

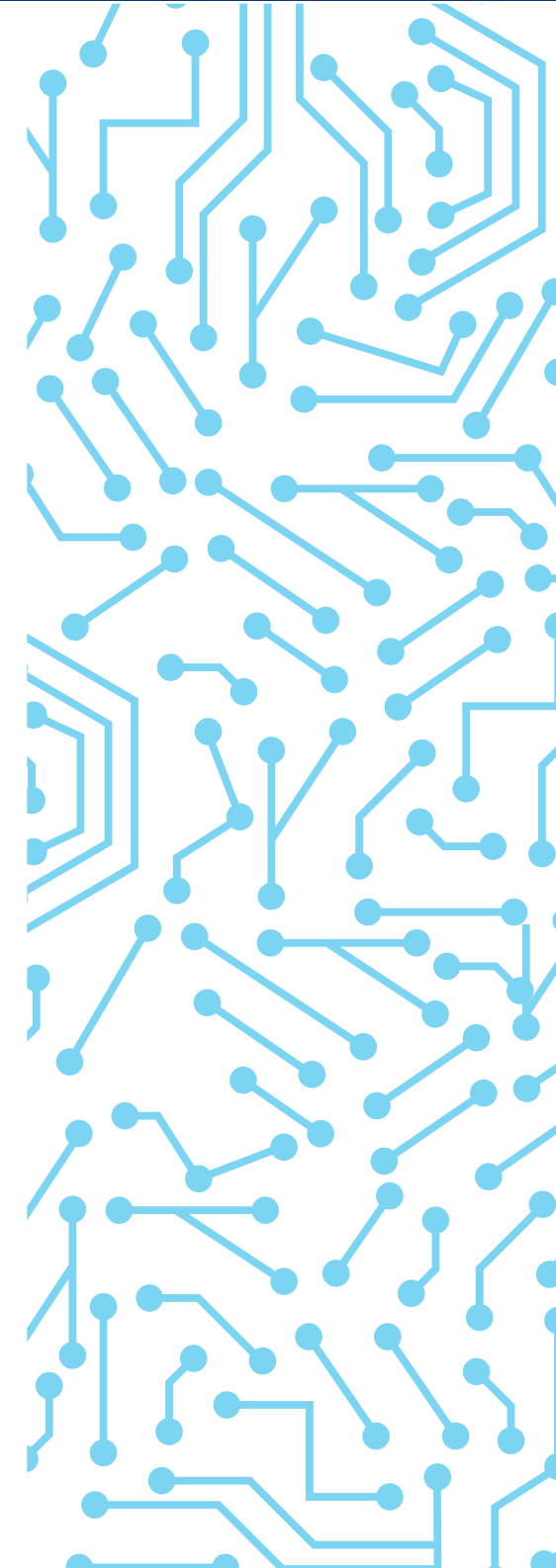


InnoHacks
HACK N' INNOVATE

TEAM NAME AND MEMBER DETAILS **IMAGINE THE IMPOSSIBLE**

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THEME : Let's Innovate (Open Innovation)



Describe the Problem Statement

Objective :

In slum areas the inhabitants lack fundamental resources .

Slum upgrading is an essential strategy in which the infrastructure of the slum is improved, such as giving adequate water supply and sewage disposal system to the community. One of the main proposed solution is slum upgrading.

In order to upgrade slums, we provide an app based solution named "HOVEL" .

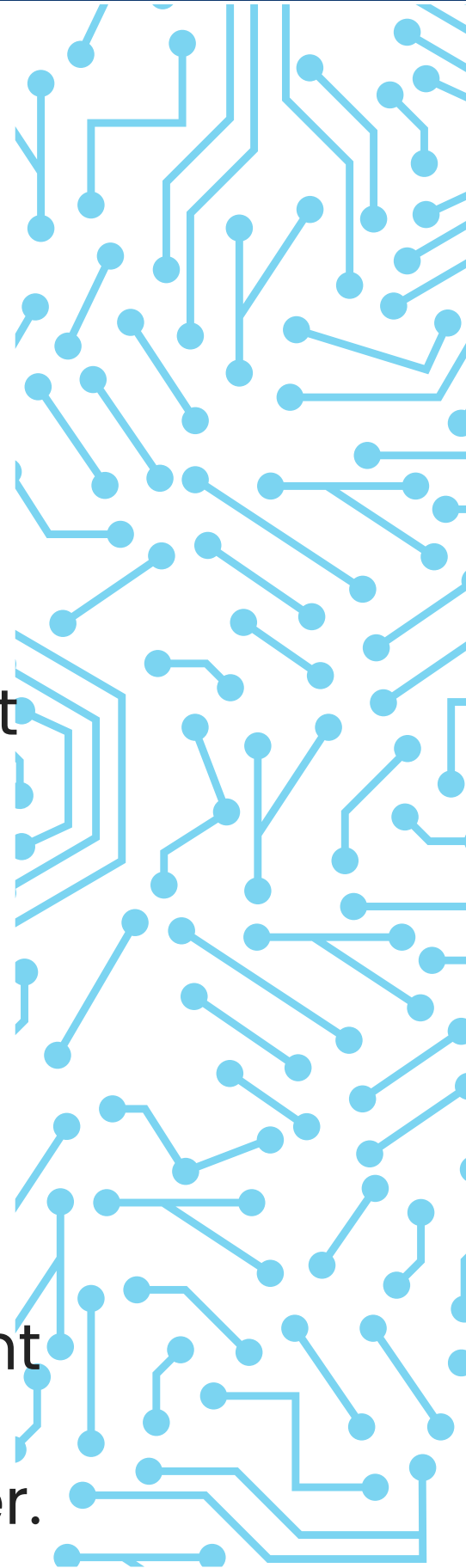
HOVEL is a mobile application which accompanies government in slum redevelopment process by providing necessary information within the app itself. This application bridges the resource gaps in slum upgrading process ,

