

**Project Technical Requirement Specification**

**(PTRS)**

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# **Preface**

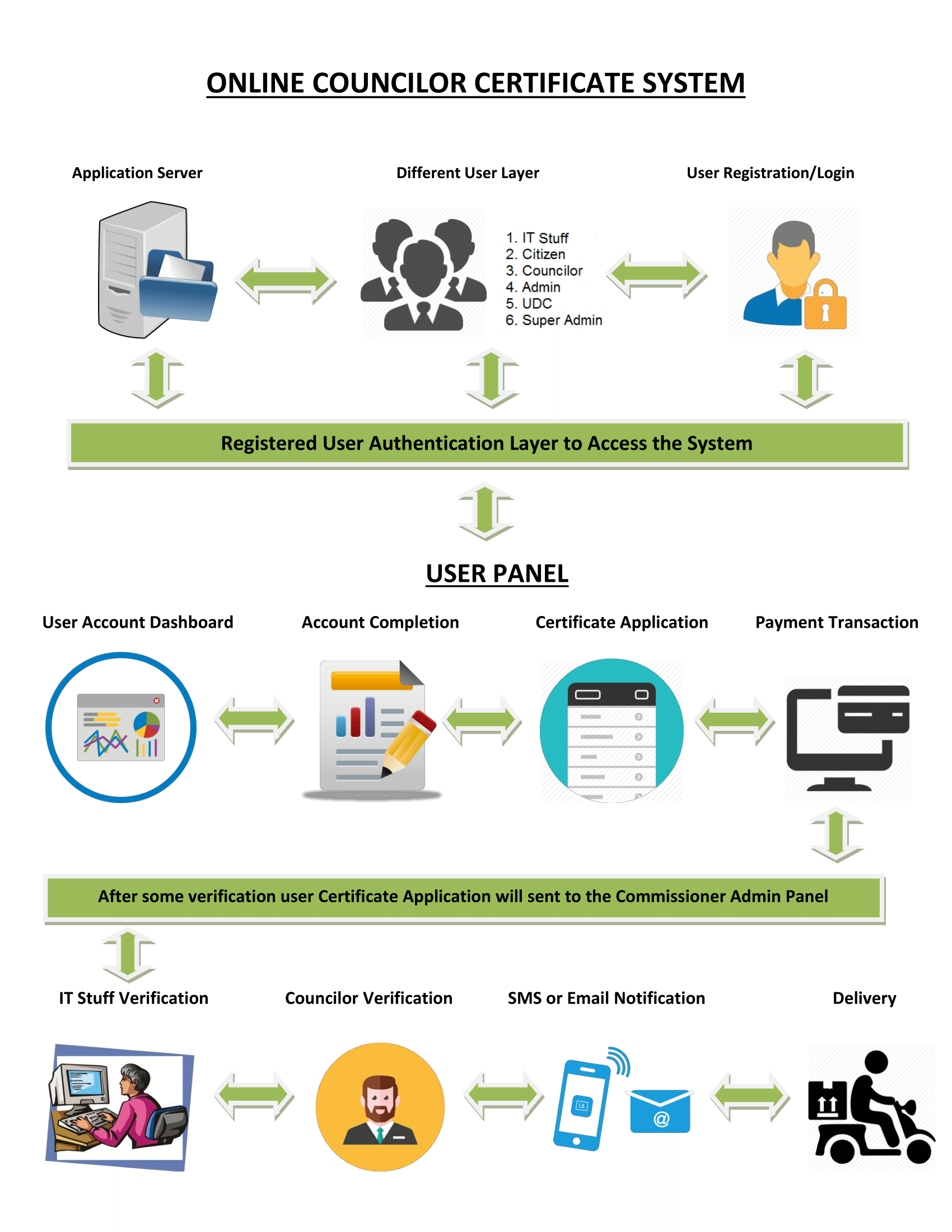
The development initiative of ***Online Councilor Certificates*is** among the pioneer moves to carry out the long-cherished dream of a digitalized nation. The system is anticipated to simplify the services provided by ***RamgotiPouroshova (Pilot area)***through ICT that have previously been practiced in traditional manual way so that citizen services can be provided in faster, easier and organized manner. This initiative aims to ease the citizens’ hassles as service recipients through modernization of ***Online Councilor Certificates issuing* system** with more authenticity and accurately. In addition, the system will reduce time, visit and cost at the service recipients end. With this initiative, *pourshova’s*will step forward in the government’s vision of Digital Bangladesh.

