



State Urban Development Authority Haryana (SUDAH) was established to lay a solid foundation for the Urban Development in the State of Haryana, India. Its main focus is on the efficiency in urban infrastructure and service delivery mechanisms, community participation, and accountability of Urban Local Bodies towards citizens. The Department, having recognized the need to integrate the reform initiatives and scale up the effort to catalyze investment in urban infrastructure across States in the country, is taking several measures.

As part of one of its initiative for the welfare of urban homeless population, it had conducted surveys for identifying the urban homeless population across various corporations, councils and committees. At present there are 9 municipal corporations, 17 councils and 49 committees in Haryana. The surveys that were recorded earlier were paper based and this time they wanted a system which would record the survey data and the officers at various levels should be able to view the survey results through raw data as well as customized reports.

The Challenge – Why did we do it?

The objective here was to conduct the survey in such a manner that the surveyors would be able to cover all the corporations, committees and councils for identifying the urban homeless people and there would be data supporting the same. This pointed out to detecting and recording the actual location where the surveyor has found the homeless individual and then adding his / her details into the system. As per the mobility requirements, an android app was found as the best mean to implement the solution as the availability and incidence of using an android device by the surveyors was way much higher.

The survey would be conducted using the android app which would have comprehensive data to be collected but could work with some minimal data like name and homeless individual's photo as well. Once recorded, the survey data would have to be fed into the main database to create reports for the homeless count in each corporation / committee / council. To do so the app would have to push data to the main database and should be able to pull any master records as well. The protection of survey data was of highest importance.



Our Solution – What did we do?

Technousa received paper based requirements regarding earlier reports and the survey fields and had to chalk out complete requirements for the android app as well the web portal. Our business analyst analyzed the requirements and came up with the wireframes for both web and mobile app, which were then discussed with the personnel responsible for coordinating the entire plan for urban homeless survey implementation. It was decided to implement the web portal using .Net and SQLServer with Rest API which was to be used by both the mobile and the web app. The mobile app was developed in Java and SQLite. Technousa was involved in all aspects of this project which included project management, business analysis, UI designing, coding and testing and applied its expertise to create the best possible experience for the user and also worked on client's feedback at each stage to deliver the most efficient solution.

We also created a detailed software specification document for this project based on which this project was developed.

The main features which were covered under the mobile app are as follows:

- ❖ Once the application would be installed successfully, the user would first sync the main master data from the main database which would basically import users, corporations, councils, committees and any other master data into the app's local database.
- ❖ On successful sync of master data, the surveyor can login as per the credentials given to him / her by SUDAH.
- ❖ On login, the home page would have options to add a new homeless record or search for an existing one.
- ❖ During survey the adding of a new record would be done by filling in step by step details with each step capturing a few details.
- ❖ The most crucial details were capturing the person's name, photo using the phone camera functionality and capturing the location where the record is being added using GPS location of the phone. The photo and GPS location add to the credibility of the survey being carried out.
- ❖ The app would function even if there is no internet and the can push data to the main database once internet is available.
- ❖ The survey has to be carried out across various corporation, councils and committees.
- ❖ The survey would be carried out three times at the same locations as in the first instance. Any new records would be added and the ones which were already added during first or second survey would be marked as homeless the 2nd / 3rd or 2nd time respectively.
- ❖ The app would also record any dependents associated with a homeless person and consequently add the associated dependent records as well through the app and the respective data would be related to each other.
- ❖ The surveyors can use the search functionality to search for records added by themselves and carry out the below functions:
 - Can edit the record unless it has been marked as "non editable".
 - Can mark the person as being fund homeless second or third time during the respective survey cycles.

