Background

UQPLAY is a not-for-profit community toy library that lends educational and recreational toys to families, carers, educators, and local groups. At present, operations rely on spreadsheets, paper records, and email/phone communication. This manual approach is time-consuming, error-prone, and increasingly difficult to manage as membership and inventory grow.

Project Purpose

The purpose of this project is to design a **digital information system** that streamlines UQPLAY's operations, enhances the borrowing experience, and supports long-term growth. The system will be designed as a foundation for future development into a fully functional digital platform.

Objectives

- Replace manual processes with an integrated digital solution.
- Improve toy lending and inventory tracking.
- Enhance customer trust through feedback, reviews, and cleaning/maintenance logs.
- Support supplier management and procurement workflows.
- Provide insights into toy usage, lifecycle, and demand.

Scope

The system design will cover four core areas:

1. **Toy Lending & Inventory Management** – Borrowing, returns, overdue alerts, deposits, and maintenance history.
2. **Lifecycle & Disposals** – Tracking toy usage, retirement, donation, and resale.
3. **Customer Management** – Membership registration, borrowing history, feedback, and condition reporting.
4. **Supplier & Procurement** – Supplier registry, purchase orders, restocking, and delivery tracking.

Deliverables

- **Requirements Specification**: Functional and non-functional user stories with acceptance criteria.
- **UML Models**: Use Case, Activity, Sequence, State, and Class diagrams created with Enterprise Architect.
- **Business Report**: A professional, executive-style document summarising analysis and proposed solutions.

Expected Outcomes

- Reduced administrative workload and fewer manual errors.
- Stronger customer experience and trust in toy safety.
- Better decision-making through data on toy popularity and lifecycle.
- Improved coordination with suppliers and procurement planning.