# **Objective**

* **Online Application** for Councilor Certificates. So the citizens Time, Cost & visit will be reduced
* Sending Application Approval/rejection Information via SMS/Email to the Applicant.
* Applicant may receive the certificates **by Post** to avoid any visit to Councilor office.
* To provide quick and better services for Online Councilor Certification.
* To maintain a citizen and family database so that family related information can be easily managed
* Information dissemination and quick decision making.
* To ensure good governance at different levels of service management.
* To ensure easier, time and cost effective and hassle free services provided to the citizens.

# **Proposed System Description**

## **Context Diagram**



## **Stakeholders & Dependencies**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stakeholder** | **Dependencies** | **Category** | **Coordination Role** | **Mode** |
| Ministry of LGD | Allocation of super admin role and access for monitoring purposes | Infrastructure | A2i | Resolution |
| Vendor | Software development | Infrastructure | Olivine Limited | Resolution |
| Outsourcing | Citizen’s data collection and input | Data Service | Olivine Limited | Resolution |
| Election Commission NID Project | NID information Verification | Data Service | A2i | MOU |
|  |  |  |  |  |
| Councilor Office | Implementation purpose(Certificate Approval and Issuance) | Infrastructure | Ramgoti & Srimongol Pouroshova/Olivine Limited, | MOU |
| Digital Centers | Application for Citizens | Data Service | PDC/ Olivine Limited | MOU |
| Mobile Phone Operators | SMS based services | Data Service | A2i/Olivine Limited/Telecom Operator | MOU |
| Bangladesh Gov portal | Integration of portal | Infrastructure | A2i | MOU |
| Internet. Org | Integration of portal | Infrastructure | A2i | MOU |
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## **System Features & Functions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Module** | **Task ID** | **Task/Feature List** | **Remarks** |
| **USER REGISTRATION** |  | Citizens Registration | * NID/parents NID required |
|  | IT Staff Registration | * Councilor office ID required |
|  | Councilor Registration | * Councilor ID required |
|  | Super Admin Registration | * Ministry office ID required |
|  | UDC user registration | * UDC office ID required |
|  |  |  |  |
| **SYSTEM LOGIN** |  | Citizens Login | * NID/parents NID required |
|  | IT Staff Login | * Councilor office ID required |
|  | Councilor Login | * Councilor ID required |
|  | Super Admin Login | * Ministry office ID required |
|  | UDC user Login | * UDC office ID required |
|  | User Password Change/Recovery |  |
|  |  |  |  |
| **Citizens Dashboard** |  | Application for the Certificates by citizens | \*\* Valid Citizen user id required and types of certificates   1. Nationality – \*NID/passport 2. Character- \*police verification 3. Marriage- \*marriage certificate 4. Address verification- \*NID address 5. Others |
|  | Application for **Warish** certificates | \*\*All family Members   * NID * Mobile Numbers * Email optional   \*\* 7days notification period |
|  | Profile Management | Update, Delete information |
|  | Notification Box for application approve/reject status |  |
|  | Show List of already issued certificates | Only issued certificates to citizen are shown |
|  | Check certificate needs to send by post | \*\* Postage and Courier fee is payable by client. |
|  | Re- Apply for rejected application | \*\* Previous money transaction code can be used for 30 Days from rejection. |
|  |  |  |  |
| **UDC user Dashboard** |  | Application for the Certificates by UDC representative for citizens | \*\* Valid **UDC user id** required and types of certificates are   1. Nationality 2. Character 3. Marriage 4. Address verification 5. Others |
|  | Application for **Warish** certificates for citizens | \*\*All Family Members NID and Mobile Numbers and/or email required for Verification |
|  | Profile Management for user by UDC representative |  |
|  | Notification Box for application approve/reject status |  |
|  | Re- Apply for rejected application | \*\* Previous money transaction code can be used for 30 Days from rejection. |
|  |  |  |  |
| **IT Staff Dashboard** |  | Application verification and comments by IT staff for Councilor to approve/reject | \*\* required  Unique ID  Area Code  Name |
|  |  | Notification Box of pending applications |  |
|  |  | List of Approved Certificates for print | \*\* Councilor approval required |
|  |  | Search Citizen’s information by holding number |  |
|  |  |  |  |
| **Councilor Dashboard** |  | Application approval/ Rejection by Councilor |  |
|  |  | Notification Box of pending applications |  |
| **Admin Dashboard** |  | Verify Councilor Registration Request |  |
|  | Monitor the Certificate issuance activities and logs |  |
|  |  |  |  |
| **Olivine Super Admin** |  | Allowed to do all necessary changes |  |
|  | Super Admin Panel with all facilities |  |
|  |  |  |  |
| **System Responses** |  | Check for Previous Application History and Issued Certificates | \*\* Immediately after Application by the user |
|  | Application Rejection Message sent to Applicant | \*\* If application is rejected by the councilor |
|  | If application rejected, then invitation for reapplication with the previous money transaction code. |  |
|  | Application Approval Message sent to Applicant |  |
|  | Store Certificate’s information in Database |  |
|  | Dynamically Generate PDF Certificates from stored information |  |
|  | Unique verification code generation for each certificates | \*\* Each certificates will have a unique code for further verification(s). |
|  | Notification of Citizen Account Activation | \*\* SMS/email notification |
|  | Regular Database Backup | \*\* Weekly Backup |
|  |  |  |  |
| **System Features** |  | Role based User Management |  |
|  | Device Responsive System |  |
|  | Reports generation | * Applications by date * Approvals by dates * Certificate Issues * Payment History * Previous Applications * Others (TBA) |
|  | Feedback/Complaint |  |
|  | Contact methods (Form, email etc.) |  |
|  | OCCS integration to internet.org |  |
|  | OCCS integration to bangladesh.gov.bd portal |  |
|  | Payment Methods:   1. Online Payment 2. Mobile Banking 3. Teletalk Recharge |  |
|  |  |  |  |
| **OCC web Outlook** |  | Services List |  |
|  |  | Online Application Services |  |
|  |  | User Guidelines |  |
|  |  | Public Notice |  |
|  |  | View/Search Options |  |

