Almost no feedback for assignment 1, especially for coding questions, even after rebuttal

The workload is quite heavy with the project

Misleading course prerequisite. Assignments and project are too difficult. Lack of an overview or overarching theme about this course.

Course content is too heavy. A lot of information packed in one lecture. Perhaps splitting the lecture into 2 parts would be great. Assignments were unnecessarily difficult. Please revamp Assignment 1. Seems that the teaching team is very defensive about maintaining Assignment 1 despite all the mistakes that they have.

I'm not sure why this module has a buffed out workload compared to other 4k modules out there. I don't think that should be the case. Given that there is a project (major project) for this module, I don't see any need of having 3 separate assignments for this module

heavy workload, too much participation required, discussion forum reply sometimes might be slow

There's quite a bit of emphasis on the mathematical aspect of the theory, which I personally feel is not as useful or practical to test on

The lectures by Chris are great, but the assignments' marking is not very reasonable, some marking is very unclear on where were the points deducted (one of the comments I received was missing something and deducted half of the points for that part, even though I have done very detailed and comprehensive analysis and explanation of that part including almost all concepts taught in lectures related to this part. It was very disappointing and the marking make many of us feeling like our effort put into this course as well as our interest of NLP are wasted) and project team matching was quite a disaster, some of the team members were not contributing enough and they gave negative feedback to the members who were doing the work for them :( Very stressful time due to this project and some assignments' marking

#### Too many workloads

Project 2 where we have to do NLP research. I'd rather implement NLP algorithms than do research and exploration

Feels like too much focus on older NLP methods, would be good to go more in depth into current trends.

The assignment instructions were very unclear and the grading seems to be not standardized

However, while the theoretical content covered in the lectures is extensive and informative, there is a noticeable lack of emphasis on practical coding aspects. The lectures primarily focus on explaining NLP concepts and theories rather than providing hands–on coding experience. As a result, when it comes to completing projects, students are often left to rely heavily on self–study to bridge the gap between theory and application. While self–study can be beneficial for reinforcing learning and promoting independent problem–solving skills, having some guidance and support in the form of coding tutorials or demonstrations from the start would undoubtedly ease the learning curve and enhance the overall learning experience. A more balanced approach that integrates theoretical concepts with practical coding exercises would better prepare students to tackle real–world NLP challenges effectively.

## HIGH WORKLOAD

- Very math heavy
- Lecture contents are very heavy as well
- Assignments are hard

The tutorials could have been more engaging. They seemed pretty boring

Personally, I did not like the project component, as it involves coming up with our own research topic and investigating it. The project weightage is high (35%), the topic is extremely open-ended, and the teaching team expects us to identify novel gaps in literature and investigate them. I understand that this is reasonable for students aiming for further studies or are interested in research, but I feel that it is quite harsh on students who are more interested in just learning and applying the foundational concepts of NLP rather than doing research.

The grading criteria for the assessments were very confusing. I did not like assignment 1 was marked, where there were too many ambiguous questions and marking points. The Intermediate Update rubrics could also be a bit more detailed on what is expected.

no

The project organization could be better. I feel like the project expectations are vague from the beginning, leaving us wondering whether the emphasis is on getting a good model or comparing several models. Also, I would really like there to be some mechanism in place throughout the project to ensure active contribution from each team member. My team has a student who completely ghosted us after the intermediate report phase.

Group project is stupid as everything can be found online, no checking of code is done so that students can fabricate their results. There are people in TEAMMATES evaluation that rates themselves highly but rate other people low. Stupid marking scheme of assignment 2, where there's a 4 page limit, but so many requirements.

Teaching team that handles grading is not good, and whoever is coordinating the grading schemes (if any) is doing a really bad job.

e.g. they wanted to use test cases in assignment 1 (which means fixed expectations on output) but we don't get sample test cases when doing the assignment (so we have no clue what is right or wrong), and auto-generate vague feedback about what is wrong with our code.

We also didn't know how long our code could run for so everyone put different iterations, until they introduced a timeout after

### grading.

The only way to contest this grading is through a rebuttal, which is impossible because you do not know what is wrong, and you are warned that you can lose more marks instead. The best part is the test cases are completely hidden. With vague comments like "the code has a small flaw", we will get no indication of what is wrong with our code and we will never learn.

I have peers who are confused on what is wrong, and they won't risk rebutting so they won't lose even more marks. I also have peers who rebutted and got some weird, short reply that never answered their queries.

The very least they could have done (like how many other mods do it) is tie each of the hidden test cases to a specific error, and giving an auto–generated feedback based on this error could be useful, rather than calling everything a "small flaw" or whatnot. They could also give explicit marks for each question, then say "you lost X marks for error Y" rather than "you failed X% of the test cases", that way students can actually learn.

Throughout my undergraduate years, this is the single worst grading scheme for an assignment I have ever taken, and I strongly do not think that "bigger cohort sizes" is a good reason if all the other modules I have taken could do it properly. Perhaps if you didn't know how to manage assignments for a large cohort, maybe you can learn from them. I enjoy the mod and the content and I wanted to learn more, but stuff like this is super discouraging and disappointing. I can only hope this is handled better fro my other assignments, and maybe for my juniors in the future.

project work quite open ended, alot of time required to train models and experiment