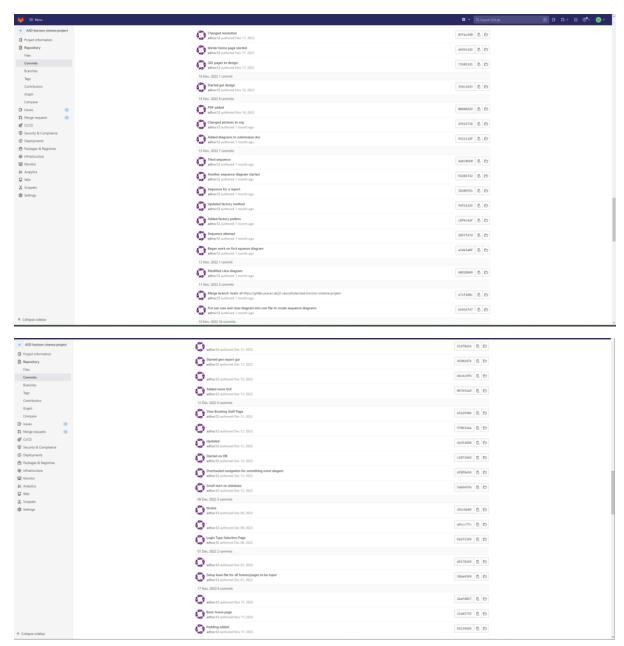
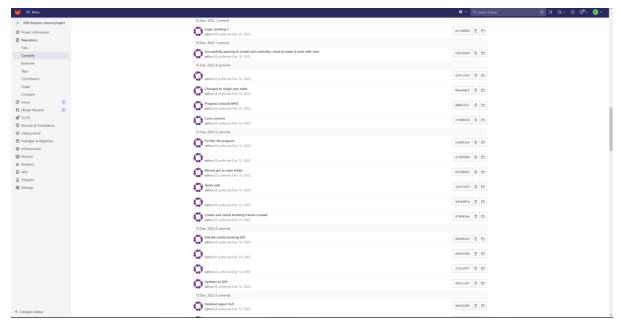
Individual Contribution and Reflective Report

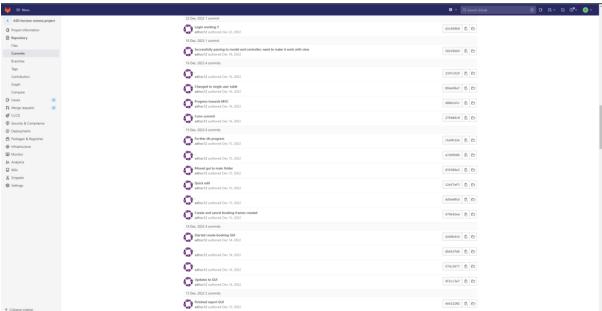
Arthur Milner – 21035478

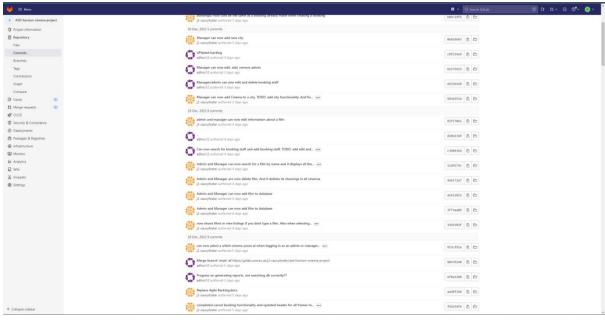
Evidence of Work Produced

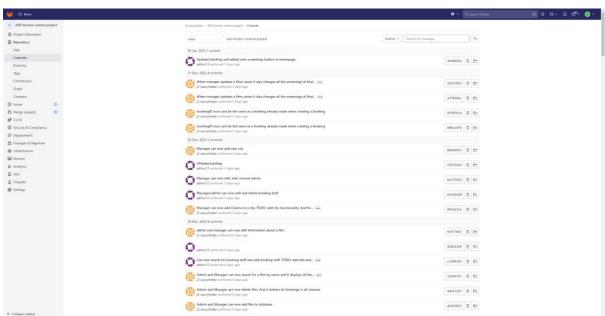
For evidence of the work I've produced please see the git lab screenshots below showcasing my commits to the project:

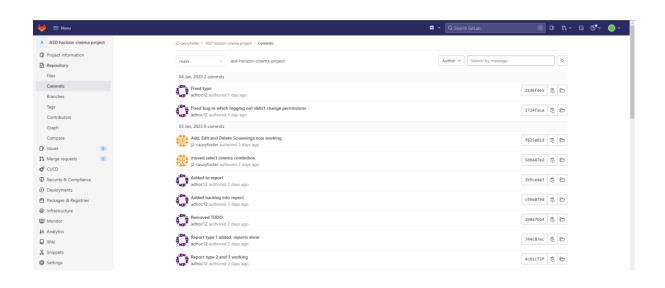


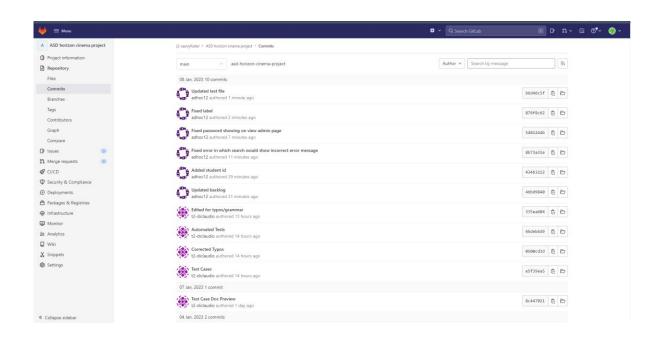


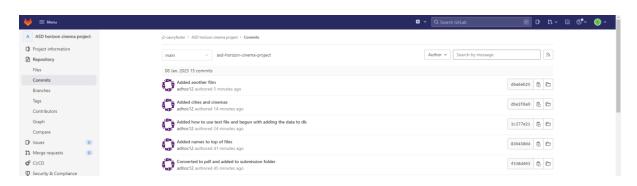


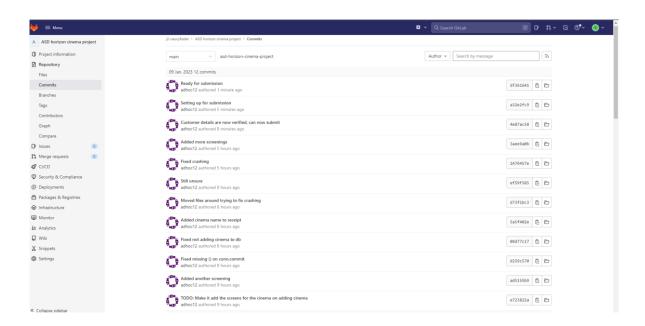












Reflection of My Contribution and Knowledge Acquired

In reflection of my contribution to the project, I believe that I have contributed a large amount of work, I had setup the projects GUI almost entirely by myself and had it working with MVC pattern on some basic functionalities such as logging in, user privilege modes and searching for film screenings before receiving help from another member.

As my other members were unfortunately left with the bulk load of work on the OS module they couldn't contribute until late into the project, however, once they did begin to contribute Joseph added key functionalities such as creating/cancelling bookings and adding/updating/deleting films/cities/cinemas/screenings. Whilst I worked on report generation, viewing cinema screenings and adding/updating/deleting staff. Finally once the project had been completely implemented Tommy undertook all the testing of the project and I fixed any issues he encountered and added the required data to the database for presenting, upon realising some tests were failing I also quickly made some final fixes.

I have gained great knowledge in object oriented programming, more than anything I feel much more comfortable in understanding how classes interact and work with each other. Further knowledge was found in the design process of the software, as using industry standard diagrams I had not before seen really helped in giving a base to work from during implementation. I also gained great knowledge in tkinter which is something I had no prior experience in.

I am also glad I have gained experience working within a group project and consequently some insight into how it might work within industry following an agile methodology and interacting with colleagues over all stages of a project.

Reflection on Relevant Emerging Technologies

An emerging technology when designing a system such as this one could be the highly popular ChatGPT, it could help provide great guidance towards all phases of the project as its feedback is often useful to some extent and easily applicable to whatever you might be implementing as it can take very specific requests.

A further example of an emerging technology is blockchain, blockchain in software development allows for an increase in security and consequently faith in the honestly of the software's operations. This is done through a ledger which is only accessed by those with suitable permissions. This could be particularly useful in applications such as ours in which card transactions are at the heart of its functionality.

For a third example you might consider the exciting potential of serverless computing, taking much of the hassle out of managing servers in which a software project will have multiple machines/people accessing. There are still servers in serverless computing, however, they are managed by an outside company which allocates the resources as needed via the cloud. This has become favoured by many in recent years due to its scalability and the ease of removing server management.