**Business Rules**

**General Business Rules**

1. Users must be valid students who study at the University of Newcastle.
2. Website terms and conditions must be accepted by users
3. Users must register on the website.
4. Users do not have permission to modify their profile once registered.
5. Each term should have a maximum capacity of 5 courses.
6. Course availability must be regularly updated to reflect changes in faculty and resources.
7. Users receive notification in case of any changes to the planned course.
8. The website does not offer services such as course registrations. Course registration must register with the admissions office.
9. The website does not offer services such as course enrollment. Course enrollment must be done through the official university website (myUni).
10. A full-time student can enroll up to 30 units per trimester (AskUon, n.d.)
11. A part-time student can enroll up to 10-20 units per trimester (AskUon, n.d.)
12. Approval from the admin’s manager is required before the admin can make changes to the user interface.
13. Courses that are not available on a specific trimester should inform the student it would not be offered on that date they selected,
14. Users have the authority to delete their accounts on the website. Afterward, the personal information that is collected must be appropriately disposed of.

**Safety and Privacy Rules**

1. Users must acknowledge the data collection rules regarding how their data is being collected, stored, and used (Privacy Act 1988).
2. Admin accounts must be properly stored to prevent unauthorized access.
3. Every password must be securely hashed before storage to prevent unauthorized access in case of a data breach.
4. Data must ensure redundancy to prevent data loss due to unexpected events.
5. Software systems and environments are required to be always up to date to prevent vulnerability attacks.
6. The website does not hold the responsibility and ownership of the data that is created by the user.
7. User data must not be shared with any external organization without the user's consent.
8. User’s data must be handled strictly and adhere to government privacy laws (Personal Data Protection Act).
9. Regular security audits and vulnerability scans must be conducted to identify and address potential threats.

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| **Business rule** | **System mapping** | **Organizational mapping** |
| Scenario Rules |  |  |
| The admin staff changes the date of the course availability on the trimester where the student plans on doing the course | In the use case ”Plan courses” where the student adds the course. | The system automatically notifies the user of the course being unavailable for that trimester. |
| A new course introduced to the program | Done in the ”Manage Courses” use case where the Admin Staff selects the option to “Add courses”. | The admin staff is responsible to add new courses on the website. |
| There is a limit on how many courses a Student can enroll in a trimester | Handled in the “Plan courses use case”. | N/A |
| Only UON students can register on the website. | The register details are checked by the “Register Account” use case. | The admin staff is responsible for verifying the students' information regularly. |
| Students request to suspend their accounts because they are no longer studying in UON. | N/A | The admin staff is receiving notifications through the system and suspending their accounts on the website. |
| Security Rules and Privacy Rules |  |  |
| Authorization: Each person authenticated only has access to their given roles. | Applicable to all use cases. | The IT staff should make sure to maintain and manage authorization of personal |
| Privacy of data: All sensitive data are encrypted and not accessible to anyone | Applicable to all use cases by the student actor. | The IT staff buy SSL certificates to protect user’s data (Cloudflare, n.d.) |
| Ownership of data: All data generated by the users belong to the users. | Applicable to all use cases by the students actor | The IT staff are required to implement a proper data disposal system in order to clean up unused data. |
| Redundancy of data: Every piece of data must ensure their redundancy by storing in multiple different locations. | The redundancy of data can be implemented through the database features. | The IT staff are required to implement a proper backup system in order to ensure data consistency. |
| Daily operation: Regular security audits and vulnerability scans must be conducted. | N/A | The IT staff who participate in developing the project must be experts in the cyber security domain to prevent the system from being compromised by the hacker. |

**References**

AskUON. (n.d.). *Can I study part time?*. <https://askuon.newcastle.edu.au/app/answers/detail/a_id/15/~/can-i-study-part-time%3F>

AskUON. (n.d.). *How do I know if I’m a full-time student?.* <https://askuon.newcastle.edu.au/app/answers/detail/a_id/41/~/how-do-i-know-if-im-a-full-time-student%3F>

Personal Data Protection Commission. (n.d.). *PDPA Overview*. <https://www.pdpc.gov.sg/overview-of-pdpa/the-legislation/personal-data-protection-act>

Cloudflare (n.d.). *What is an SSL certificate?*. <https://www.cloudflare.com/learning/ssl/what-is-an-ssl-certificate/>