

Invitation to the Developer Community to contribute to the development of Enrolment Software for UIDAI

Unique Identification Authority of India (UIDAI/ Authority) has been setup by the Government of India with a mandate to issue Unique Identification numbers (UIDs/ UID Numbers) to all the residents in the country. UIDAI proposes to create a platform to enroll the residents of the country in order to issue UID Numbers. These numbers may then be used for authentication. This can be used by several government and private organizations for better delivery of services to residents. The purpose of the UIDAI is to issue UID Numbers that are (a) robust enough to minimize / eliminate duplicate and fake identities, and (b) can be verified and authenticated in an easy, cost effective way. Details of the UIDAI approach are contained in the document titled “Creating unique Identity Number for every Resident in India” which is available at <http://www.uidai.gov.in/documents/Creating a unique identity for every resident in India.pdf>

UIDAI will use common demographic and biometric data for establishing and verifying identity, therefore, it becomes essential to standardize these data fields and verification procedures across its registering partners (Registrars). The details of the demographic fields and their structure have been finalized by the Authority and are contained in the report of the Data Standards and Verification Procedure Committee available at <http://www.uidai.gov.in/documents/UID DDSVP Committee Report v1.0.pdf> . Specifications and other details of the biometric attributes may be seen in the Report of the Biometric Committee at <http://www.uidai.gov.in/documents/Biometrics Standards Committee report.pdf> The Authority will be collecting the photograph, all ten finger images and iris scan of both the eyes.

The demographic and biometric information will be collected by the Registrars of the UIDAI. The Registrars will be the agencies of the State and Central Government and some other entities that, in normal course of their activities, interact with the residents. It is expected that the actual data collection from the residents will take place with the help of the Enrolling Agencies which will be hired by the Registrars. These enrolling agencies will send the information collected from the residents to the UIDAI’s Central Database (called the Central Identities’ Repository – CIDR) in a batch mode, probably at the end of each day electronically. These enrolment requests will be processed at the CIDR and the CIDR will issue UIDs to those residents whose records are complete (in terms of quality of biometric images and demographic information) and whose biometric attributes do not exist in the database (i.e. these are not ‘duplicates’). This information will be sent by the Authority to the individuals directly and also the concerned Registrar.

For enrolling residents into the UID System, the Authority will require necessary enrolment software (called the "Client Software"). This Client Software should be capable of (i) Entry of demographic fields (ii) Simultaneous transliteration and correction in one local language besides English (iii) integrating the biometric devices (camera, Fingerprint scanner and Iris image capture camera), (iv) storing the data in a secure way and (v) transmitting the data to the CIDR in a secure manner. There are many other requirements which are described on Page 28 (section "Enrolment Module") in "UID Application Overview and Requirements" document available at http://uidai.gov.in/tenders/RFP_ASDMSA_Volume_II.pdf

As the Client Software will be required for multiple standard Operating Systems (Windows, Linux, Mac), the Authority will require that the Client software should be capable of running on multiple Operating Systems. Alternatively, there can be different version of the Client Software made for different Operating Systems.

We believe that a National project of this magnitude and importance cannot be implemented without the active support and involvement of people at various levels and in varying degrees – communicating the message of the UID to encouraging enrollment and monitoring implementation.

Similarly, we seek voluntary support of the software development community in building the Client Software. This is an invitation to the Community of developers to contribute to this important National Mission and develop the Client Software. Currently the Authority is seeing Client Software developed for any of the standard operating systems in standard development languages (eg. Java, C++ or C#). Developers may also develop some specific modules (an example, transliteration module, address normalization module) that can be integrated with the Client Software through well-defined APIs. In the coming days, the Authority will define these APIs and provide further details as part of system design.

In order to define a productive and conducive environment for this collaborative effort, following Rules are proposed:

1. Any Company or an existing open source project and even individual developers (each of these categories will, henceforth, be described as Developer) may volunteer to undertake the development of the entire Client Software or a module of it.
2. When a Developer undertakes to develop the Client Software or a module of it, the Developer should inform the Authority. The Authority will give the Developer a registration number (Registered Developer). This will, however, be given only to those who, in the opinion of the Authority, demonstrate a potential for positive contribution to the achievement of the objective.
3. The Registered Developers may seek answers and participate in discussions among other registered developers and/or with UIDAI regarding the software specifications and requirements using the collaboration environment setup by the Authority during the course of software development cycle.
4. Authority is under no obligation to accept the ideas and codes developed. Acceptance and evaluation of the codes submitted is at the sole discretion of the Authority. Further, the

Authority does not make any guarantees with respect to answering questions within a prescribed time.

5. When a Registered Developer feels that the software or a module is fit for trials by the Authority, the source-code may be submitted to the Authority along with the Manual and other documentation using the code submission tools and procedures setup by the Authority. If the Authority is of the view (in its sole discretion and assessment) that the code developed could be useful to the UID project, the Authority may ask for further help from the concerned Registered Developer in improving the functionality or any other aspect as deemed necessary. The Registered Developer may be invited by the Authority to give the final shape to the product.
6. If the Client Software or a module developed by any Developer is accepted by the Authority for implementation in the field for enrolment, the contribution of the Registered Developer will be recognized. However, the source code, documentation and IPR will belong to the Authority. Accordingly, the Registered Developer will be required to enter into appropriate agreements transferring all rights and intellectual property to the Authority for their product and contribution.
7. This effort for creation of the enrollment software is completely voluntary and the Authority is under no obligation to provide any financial incentive or consideration to the concerned Registered Developer for the product.
8. The use of design / drawings/ or any other material by the developer in writing the enrolment software shall be fully at the risk and liability of the developer. UIDAI shall not be liable for IPR violation on this account and shall not be made a party to any court proceeding on this account.
9. The Authority reserves the right to open source any part or in full, any of these components and contributions in the future for the betterment of the community.
10. The Authority reserves the right to change/ cancel any specification, requirement, change tools, architecture, or any part of the system as required.
11. During the development of the software component, a Developer will have the discretion to share/ not share the source code with other developer. However, once the code is submitted and accepted by the Authority, the Authority can make the source code available to with a view to further enhancements/improvements or additions for any additional features.

All interested Developers may send their intentions to participate in this collaborative effort to enrolmentsw@uidai.gov.in. They should send the details of the developers who will work on this project and their brief resume and their proposal of work. They should also send their contact details (email and phone numbers etc. so that they may be contacted if required).