### System Functional Description Details:

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Module:** | **User Registration** | | **Feature:** | **Registration** | **Task ID :** | | **T-01** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | CitizensUseraccount registration/Profile Creation | Citizens | Web Form | SMSor  Email | Registered User account created or declined | If accepted, Profile info Stored into database or redirect web portal | NID/parents NID required |
| **Module:** | **User Registration** | | **Feature:** | **Registration** | **Task ID :** | | **T-02** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | IT Staff account registration/Profile Creation | IT Staff | Web Form | SMS or  Email | Registered User account created or declined | If accepted, Profile info Stored into database or redirect web portal | Councilor office ID required |
| **Module:** | **User Registration** | | **Feature:** | **Registration** | **Task ID :** | | **T-03** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Councilor  account registration/Profile Creation | Councilor | Web Form | SMS or  Email | Registered User account created or declined | If accepted, Profile info Stored into databaseor redirect web portal | Councilor ID required |
| **Module:** | **User Registration** | | **Feature:** | **Registration** | **Task ID :** | | **T-04** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Super Admin  account registration/Profile Creation | Super Admin | Web Form | SMS or  Email | Registered User account created or declined | If accepted, Profile info Stored into database or redirect web portal | Ministry office ID required |
| **Module:** | **User Registration** | | **Feature:** | **Registration** | **Task ID :** | | **T-05** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | UDC Useraccount registration/Profile Creation | UDC user | Web Form | SMS or  Email | Registered User account created or declined | If accepted, Profile info Stored into database or redirect web portal | UDC office ID required |

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| **Module:** | **System Login** | | **Feature :** | **Login into System** | **Task ID :** | | **T-06** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Login into Citizen Account | Citizens | Web Form | Alert or Popup notification | Successful Login or Declined | If successful Login, then redirect to user dashboard or redirect to Login page | NID/parents NID required |
| **Module:** | **System Login** | | **Feature :** | **Login into System** | **Task ID :** | | **T-07** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Login into IT StaffAccount | IT Staff | Web Form | Alert or Popup notification | Successful Login or Declined | If successful Login, then redirect to user dashboard or redirect to Login page | Councilor office ID required |
| **Module:** | **System Login** | | **Feature :** | **Login into System** | **Task ID :** | | **T-08** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Login into Councilor Account | Councilor | Web Form | Alert or Popup notification | Successful Login or Declined | If successful Login, then redirect to user dashboard or redirect to Login page | Councilor ID required |
| **Module:** | **System Login** | | **Feature :** | **Login into System** | **Task ID :** | | **T-09** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Login into Super Admin Account | Super Admin | Web Form | Alert or Popup notification | Successful Login or Declined | If successful Login, then redirect to user dashboard or redirect to Login page | Ministry office ID required |
| **Module:** | **System Login** | | **Feature :** | **Login into System** | **Task ID :** | | **T-10** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Login into UDC Account | UDC | Web Form | Alert or Popup notification | Successful Login or Declined | If successful Login, then redirect to user dashboard or redirect to Login page | UDC office ID required |

