

# Enterprise Software proposal

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## **Enterprise Software proposal**

### Overview and goals:

Every country and society need a kind of classification to make the daily activities easier to handle. Opening a bank account, getting married, selling a house and etc.

This unified system is being called (Civil Registration) that obviously is not a newly configured system but there might be some differences in this project from the main ones, due to existence and stored critical data, the security and responsivity are main measurements.

Main idea of the system is giving people a unique identity that identify them in every single organization so tracking and controlling will be easier for government and their organizations.

One of the most important task for this system is the relation between a lot of organizations which will be explained later in the project.

The management target of this system is being considered by government so not only there are laws controlling our system but also situations may make changes. In this case our system may need huge changes and updates so we have to make it, portable, secure, and reliable.

## **System features**

- ❖ Digitizing documents
- ❖ Easier and faster data exchange
- ❖ More efficient statistic gathering
- ❖ Easy access to any operation
- ❖ Fast and secure API
- ❖ Storing every activity
- ❖ Flexible with other organization policies
- ❖ Clear vision and easy processes for system users

## **Problems solved**

- Access to digitized documents from every branch
- Reliability and security against natural incidents
- Unified system for validation of an identity
- Speeding up the validation requests from external organizations
- CRUD made easier
- More controllable and portable system
- Easy to update system because of modularity

**Some of goals and tasks are shown below:**

- ❖ Birth certificate registration
  - ❖ Marriage and divorce registrations
  - ❖ Death certificate
  - ❖ Gathering populational statistics
  - ❖ National card issue
  - ❖ Changing ID (missed, destroyed, stolen)
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- ❖ Digitize and automate the registration of vital events, including births, deaths, marriages, and divorces.
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- ❖ Provide a centralized database for storing and managing vital records securely.
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- ❖ Enhance data accuracy and integrity through standardized data entry processes and validation checks
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- ❖ Facilitate easy access to vital records for citizens, government agencies, and authorized stakeholders.
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- ❖ Improve reporting capabilities for monitoring vital statistics and generating statistical reports

There are some indirect goals related to our system:

- ❖ Population count statistics
- ❖ Birth and Death control
- ❖ Pollution policies

## **Project Background**

In old systems storing that kind of data and in this amount was very inefficient and confusing. Also retrieving, deleting and updating data would cost a lot of time, money and human work.

Every document was physical. Therefore, all the processes were handled

By humans. Obviously that much of a data could not be handled fast and sometimes efficient.

So there comes the computers and our suggested system. Every document gets digitized, every single document has completely unique security measurements with a high secure rate along the speed.

For easier access, we store every single action with a reference code dedicated to it. This feature linearly helps us to find the main operation intention. How? Imagine a birth registration process is in operation, filling the form makes the first reference code and gets stored with the applicant unique ID, API comes in act to validate the filled form, after validation, another reference code gets created as a success status. Now we have two reference codes dedicated and bound to our applicant ID. This ID is the key to every single reference code. Therefore, we are able to see every request, change, and even deletions with one single Key "ID". Of course, for easier recognition, the essence of reference code will have multiple aspects.

Here comes digitizing system, the name says it all. For having access from every single organization branch and sub-branch we have to digitize our data

it is obvious that people might migrate from a place to another, what happens if the target branch does not have the information about the immigrant?

What happens if a document gets forged and we don't have the legit one in our data bases?

Both digitized and physical documents could get destroyed against natural incidents or theft. But it is proven that digitized documents are more reliable these days. Without digitizing documents, how are we going to provide the information that other organizations demand? What would be the use of our system if it's not digitized.

Previous systems had low rate of speed, efficiency and reliability, if you wanted to get your passport you had to wait a long period of time. Because lack of communication between two organizations. how are we going to solve this problem? With the background of digitizing, reference codes we only need one system to share these information. API comes handy as a proxy between third party organization request and our provided data. Like the example in this paragraph.

Our main target is to store and share this critical information. Because of the tight connection that our system should have with other government organizations we have to be precise.

Our new system makes the connection between registrant and organization tighter than ever, registrants can be in touch with our website or application.

