**Research**

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| Question | Research |
| How do we implement unit testing and TDD in Project X? | * **Jest** is the default testing framework in Expo. * Use **React Native Testing Library (RNTL)** for component-level testing. * Use **@testing-library/jest-native** for extended Jest matchers. * TDD approach: Write tests before implementing features, and refactor afterward. |
| What should be included in a high-level design document for a software project? | * System Overview * Architecture Diagram * Modules and Components * Data Flow / ER Diagrams * Technology Stack * Security Considerations |
| How can we test database connectivity through a basic login and logout flow in a React Native (Expo) app? | **Successful Login**   * Input valid credentials. * Connect to the backend/database (MongoDB). * User should be marked as logged in on the database.   **Failed Login**   * Input invalid credentials (wrong password, unregistered user). * User should be marked as failed logged in on the database.   **Logout**   * Log out from the system * User should be marked as logged out on the database. |
| How do we test QR code scanning functionality? | * Simulate QR code scanning using the course QR image. * Scan it using other Device but still using the system. * User should be marked present after scanning the QR code. |