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| **Module:** | **User Password Change/Recovery** | | **Feature:** | **Password Change/Recovery** | **Task ID :** | | **T-11** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Change or Recover Password | All Type of User | Web Form | Alert or Popup notification | If successfully Changed or Recovered then system generates a success alert or popup or generates negative alert or popup | Redirect to Dashboard and Store New Password into Database or not save the password to the database | It will need specific email or unique ID of the individual users |

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| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-12** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Application for the Certificates by citizens | Citizen | Web Form | SMSorEmail | If accepted then proceed to the further verification or declined and generate resubmit notification | If submitted successfully then Store info into Database and other verification applied | \*\* Valid Citizen user id required and types of certificates  Nationality – \*NID/passport  Character- \*police verification  Marriage- \*marriage certificate  Address verification- \*NID address  Others |
| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-13** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Application for **Warish** certificates | Citizen | Web Form | SMS or Email | If accepted then proceed to the further verification or declined and generate resubmit notification | If submitted successfully then Store info into Database and other verification applied | \*\*All family Members  1. NID  2.Mobile 3.Numbers  Email required  \*\* 7days notification period |
| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-14** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Profile Management | Citizen | Web Form and Pages | Web Alerts | If profile customization successfully done then generate success notification or generate unsuccessful notification | If submitted successfully then Store info into Database and notification generate | Update, Delete information |
| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-15** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Notification Box for application approve/reject status | Citizen | Notification Box | Popup or Alert type notification | On successful or unsuccessful operation generate Notification Box | Display operation status notification |  |
| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-16** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Show List of already issued certificates | Citizen | Web Table | Display data record | List of issued certificate | Retrieve issued certificate information from database | Only issued certificates to citizen are shown |
| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-17** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Check certificate needs to send by post | Citizen | Manually in office or By Post | SMS or Email | Delivered to Applicant | Certificate sent to applicant | Postage and Courier fee is payable by client. |
| **Module:** | **Citizens Dashboard** | | **Feature:** | **Citizens Dashboard Options** | **Task ID :** | | **T-18** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| 01 | Re- Apply for rejected application | Citizen | Web Form | SMS or Email | Re-Apply acceptation or rejection notifications | Store information on acceptation or declined | Previous money transaction code can be used for 30 Days from rejection. |

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| **Module:** | | **UDC user Dashboard** | | | **Feature :** | | **UDC user Dashboard Options** | | **Task ID :** | | | **T-19** | |
| **Action No.** | | **Action** | | **Actor** | **Medium** | | **Notification** | | **Output** | | **Post Action** | **Remarks** | |
| **01** | | Application for the Certificates by UDC representative for citizens | | UDC user | Web Form | | SMSor Email | | If accepted then proceed to the further verification or declined and generate resubmit notification | | If submitted successfully then Store info into Database and other verification applied | \*\* Valid **UDC user id** required and types of certificates are :  1.Nationality  2.Character  Marriage | |
| **Module:** | | **UDC user Dashboard** | | | **Feature :** | | **UDC user Dashboard Options** | | **Task ID :** | | | **T-20** | |
| **Action No.** | | **Action** | | **Actor** | **Medium** | | **Notification** | | **Output** | | **Post Action** | **Remarks** | |
| **01** | | Application for **Warish** certificates for citizens | | UDC user | Web Form | | SMS or  Email | | If accepted then proceed to the further verification or declined and generate resubmit notification | | If submitted successfully then Store info into Database and other verification applied | All Family Members NID and Mobile Numbers and/or email required for Verification | |
| **Module:** | | **UDC user Dashboard** | | | **Feature :** | | **UDC user Dashboard Options** | | **Task ID :** | | | **T-21** | |
| **Action No.** | | **Action** | | **Actor** | **Medium** | | **Notification** | | **Output** | | **Post Action** | **Remarks** | |
| **01** | | Profile Management for user by UDC representative | | UDC user | Web Form and Pages | | Web Alerts | | If profile customization successfully done then generate success notification or generate unsuccessful notification | | If submitted successfully then Store info into Database and notification generate |  | |
| **Module:** | | **UDC user Dashboard** | | | **Feature :** | | **UDC user Dashboard Options** | | **Task ID :** | | | **T-22** | |
| **Action No.** | | **Action** | | **Actor** | **Medium** | | **Notification** | | **Output** | | **Post Action** | **Remarks** | |
| **01** | | Notification Box for application approve/reject status | | UDC user | Notification Box | | Popup or Alert type notification | | On successful or unsuccessful operation generate Notification Box | | Display operation status notification |  | |
| **Module:** | **UDC user Dashboard** | | | | **Feature :** | **UDC user Dashboard Options** | | **Task ID :** | | | | | **T-23** |
| **Action No.** | **Action** | | **Actor** | | **Medium** | **Notification** | | **Output** | | **Post Action** | | | **Remarks** |
| **01** | Re- Apply for rejected application | | UDC user | | Web Table | Display data record | | List of issued certificate | | Retrieve issued certificate information from database | | | Previous money transaction code can be used for 30 Days from rejection. |