They can send their requests, after authorizations such as two authentication factor and ETC... their request will be in process and the status would be traceable via App and website.

Our application is going to be a super app, what would be the use of it?

Imagine you have multiple SIM cards, registered bank accounts, car and obviously car plates and everything that has your name on it metaphorically, everything you may own.

You can see your bills, your account's balance, driving violations, tax payments, electrical bills and everything refers to you.

There might be some other apps that seem like our application but the difference is you just need one time registration and login, no need for multiple registrations. Because of our connection to third party organizations every single information related to an ID is available for us to deliver the needs.

This amount of information in a single app and single system is really dangerous, so how do we protect your information? First of all, explaining whole process makes our system vulnerable but there is some of them delivered.

- You must have active profile that happens with your request and if you don't have one there would be no information so the initiator is you.
- We have none stop monitoring the system logs, data stream and all requests that are sent or received and the suspicious ones gets cooldown
- Multi-factor authentication

- Physical security key
- Biometrics
- Notification on authentication apps
- One-time passcodes
- One last thing is your behaviour in our system, that will be followed by our ML algorithms and suspicious acts make the data exchange blocked.

One and a centralized app is going to make managing your works easier than ever, by our powerful API and the access level of our organization to other systems, we can guarantee to be able to control your tasks in every aspect, insurance, tax, salary management, bill payments and every single act that you may need.



## **Scope of services**

### **Application enterprise:**

This part is the bridge between our applicants and staff all the processes of registrations and annulments happen in this section.

Changing ID documents, and some verification of legitimate documents.

### **Laboratories:**

We have to deal with many digital and physical documents, we have to come up with a new solution to handle this problem.

This section mostly controls and invents security layers of the documents.

Some of the validation checks may happen with AI, but not only once, human eyes are more precise and reliable.

Integration of machine learning algorithms and optical character recognition (OCR) technology to automate the validation and verification of submitted records.

Deploy biometric authentication methods, such as fingerprint scanning and facial recognition, to enhance identity verification accuracy and security.

All this kind of approaches are handled by this laboratory department.

All reported received from other organizations, forged documents, or any kind of handicraft, will be dealt by both AI and human resources.

## **API:**

What makes our system different? The API.

This feature makes data and status transmission easier, faster and more efficient.

API handles the mid organizations requests for verifications, legitimization.

Because of high demand from third party systems we needed a way to both handle the data and load of servers. This system is fast, secure and light enough to meet the needs.

In case for more secure connections and data exchange, this feature is going to be private and needs governmental authorization which should be given by order of government cabinet.

## **Implementation plan**

- I. **Assessment and Requirements Gathering:** Conduct a comprehensive assessment of existing civil registration processes, stakeholder requirements, and technical infrastructure.
- II. **Software Development:** Design and develop the Civil Registration Software solution based on identified requirements and best practices in software development and data management.
- III. **Pilot Testing:** Conduct pilot testing of the software in select regions or jurisdictions to evaluate its functionality, usability, and effectiveness in real-world scenarios.
- IV. **Deployment and Training:** Deploy the software in phased rollouts, providing training and support to registration officers, administrators, and other users.
- V. **Monitoring and Evaluation:** Monitor system performance, user feedback, and key metrics to identify areas for improvement and ensure ongoing optimization.
- VI. **Scaling and Expansion:** Scale the software solution to additional regions or jurisdictions, incorporating feedback and lessons learned from pilot testing and initial deployments.

### **Cost Estimate:**

The cost of developing and implementing the Civil Registration Software will depend on factors such as scope, complexity, and scale. A detailed cost estimate will be provided following the completion of requirements gathering and assessment phase.

## **Conclusion**

The proposed Civil Registration Software offers a transformative solution for modernizing civil registration processes, improving efficiency, accuracy, and accessibility. By digitizing and automating vital event registration, governments can enhance service delivery, data integrity, and citizen satisfaction. We look forward to partnering with your organization to bring this vision to fruition and drive positive change in civil registration systems.

Thank you for considering our proposal. We are available to discuss any questions or concerns you may have and welcome the opportunity to collaborate on this important initiative.