DataQuest Solutions

Data Collection using Commcare

Lesson 1. Introduction to CommCare

- What is CommCare?
- Features and benefits
- Use cases in health, agriculture, education, etc.
- Online vs. offline data collection

Lesson 2. Account Setup and Navigation

- Creating a CommCare HQ account
- Navigating the dashboard
- Project space and applications overview

Lesson 3. Form Building Basics

- Understanding forms, modules, and applications
- Question types (text, integer, multiple choice, hidden, etc.)
- Grouping and labeling questions
- Display conditions (show/hide logic)

Lesson 4. Advanced Form Logic

- Skip logic
- Validation conditions
- Calculations and expressions
- Using case properties in forms

Lesson 5. Case Management

- What is case management?
- Opening, updating, and closing cases
- Case types and properties
- Case lists and case detail screens

Lesson 6. Application Design and Workflows

- Designing workflows with multiple forms and modules
- Linking forms via case management
- Parent-child case relationships
- Registration and follow-up logic

Lesson 7. Multimedia Integration

- Adding images, audio, and video
- Using multimedia for training or field guidance

Lesson 8. User Management

- Mobile worker accounts
- Roles and permissions
- Web users vs. mobile users
- Managing user groups

Lesson 9. Deploying Applications

- Application versions
- Preview and test applications
- Deploying to mobile devices (Android)

Lesson 10. Data Collection via Mobile

- Installing CommCare mobile
- Logging in as a mobile worker
- Downloading and filling forms
- Offline data entry and syncing

Lesson 11. Data Export and Analysis

- Exporting data (Excel, CSV, API)
- Using filters and report builder
- Interpreting standard reports (form completion, case status, etc.)
- Integration with Excel, Power BI, or other tools

Lesson 12. GPS and Location Tracking

- Capturing GPS coordinates
- Mapping and spatial data collection

Lesson 13. Barcode and QR Code Scanning

- Setting up barcode scanning questions
- Practical use cases (e.g., medicine tracking)

Lesson 14. Integration with External Tools

- CommCare API
- Integration with Power BI, Tableau, or DHIS2
- Data synchronization with external databases

Lesson 15. Application Updates and Maintenance

- Best practices for updates
- Version control
- Application deprecation and migration

Lesson 16. Security and Data Privacy

- Data encryption
- HIPAA and GDPR compliance
- User access controls

Lesson 17. Project Monitoring and Evaluation

- Custom indicators and dashboards
- Monitoring data quality and timeliness
- Automating reports and alerts