Revisions

| Version | Primary Author(s) | Description of Version | Date Completed |
| --- | --- | --- | --- |
| 1.0 | Hesham | Categories added, drafted up examples for objects | 18/04/2025 |
| 1.1 | Nickleirsch | Drafted sources of requirements | 19/04/2025 |
| 1.2 | Lim Xin Yee | Drafted development context objects | 21/04/2025 |
| 1.3 | Nickleirsch | Explanation for material context objects | 22/04/2025 |
| 1.4 | Nickleirsch | Explanation for immaterial context objects | 22/04/2025 |

Context objects are elements in and around the system that influence its design and behaviour. We can divide them into two main categories – material and immaterial.

**Material Context Objects:**

1. Students: expected to be the primary users of the system; access academic data, receive notifications, view attendance, etc
2. Lecturers: educators who will enter academic records, view student data, communicate updates, etc
3. Administrators: manage system access, maintain academic and financial records.
4. Parents: receive academic and financial updates via SMS and view performance summaries
5. Campus: physical environment where the system is used — affects network access and system availability
6. University Database Servers: store academic records, attendance, billing info, and user profiles.
7. Network Infrastructure: enables system access across campus (Wi-Fi, LAN, internet connectivity, etc.)

**Immaterial Context Objects:**

1. User Roles and Permissions: which define what each user (student, parent, etc.) can see or do within the portal
2. Academic Processes: workflows like course registration, grading, and attendance tracking
3. Communication Protocols: rules that define how messages are sent and received (e.g., email, SMS format, response handling)
4. Administrative Processes: includes billing, scheduling, reporting, and system maintenance routines.
5. SMS/Notification Services: third-party or internal services used to deliver timely messages (alerts, reminders) to users.
6. API Integrations: Interfaces that connect the portal with the campus management system, SMS gateway, etc.

**Development Context Objects:**

1. Technical Environment
2. IT/Development Team
3. Testing Tools & Methods
4. Budget & Timeline Constraints
5. Version Control System

**Sources of Requirements**

Stakeholders (students, parents, lecturers, admin) – understand what they need

University policies (rules)

Current system documentation – look at what constraints the current system has