# **Specifications Requirement Document**

## **Point of Contact:**

ABC (Technical Contact) Contact Info here

DEF (Business Contact) Contact info here

#### **Description:**

To provide comprehensive systems integration and support for a mobile forms software platform with reporting capabilities.

The following optional items should be quoted individually:

- Development/Configuration of X forms of simple complexity
- Development/Configuration of Y workflow of simple complexity
- Development/Configuration of Z reports of simple complexity
- Training of
  - o End-users of mobile devices
  - Users who would create forms
  - Users who would create reports

An example scenario for the mobile forms would be for quality inspectors to perform their inspection activities using a mobile device instead of a paper form.

The systems integrator (SI) will be the single point of contact for implementation and support. Kindly specify if the SI requires CUSTOMER to purchase any software licenses on its own.

Hardware and software architecture have to be specified. Also specify if there is any network or OS configuration that is required. There is no requirement for hardware purchase.

If the quotation depends on the number of users, the SI should specify the different pricing tiers from 10 to 150 users.

If the SI has the flexibility to specify multiple pricing models, for example annual subscription or perpetual plus maintenance, the SI should provide the option for multiple pricing models with an annual option.

The capabilities of the software platform are specified below.

#### **Requirements:**

#### 1. Mobile forms

The business requirements are:

- The forms client should be able to run on Windows, Android, Apple iOS and through a web browser, as well as support a paper-based option such as Anoto Digital Pen
- There should be an administrative interface for managing forms, users, roles, and any other features of the software. Preferably this administrative interface is delivered through a web browser
- Offline capabilities
  - The mobile client on the Android and Apple iOS platforms (mobile client) should be able to download the relevant forms into the device for offline use
  - Mobile forms on should be able to work offline and store the results of the filled in form

- Locally stored data on devices should be deleted/purged upon syncing of data
- Mobile users can submit the form when they are within range of the Wi-Fi network or this could be automatic when it detects the Wi-Fi network
- Mobile forms should render in a paper-like user interface regardless of device used
- o Mobile forms technology should be a Microsoft .NET platform product
- Mobile forms technology should have been extensively validated & tested, meeting standards such as FDA 21 CFR Part 11 compliance and HIPAA compliance, with proofs of past successful audits of vendor & software development practices

#### Server capabilities

- o The result of the inspections should be stored on the server for analysis
- Analysis and reporting capabilities are required. See the reports capabilities in section 3
- The server software must be extensible to support import and export of data through APIs and common export file formats e.g. Excel, PDF, CSV, etc.
- o The server software should be able to be deployed as an on-premise solution (not hosted/SaaS) behind the CUSTOMER firewall
- Scripting should be possible to run on the Server side as well as on the Client side
- Server should maintain an audit trail of all changes to the forms, who is processing a form at what stage, version control & store images of completed forms for back-up purposes

#### • Access and authorization

- o Authorizations to the mobile forms should be role-based.
- Users can be assigned to roles
- Administrator role should be able to define roles for read or write access to forms and to results
- Administrator role should be able to define an unlimited number of roles
- Administrator should be able to define permissions to forms for specific users.
- Authentication of users should be through Active Directory out-of-thebox, with pluggable authentication to support LDAP and other authentication mechanisms with customization

### Form capabilities

- The system should be able to create unlimited number of forms with an unlimited number of fields in a form
- Form specification and configuration can be done by authorized users without any programming for the standard field types mentioned below
- The forms should be able to capture the following types of information:
  - Lists of items. Each item is a sub-form
  - List of users
  - List of roles
  - Images with annotations
  - Calculated fields

- GPS Location
- Dropdowns & Checkboxes
- Ability to integrate with External Devices to gather data
- Radio buttons
- Date & Time stamped audit trails on fields and an XML trail
- Barcode scanning
- Signature
- Attachment
- Voice (recordings as well as capabilities for voice-filling)
- Video
- The forms client should be able to perform data validation on the user input, exporting both images as well as discrete data
- Data validation should be in the form of restricted data types and through custom validation rules
- Validation rules should be able to be specified/configured easily, similar to Excel formulas
- o If validation fails, the user should not be able to submit the form
- The form administrator should be able to configure offline access to results for mobile clients i.e. synchronization of records between server and client
- Fields can be configured to be shown conditionally based on the previous results or selections
- Scripting capabilities in both VB.NET and Javascript to add complex functionality to the forms is required
- Import utilities permitting import of PDF, XML schemas and other formats are required capabilities for the design process

#### Workflow capabilities

- Authorized users should be able to create workflows for forms.
  Examples of workflows are approval requests and task assignment.
  Workflows can be triggered by values of fields in the form as well.
- Workflows should function via Group membership, wherein forms can be sent from 1 group to another in a queue, with email notification to users in that group
- Authorized users should be able to assign forms to users for them to complete. Upon assignment the user should be able to be notified of the new task on the mobile device

#### 2. Reporting

The business requirements are:

- SQL Server for storage & SSRS for reporting
- Dashboard
- Self-service ad-hoc reporting once configured
- Live or scheduled updates. Scheduled updates could be:
  - o Daily, Weekly, Monthly
  - At certain time of the day
- Report distribution via email
  - o Formats: Inline HTML, PDF
  - o Scheduling: as above

- Charts
  - o Bar,
  - o Column
  - o Pie
  - o Line
  - o Scatter
  - o Area
  - o Stacked
  - o Gauge
- Pivot tables
- Interactive drill-down capability. For example, clicking on a section of a pie chart would bring up the details of that section
- Report filters and sort