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| **Module:** | **IT Staff Dashboard** | | | **Feature :** | **IT Staff user Dashboard Options** | **Task ID :** | | **T-24** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Application verification and comments by IT staff for Councilor to approve/reject | IT staff | Web Form | | SMSor Email | Verify applications and make feedback of acceptation or rejection | For positive verification make positive feedback otherwise negative feedback | Required  Unique ID  Area Code  Name |
| **Module:** | **IT Staff Dashboard** | | | **Feature :** | **IT Staff user Dashboard Options** | **Task ID :** | | **T-25** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Notification Box of pending applications | IT staff | Web Table | | Table data | View pending application list | Retrieved data from database |  |
| **Module:** | **IT Staff Dashboard** | | | **Feature :** | **IT Staff user Dashboard Options** | **Task ID :** | | **T-26** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | List of Approved Certificates for print | IT staff | Web Table | | Table data | View approved application list | Retrieved data from database | Councilor approval required |
| **Module:** | **IT Staff Dashboard** | | | **Feature :** | **IT Staff user Dashboard Options** | **Task ID :** | | **T-27** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Search Citizen’s information by holding number | IT staff | Web Search Form | | Search result finding notification | View found result | Retrieve Data from database table |  |

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| **Module:** | **Councilor Dashboard** | | | **Feature :** | **Councilor Dashboard Options** | **Task ID :** | | **T-28** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Application approval/ Rejection by Councilor | Councilor | | Approve or rejection button | Approval or Rejection related notification | Approval or Rejection of the Application request | If approved then sent to IT officer for the post or decline notification to applicant |  |
| **Module:** | **Councilor Dashboard** | | | **Feature :** | **Councilor Dashboard Options** | **Task ID :** | | **T-29** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Notification Box of pending applications | Councilor | | Web Table List | List of Pending application | Pending Applications | Retrieve Pending Application from the database |  |

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| **Module:** | **Admin Dashboard** | | | **Feature :** | **Admin Dashboard Options** | **Task ID :** | | **T-30** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Verify Councilor Registration Request | Admin | | Registration request list | Approval or rejection notification | List of councilor pending requests | Retrieve councilor registration request list from database |  |
| **Module:** | **Admin Dashboard** | | | **Feature :** | **Admin Dashboard Options** | **Task ID :** | | **T-31** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Monitor the Certificate issuance activities and logs | Admin | | Various list and data ratio of certificate application | Reporting list of the certificate transections | Filtered analysis data of a specific period of time or all time | Retrieve all data from database |  |

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| **Module:** | **Olivine Super Admin** | | | **Feature :** | **Olivine Super Admin Dashboard Options** | **Task ID :** | | **T-32** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Allowed to do all necessary changes | Olivine Super Admin | | All web application facilities | All kind of alerts and notifications | Filtered analysis result or operational functionaries | Retrieve all kind of data from database |  |
| **Module:** | **Olivine Super Admin** | | | **Feature :** | **Olivine Super Admin Dashboard Options** | **Task ID :** | | **T-33** |
| **Action No.** | **Action** | **Actor** | **Medium** | | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Super Admin Panel with all facilities | Olivine Super Admin | | Web pages and features | All kind of application related, internal and external reporting notifications | Filtered analysis reports | Retrieved all application data |  |

