**SyncInCorp Crèche Management Mobile Application**

**Sprint 2:**

**Project:** Crèche Management Mobile Application  
**Team:** SyncInCorp  
**Module:** INSY7315 - Work Integrated Learning  
**Institution:** Varsity College  
**Facilitator:** Mr D S Govender  
**Period:** March 31, 2025 - October 31, 2025

### **Session 5-6( SPRINT 2)**

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1. Agile Lifecycle Phase

| **Phase** | **Description** |
| --- | --- |
| **Sprint 2: Gather Requirements** | This sprint is part of the *Agile Initiation and Planning* phase. The focus is on engaging with the client to collect, analyse, and prioritize requirements. The output includes user stories, acceptance criteria, and the first draft of the user journey for the Crèche Management Mobile App. |

(Atlassian, 2024)

## **2. Sprint Goal**

**Meet with the client to develop detailed user stories and a first draft of the user journey, capturing both functional and non-functional requirements necessary for the Crèche Management Mobile App.**

3. Functional Requirements

| **No.** | **Functional Requirement** | **Description** |
| --- | --- | --- |
| 1 | **User Management** | Admin, Staff, and Parents can register and manage profiles with secure authentication (OTP/password). |
| 2 | **Parent & Child Registration** | Admin captures and manages details of parents and children, assigns children to staff. |
| 3 | **Attendance Tracking (Wow Factor)** | Teachers/Admin can mark attendance; parents receive real-time notifications if a child is absent. |
| 4 | **Event Notifications & Calendar Integration** | Admins create events; parents receive notifications and can sync with personal calendars. |
| 5 | **Payment Gateway** | Parents can pay tuition and meals securely, view receipts, and receive payment reminders. |
| 6 | **Messaging & Communication** | Admin posts announcements: parents receive instant updates about safety or health concerns. |
| 7 | **Media Sharing (Wow Factor)** | Teachers upload photos/videos of daily activities; parents can view and download media securely. |
| 8 | **Lunch Ordering System (Wow Factor)** | Admins upload meal options; parents can pre-order meals for children and view nutrition info. |

(SyncInCorp, 2025)

4. Non-Functional Requirements

| **Category** | **Description** |
| --- | --- |
| **Performance** | App must handle 500+ concurrent users without lag. |
| **Security** | Use of AES-256 encryption and two-factor authentication. |
| **Usability** | Simple, mobile-friendly UI accessible to all user types. |
| **Availability** | Minimum 99% uptime using reliable cloud hosting. |
| **Scalability** | Must support addition of new features without redesign. |
| **Maintainability** | Code should follow best practices with inline documentation. |
| **Compliance** | Must adhere to POPIA for data privacy. |

(Atlassian, 2024; Govender, 2025)

5. Considerations: Technology Investigations

| **Technology Area** | **Tools/Frameworks Considered** | **Purpose** |
| --- | --- | --- |
| **Frontend** | React Native / Flutter | Cross-platform mobile app development |
| **Backend** | Node.js with Express / Firebase | API creation and database interaction |
| **Database** | Firebase Firestore / MongoDB | Real-time, cloud-hosted data storage |
| **DevOps** | GitHub Actions, Docker | Continuous Integration and Deployment |
| **Payment Gateway** | PayFast | Secure payment transactions |
| **Authentication** | Firebase Auth / OAuth | Secure login and user verification |

6. Team Availability

7. User Stories

User stories capture client needs and define development tasks in simple, goal-oriented language.

**User Story 1 — Requirements Prioritisation**

| **User Story** | **As a developer, I need a prioritized backlog of requirements from the client so that I can develop an application that meets their needs.** |
| --- | --- |
| **Acceptance Criteria** | 1. A backlog is created and prioritized in collaboration with the client.2. Each requirement has clear acceptance criteria.3. Requirements are stored in Jira/ProjectManager.4. Client signs off on final list. |

**User Story 2 — Screen and Role Understanding (UX)**

| **User Story** | **As a developer, I need to understand how the screens and user roles will work together so that I can build a UI that meets the client’s needs.** |
| --- | --- |
| **Acceptance Criteria** | 1. User journey diagrams created and reviewed by client.2. Role-based navigation maps created.3. Stakeholder approval obtained. |

**User Story 3 — Frontend Framework and Standards**

| **User Story** | **As a frontend developer, I need to know which framework to use and which standards to follow so that I can develop high-quality code.** |
| --- | --- |
| **Acceptance Criteria** | 1. Framework (React Native/Flutter) finalized.2. Coding standards documented and shared.3. Initial component prototypes tested successfully. |

**User Story 4 — CI/CD Pipeline (DevOps)**

| **User Story** | **As a DevOps team member, I need to understand how GitHub Actions work so that I can build a pipeline to ensure a high-level of code quality.** |
| --- | --- |
| **Acceptance Criteria** | 1. GitHub Actions workflow configured.2. Automated testing implemented.3. Code successfully deployed to staging environment. |

**User Story 5 — Backend Libraries**

| **User Story** | **As a backend developer, I need to know which libraries (SDK versions) to use so that I can ensure my local environment is configured to match the rest of my team.** |
| --- | --- |
| **Acceptance Criteria** | 1. Libraries and SDKs standardized.2. Backend environment configuration guide created.3. Local development validated by team. |

(ProjectManager.com, 2025; Atlassian, 2024)

8. Summary

Sprint 2 lays the groundwork for actual development by clarifying user expectations, defining technical needs, and mapping workflows. The deliverables from this sprint include:

* Approved user stories with acceptance criteria
* Prioritized functional and non-functional requirements
* A draft of the user journey (UI/UX flow)
* Preliminary technology stack selection
* Updated sprint backlog

This ensures the team is well-prepared to begin **Sprint 3: Design and Prototype** with validated requirements and an agreed-upon development roadmap.

*(Govender, 2025; SyncInCorp, 2025)*

# **References**

Atlassian. (2024). *Agile Software Development: Definition of Ready and Definition of Done.* Retrieved from https://www.atlassian.com/agile

Govender, D. S. (2025). *INSY7315 Work Integrated Learning Guidelines.* Varsity College.

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SyncInCorp. (2025). *Internal Sprint Documentation and Requirement Notes.* Varsity College, INSY7315.