Height clearance certificate management system software

CAAB currently issues height clearance certificate for the lands across it's operational area. Any landowner can request for the certificate to CAAB by submitting required information and fees. The total procedure is implemented manually through the service seeker and service provider with separate steps in fees submission with bank engagement. This system's main goal is to automated the whole procedure for ensuring of height clearance certificate to beneficiary without any hassle.

E-service objectives:

Service recipient:

- Can apply for structural height clearance
- No need to apply through manual system
- Getting height clearance certificate form system
- Can pay the service fee using any payment method from bank to MFS.
- SMS confirmation system
- Reduce Time
- Ensure transparency
- Ensure benefits of height clearance certificate to beneficiary
- Inform beneficiary the status of the certificate
- Receive height clearance certificate without any hassle
- Notification of certificate.

Service Provider:

- Can approve height clearance certificate application through the approval chain
- Automated report of height clearance calculation
- Seamless integration with e Filing.
- Automatic Reporting Service.
- Rajuk can check the certificate authenticity by themselves.
- Paperless process

Application Functions and Features

List of Modules:

- 1. Information services
- 2. Online Application
- 3. Digital area map integration
- 4. Payment Gateway
- 5. Online Height clearance certificate
- 6. User management

Module 1: Information Service

Functionalities:

- Will provide information regarding procedure of getting height clearance certificate and eligibility
- client information
- location wise land information
- height clearance information

Challenges:

Collect height clearance related data from CAAB

Module 2: Online Application

Functionalities:

- Any Citizen can apply for structural height clearance in any Bangladeshi Airport area.
- With application form, applicant can provide his all supporting documents through online.
- After submit the application, applicant cannot change anything.
- System admin will check the applications.
- Auto SMS notification after successful application, payment confirmation & certification confirmation.
- Service recipient can search for one's own application and can check the progress of system's process and application status
- Status of all application will be displayed in dashboard which will monitor by an administrator but applicant cannot see anything.
- System will make report on user's online application service activities and will showing on dashboard

Challenges:

• online application module is simply an I/O module but the main challenge for this module is to make a real time dashboard report based on system's user activities

Module 3: Digital area map integration

Functionalities:

- Map integration with all airport runway as per Survey of Bangladesh map
- User can search their land by providing coordinates or tafsil of the landowner
- Below the result (Permissible height) messages will show that for height clearance certificate from CAAB .

Challenges:

• This module will be most challenging part for any developers. We can use google map api for searching land location. But we have to connect this map to system database in order to getting height clearance related information.

Module 4: Payment gateway management

Functionalities:

- Application will provide service charge in any payment system with all kind of bank cards and MFS
- After any kind of successful payment user will get confirmation SMS by payment gateway process

Challenges:

• For connecting CAAB's Sonali bank offical account number to the payment gateway system's

Module 5: Online Height clearance certificate

Functionalities:

- Applications as well as online submitted documents will be verified by the responsible authorities
- After approval from the authority a certificate will generate automatically and send to applicant's profile

- Service recipient will be notified through Email or sms
- Service recipient will be able to print the certificate any time
- Service provider also send applicant's information and clearance documents to concerned stack holder like RAJUK
- All information of the application will be stored for future use or reference

Challenges:

- Configuration of real time e-notification
- Automated certificate generate

Module 6: User management

Functionalities:

- User registration for this system
- system admin can create new user (CAAB, RAJUK or another stack holders)
- User can update limited field of information defined by the system.
- The system admin can change or amend the role privilege given to user
- System can generate report on user activity. The system admin will monitor it when necessary.
- To view real time user activity by the system admin

Users and User Roles:

- 1. e-service operator possible number of user 10 (Office of the CAAB)
- 2. e-service observer possible number of user 10 (Respective Desk office)
- 3. e-Service admin possible number of user 10 (Chairman, Directors and others)

Challenges:

•	Collecting role wise services plan from CAAB and integrate those user role and permissions also.