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| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-34** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Checking Previous Application History and Issued Certificates | System | Web Pages and Reporting medium | Displaying Application history if exists | Previous and Issued Application Report | Retrieved Application data from system database | Immediately after Application by the user |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-35** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Application Rejection Feedback from the system sent to Applicant | System | Web based Automatic Notification generate medium | SMS or  Email | If rejected, send rejection feedback to the applicant | Rejection feedback generate from the System | If application is rejected by the councilor |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-36** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | If application rejected, then invitation for reapplication with the previous money transaction code. | System | Automatic web based medium that make feedback to the applicant to reapplication | SMS or  Email | Generate reapplication feedback with the rejected transaction code | Generate system reapplication feedback to the applicant |  |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-37** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Application Approval Message sent to Applicant | System | Automatic web based medium that make feedback to the applicant for successful approval | SMS or  Email | Approval feedback from the system | Generate approval feedback to the applicant |  |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-38** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Store Certificate’s information in Database | System | Database System | SMS or  Email | Store Application data into database | Sent validate data from web form to system database |  |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-39** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Dynamically Generate PDF Certificates from stored information | System | System feature that generate PDF documents from the existing information | If generated then make successful PDF generation feedback | Generate PDF document | Retrieve application data from system database and generate PDF document |  |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-40** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Unique verification code generation for each certificates | System | System features that attach unique verification code with the approved certificate | Send unique verification code to the applicant with the approved application | Unique Verification code | Sent verification code to the applicant user throw system | Each certificate will have a unique code for further verification(s). |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-41** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Notification of Citizen Account Activation | System | System feature that verifies and activates Citizen accounts | SMS or  Email | Citizen account activation | Activate pending Citizen account request and store to database | SMS/email notification |
| **Module:** | **System Responses** | | **Feature** | **System Internal Application Processing Functionalities** | **Task ID:** | | **T-42** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Regular Database Backup | System | Web based system feature that takes backups of system information | Generate system backup | Backup Files and Documents | Save backup file or documents to the local system or central server | Weekly Backup |

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| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-43** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Role based User Management | System | User Management layer | Create role based notification plan | Create different role based users | Different role based user data save in system database |  |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-44** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Device Responsive System | System | Device responsive features that make system independently runs on different kind of device | Catching device type that the system runs on | Act like different on the basis of different kind of device | Manage view and data deployment on the basis of device kind |  |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-45** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Reports generation | System | System feature that generate different kind of data report | Different kind of document (PDF, Excel ect) | Filtered document reports | Retrieve data from system database and generated filtered reports | 1.Applications by date  2.Approvals by dates  3.Certificate Issues  4.Payment History  5.Previous Applications  Others (TBA) |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-46** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Feedback/Complaint | System | System feature to make various feedback or complain from different user or admin panel | System internal feedback or notification feature or SMS/email | Generate feedback or complain output | Verified system output as feedback or complain |  |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-47** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Contact methods (Form, email etc.) | System | Web Form | SMS or  Email | SMS or email notification | Send SMS or email notification from system |  |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-48** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | OCCS integration to internet.org | System | Website integration methodology | If integrated, then generate successful integration feedback or unsuccessful integration feedback | Integration result | Website or system integration processes |  |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-49** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | OCCS integration to bangladesh.gov.bd portal | System | Website integration methodology | If integrated, then generate successful integration feedback or unsuccessful integration feedback | Integration result | Website or system integration processes |  |
| **Module:** | **System Features** | | **Feature** | **Internal System Management Functionalities** | **Task ID** | | **T-50** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Payment Methods:  1.Online Payment  2.Mobile Banking  3.Teletalk Recharge | System | Web Form | SMS or  Email | On acceptation of the payment generate feedback to the applicant for further verification | Send payment to the Application server and get feedback |  |

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| **Module:** | **OCCS web Outlook** | | **Feature** | **OCCS Outlook and Misc Feature** | **Task ID** | | **T-51** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Services List | System | Web page | Service list display | Service List | Web Content |  |
| **Module:** | **OCCS web Outlook** | | **Feature** | **OCCS Outlook and Misc Feature** | **Task ID** | | **T-52** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Online Application Services | System | Web page | Application Services display | Application Service List | Web Content |  |
| **Module:** | **OCCS web Outlook** | | **Feature** | **OCCS Outlook and Misc Feature** | **Task ID** | | **T-53** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | User Guidelines | System | Web page | User Guidelines documentation | User Manual | Web Content |  |
| **Module:** | **OCCS web Outlook** | | **Feature** | **OCCS Outlook and Misc Feature** | **Task ID** | | **T-54** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | Public Notice | System | Web page | Public Notification from system | Public notification | Web Content |  |
| **Module:** | **OCCS web Outlook** | | **Feature** | **OCCS Outlook and Misc Feature** | **Task ID** | | **T-55** |
| **Action No.** | **Action** | **Actor** | **Medium** | **Notification** | **Output** | **Post Action** | **Remarks** |
| **01** | View/Search Options | System | Web Form | If found desired result then generate or declined | Search result | Retrieve desired result from System database |  |

# **Project Management Scope**

Selected vendor must also provide and follow the approved work plan of the application in terms of Standard Software Development Life Cycle (SDLC).

