# 6. Ethics

One important aspect that was to be ascertained from the system was the assurance of widespread understandability, directly resulting in strengthened usability. This was achieved by means of providing users with concise, but informative notifications. Notifications made it possible to inform users of the state of the system and explain all results obtained through the system. As an added benefit, certain academic field may support plenty of jargon that may be misinterpreted, therefore, the employment of such notices proved to be of great benefit to users of the system.

Substantial amounts of personal data will be utilised by the system, including but not limited to, student and supervisor personal details. As a result, GDPR (General Data Protection Regulation) will be followed, as a means of keeping data strictly confidential and extensively protected. During testing, to avoid any breaching of regulations, randomly generated data was utilised in order to carry out tests relating to the performance of allocations.

Each user profession is handled by the system using the aforementioned role authorization, to distribute students, supervisors, and administrators accordingly. Each section, defined by role, has its own functionality dependent on the user logged in. Having an error occur in this section could be harmful to the results of the allocation. For instance, if a student is to log in as an administrator, all the areas, quotas, and other student preferences may be unlawfully manipulated or in the worst case, deleted from the system due to misuse. Therefore, it is of the utmost importance that classification is implemented to separate and restrict user access by role.

To minimize the probability of unwanted manipulation of sensitive data. Administrators are given the sole right to manipulate student and supervisor data, as well as being the only role that is able to perform allocations and publish results.

The algorithm is designed in a way which prioritizes fairness in the allocation of students, by means of conducting all tasks objectively. By this, it is meant that average marks are gathered with no preference being given to students for other factors than individual performances throughout the first year, as well as the time with which they submitted to break any equal averages.