The main features of the web portal are as follows:

- ❖ The main purpose of the web portal was to be able to provide access to the homeless survey data to various stakeholders of this initiative to provide homes to the urban homeless population.
- ❖ To achieve the main objective of the portal, a comprehensive search facility as well as access all records was available for the personnel in charge.
- ❖ Using this portal, the user would also be able to download complete homeless records data into a spreadsheet.
- ❖ A homeless record could be added through the portal as well as it had the facility of bulk importing the records through a spreadsheet.
- ❖ The detailed view of each record was available through the web portal and if found to be correct it could be marked as "non editable" so that the survey cannot make further changes to it. This was to ensure that none of the collected data gets deleted or updated incorrectly.
- ❖ The web portal also had custom reports to display the homeless count across various towns / districts as well as count based on the number of times people were found homeless.
- ❖ The web portal also had provision for uploading any other analysis reports, videos, images, proposal reports , etc associated with this initiative for identifying the urban homeless and providing them with shelter.
- ❖ Lastly any survey users were also created through the web portal.

Welcome Admin

Urban Homeless Profiles

Upload Excel

Add

Survey of Homeless Records
Reports of 1st, 2nd & 3rd Survey
Analysis Reports of All 80 ULB's
Campaign(Posters, Videos, Flex, Banners)
Proposal Report of Construction Site
Proposal Report of Refurbishment of Existing Night Shelter
Users

State: District:

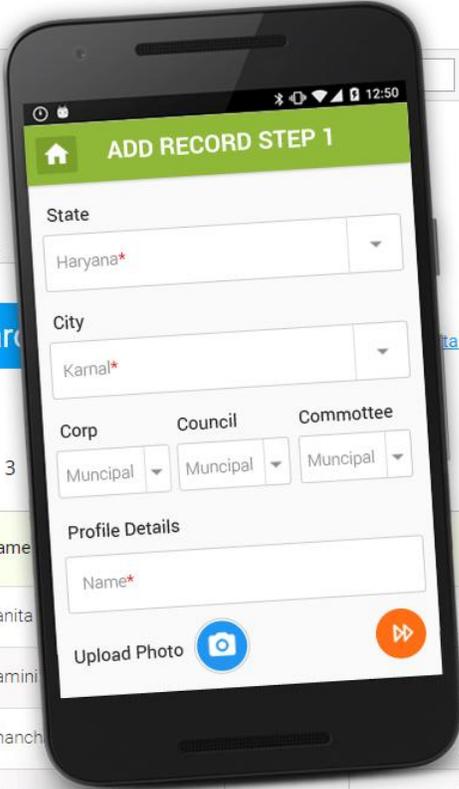
Corporation: Council: Committee:

Users: Admin Ajay Ajit Akhil Amar amarjeet

Search [Data With images](#) [Download Homeless Data without images](#)

1 2 3

Image	Name	Age	Gender	View	Mark as non editable
	Kanita	3	Female	View	Mark as non editable
	Damini	3	Female	View	Mark as non editable
	Chanchal	3	Female	View	Mark as non editable
	Shalini	3	Female	View	Mark as non editable
	Bhumika	3	Female	View	Mark as non editable
	Savita	3	Female	View	Mark as non editable
	Rakesh	3	Male	View	Mark as non editable
	Kannu	3	Male	View	Mark as non editable
	Aashish	3	Male	View	Mark as non editable
	Anit	1	Male	View	Mark as non editable
	Sarmili	3	Female	View	Mark as non editable
	Sobha	3	Female	View	Mark as non editable
	Sumitra	3	Female	View	Mark as non editable
	Sarbati	3	Female	View	Mark as non editable
	Rajendr	3	Male	View	Mark as non editable



Our Process – How did we do it?



The Results and the Benefits



The survey app proved to be a great tool for the surveyors and all the survey cycles were well tracked. The surveys done through the app and the final output of the entire exercise was immediately visible to the stakeholders through the web portal. The easy analysis of the survey results made it possible to propose quick recommendations for the next steps as to how many shelters were needed and how to realize them to provide homes to the urban homes population.

Contact Us

To know how we can do more for your business, contact us at any of the following:



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