## **Software Development Activities**

### Software Requirement Study

Requirements finalization is the first milestone of this assignment. The selected vendor needs to go through the attached User Requirement Specification (URS) document as primary guideline of this project. Vendor will need to carryout detailed system study to find out actual requirements of the software. Vendor needs to prepare detailed final URS and submit the document for approval. Software Requirements Specification (SRS) to be prepared based on the approved URS. However, further requirements/ suggestions that would come during feedback collection process through demonstration of UAT and beta version of the application to different stakeholders should be accommodated.

**Deliverable:** Final detailed URS.

### System Analysis and Design

Based on the approved URS, vendor needs to prepare detailed standard Software Requirement Specification (SRS) document and submit the document for approval, a simulated demo for the software to be conducted and user feedback to be collected and accommodated in the SRS. During system design phase, Software Design Document (SDD) must be prepared based on the approved SRS

* SRS document should follow standard SRS format with below recommended sections:
* Identified components and features
* Process flow diagram
* Description of process, detailed functional requirements of individual feature
* Use Cases

SDD should contain

* Design overview
* User Interface design
* Description of UI and requirements
* Objects and action
* Data flow diagram
* NID Integration
* Payment Gateway Integration
* Bangladesh.gov.bd portal integration
* Internet.org integration

**Deliverable:** Approved Software Requirement Specification (SRS) and Software Design Document (SDD)

### Software Development

Based on the approved SDD vendor must initiate development of the application along with standard code level documentation. Purpose of the code level document is to ensure understanding and portability of source code. Documentation of code, header of each file, algorithms, interfaces, and APIs should be supplied with proper description.

Vendor should perform all sorts of testing based on the standard testing methodology like white and black box. Testing shall be carried out rigorously throughout the software development life cycle. Unit and other code or development level test must be performed with proper test plan documentation and report.

Vendor should also prepare test cases for all functionalities that each module offers according to the SRS and submit their test result and test case list before UAT.

Vendor must organize application level load, stress test and should submit application capacity report in terms of usage load. Test case document should prepare and submit before performing UAT. Test cases should follow standard test case template; a sample test case template is given below.

**Deliverables:** Developed vendor tested Software Application, Complete Test Plan and Test Report.

### Integration and Testing

### Deployment/Hosting / Installation

Vendor must provide detail hosting requirements related hardware, servers, network, security, storage, traffic, firewall etc. i.e. complete hosting infrastructure that will be requires for their developed application hosting considering the implementation scope. Based on their submitted requirements, regarding hosting, the concern authority will provide detail hosting infrastructure and environment asked. Vendor will prepare a complete test case for UAT. After performing the necessary testing vendor will perform the following:

**Deliverable:**

* Beta version released with source code.
* Code and relevant technical documents.
* Relevant test Report.
* Test case for UAT.

### UAT / on site Testing

A vendor tested application must be hosted in UAT environment and should be tested under close supervision of vendor and A2I by selected Olivine Limited personnel. Olivine Limited personnel will test the application based on approved test case list. Vendor must take full responsibility of fixing and delivering any issue identified during UAT operation.

### Manual

Vendor must prepare different manuals for all types of users and operation. The selected vendor must provide the following types of manuals.

* Technical Manual
* User Manual
* Training Manual

## **System Implementation Activities**

### Deployment/Hosting /Installation

Vendor must provide details hosting/Installation& system Deployment Plan along with requirements related hardware, servers, network, security, storage, traffic, firewall etc. The plan also should have the data entry/data migration plan.

**Deliverable:**

* System Deployment Plan.
* Data Entry & Data Migration Plan.

### Infrastructure

Vendor must provide a details requirement report to run the system at user end. They need to submit a plan to ensure the required infrastructures at user end with the help of the organization.

**Deliverable:**

* Infrastructure Requirement Report.
* User End readiness Plan.

