**Context Objects and Requirements Sources**

**for**

**COMSYS**

University Communication and Services Portal

**Section: TT4L**

**Group: 4**

|  |  |
| --- | --- |
| **NAME** | **STUDENT ID** |
| HESHAM NADER DEYAAEDEEN EISA | 1221101049 |
| NICKLEIRSCH JAYA RAJ | 1231303114 |
| DANESH VERAN A/L BALASUBRAMANIAM | 1211109158 |
| LIM XIN YEE | 1211109469 |

***OneDrive link containing proof of execution:*** [***SRE Items***](https://mmuedumy-my.sharepoint.com/:f:/g/personal/1221101049_student_mmu_edu_my/Ek_hYQuewOxHtjGwTXkIocwBFJmRQXxLP-XgA9Wkxvp0hA?e=8tjtHb)

Table of Contents

[1 Context Objects 3](#_Toc199055992)

[1.1 Material Context Objects 3](#_Toc199055993)

[1.2 Immaterial Context Objects 4](#_Toc199055994)

[1.3 Development Context Objects 5](#_Toc199055995)

# Context Objects

Context objects are elements in and around a system that influence its design and behaviour. They fall into three main categories:

* Material context objects are tangible things like hardware.
* Immaterial context objects include policies, regulations, and cultural factors that shape requirements.
* Development context objects are tools, technologies, and processes used to build and maintain the system.

## Material Context Objects

|  |  |  |
| --- | --- | --- |
| **Object** | **Sources** | **Explanation** |
| Student | Project Guidelines (Document) | Expected to be the primary users of the system; access academic data, receive notifications, view attendance, etc. |
| Lecturer | Project Guidelines (Document) | Educators who will enter academic records, view student data, communicate updates, etc. |
| Administrator | Project Guidelines (Document) | Manage system access, maintain academic and financial records. |
| Parent | Project Guidelines (Document) | Receive academic and financial updates via SMS and view performance summaries. |
| University Database Server | Existing System  (System) | Store academic records, attendance, billing info, and user profiles. |

## Immaterial Context Objects

|  |  |  |
| --- | --- | --- |
| **Object** | **Sources** | **Explanation** |
| Academic Processes | Student and Lecturer (Stakeholders) | Workflows like course registration, grading, and attendance tracking. |
| Administrative Processes | Admin (Stakeholders) | Includes billing, scheduling, reporting, and system maintenance routines. |
| SMS/Notification Service | Project Guidelines (Document) | Third-party or internal services used to deliver timely messages (alerts, reminders) to users. |
| API Integration | Project Guidelines (Document) | Interfaces that connect the portal with the campus management system, SMS gateway, etc. |
| Authentication and Access Control Policies | ISO/IEC 27001 (Document) | Define how users securely log in (e.g., via single sign-on or OTP), session timeouts and password rules. |
| Notification Prioritization and Escalation Logic | Lecturer and Admin (Stakeholders) | Logic flow that determines the urgency and format of alerts. For example, critical alerts (e.g., payment deadlines, academic probation) are sent via SMS + portal, while general reminders (e.g., campus events) are sent via portal only. |
| Localization and Language Settings | Student and Parent (Stakeholder) | Optional configurations to support multi-language capabilities and regional time/date formats. |

## Development Context Objects

|  |  |  |
| --- | --- | --- |
| **Object** | **Sources** | **Explanation** |
| IT Department | Admin (Stakeholders) | Responsible for designing, coding, testing, and maintaining the portal (developers, system admins, and project managers). |
| Go-live date | Academic Calendar (Document) | How and when the portal is rolled out to users |
| Maintenance and Support Plan | Admin (Stakeholders) | Outlines post-launch support, including updates, bug fixes and scheduled maintenance. |
| Security Policies and Protocols | ISO/IEC 27001 (Document) | ISO’s ISMS globally recognized international standard for information security management system |
| Integration Testing and Staging Environments | Admin (Stakeholders) | Allows safe development and testing before the go-live date |