### Support

Vendor must provide all kind of supports at the time of Test Run & Piloting. The vendor should submit a details support plan including support HR, Mode, Methodology etc.

**Deliverable:**

* Details Support Plan.

### Training

Vendor must provide a detail Training plan to implement/rollout the system successfully by the organization. Different types of training for different types of user like ToT, Admin User Training, Technical Training, End user training can be required for implement, maintain and run the system in live.The detail training plan should be cover all the training scopes.

**Deliverable:**

* Details Training Plan.
* Reports on Training
* User Feedback

## **Warranty & Maintenance**

A period of two (2) years on-site warranty for fixing any reported software problems. During the warranty period Vendor should keep standby at least one midlevel ICT expert having minimum 3-5 years of experience in IT-related fields of web-application development. The person should be attached with the project during the development phase to have clear understanding about application and its detail business. He/she should have hands on experience in solving end-user problems.

Within this period, the maintenance team from the vendor should be responsible for fixing reported problems. Besides the bug fixing vendor may asked to change or modify interfaces, adding variables and create reports without changing in the design of the system during the warranty period.

# **Technologies Preference**

Application development tool and platform is open to select. Vendor must consult with A2I and Olivine Limited to finally select the development platform and frameworks and should start with the development after approval from Olivine Limited and A2I.

The main components of the software will be web based application. It should be run in Windows operating system and should be compatible to all major browsers such as – Internet Explorer, Firefox, Google Chrome, Opera etc.

The System UI should be compatible with Tab & Smart Phone browser.

# **Project Location**

# RamgotiPouroshova, Laxmipur-4

# **System Security**

The system should be designed and developed properly to handle security issues. Following are the aspects of security issues.

* Access Rights for user
* Protection against data loss
* Data Transfer
* Concurrent Issues
* Protection against unintended user action
* Protection against threats – SQL injection, Cross Site Scripting, Cross Site Request Forging etc.

# **Deployment & Hosting plan**

The final system will be hosted in Nation Data Center(NDC hosting) and can be accesed via bangladesh.gov.bd portal domain. There will also be a facebook page linked with the online councilor certificate systems

# **Language**

Software application will be in Bangla i.e. all Menu and Interfaces will be in Bangla, Maximum control of UI will be need to accept data in Bangla. Some text controls may need to accept text data both in Bangla and English.

# **Copyright**

Olivine Limited will be entitled to all proprietary rights including but not limited to patents, copyrights and trademarks, with regard to material which bear a direct relation to, or is made in consequence of the services provided by the vendor under this TOR. At the request of the Olivine Limited, the vendor shall assist in securing such property rights and transferring them in compliance with the requirement of the applicable law. After the completion of the project such rights will be handed over to the Olivine Limited and A2i, Prime Minister’s Office project authority as mentioned the agreement paper between a2i and Olivine Limited.

The source code developed under this TOR will be owned by Olivine Limited. The vendor should properly document all such codes and deliver it to Olivine Limited A2I, Prime Minister’s Office. Vendor cannot claim any royalty or authority of any sort in case of replicating the source code /database or any other deliverables under this TOR for any future use that Olivine Limited see fits.

Any studies, documents, reports or other material, graphic or otherwise, prepared by the vendor for the project under this TOR shall belong to and remain the property of Olivine Limited and Government of the People’s Republic of Bangladesh.

# **Project Timeline**

Following are the major milestone activities with expected time to complete the individual activity of the assignment. Time column indicates days to finalize individual activity of the project.

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| --- | --- | --- | --- |
| **Sl. No.** | **Activity** | **Deliverable** | **Time in Days (working)** |
| 1 | URS Finalization | Final URS |  |
| 2 | System analysis | SRS(System Requirement Specifications) |  |
| 3 | System Design | System Design Document |  |
| 4 | Technical collaboration to integrate Online payment gateway, NID & SMS gateway | MOU among NID, Payment gateway&Robi/Teletalk. Technical interfacing with NID System, SMS gateway and Payment gateway |  |
| 5 | System Development and internal Testing that includes all type of development level testing. | Developed Software & Code Documentation |  |
| 6 | Configuration, Integration and Setup, Data Migration | Solution ready for UAT |  |
| 7 | Hosting | Hosted Application |  |
| 8 | UAT with test and migrated data | Developed Software for Piloting |  |
| 9 | Training for Trainer, System Admin | Trained personnel for complete pilot operation |  |
| 10 | Live Operation | - |  |
| 12 | Software warranty and maintenance | - |  |