The five main objectives of the app are: user verification, updating data records, photag , regional language support and slum extension prevention.

The main objectives are described below;

User verification is a general security authentication in which we can provide different verification process for different community people namely general public, government employees(in charge people for that particular slums)and organization.

The data records are updated by the authorised persons and stored in the cloud server.



In order to help the common people, this app is designed to be operated in regional languages also.

To Prevent extension of slums , Machine learning algorithms are used to detect slum area extension from VHR images based on the morphology of built environment. This is a technical solution in which we can also monitor the extensions of slums in the future and be able to control them.

Photag is an feature in which people can post something related to slums and also problems in the slum. Additionally they could request donation from users.

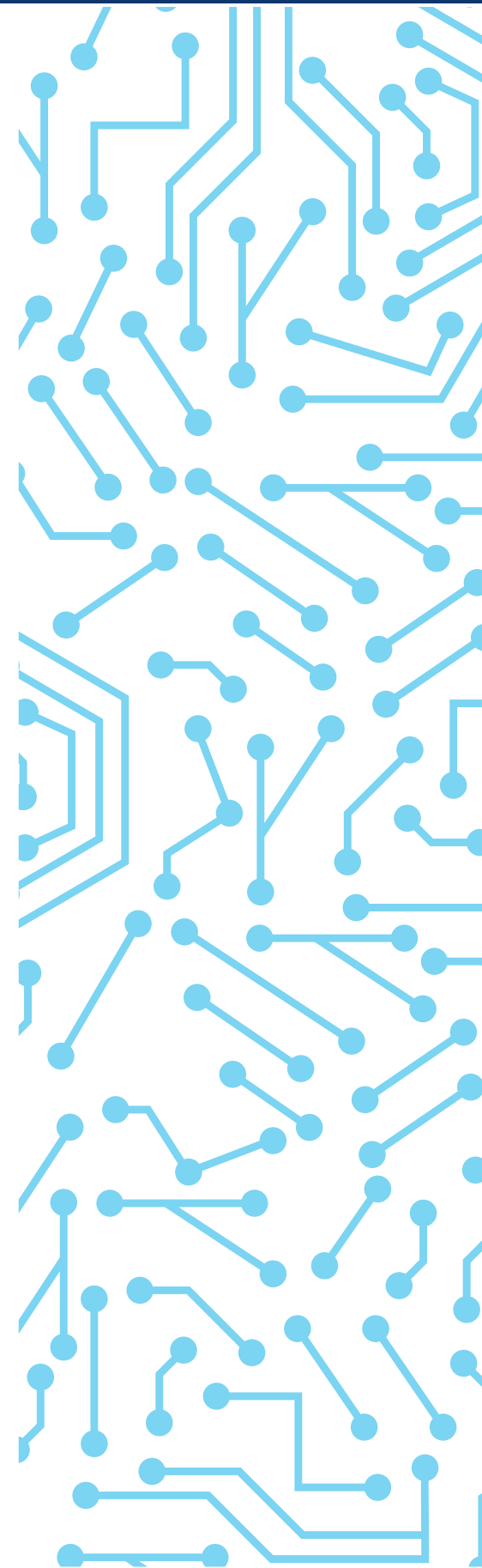
Novelty :

This application "HOVEL" is the first and foremost implementation in the field of slum upgrading.

Data security is ensured by giving permission only to the authorised persons.

Resolving the problem of common people with their language barrier.

Imaging technology to compare slum growth in present with past.



Authenticity – The user given with permanent Id number can access all the government Files in this application.

This permanent id number is only given to whom the government wishes to access its files. Everywhere in the application securities have been kept high using blockchain technology to maintain data safely.

To avoid controversial and some other inactivities in the application we restrict unwanted contents .

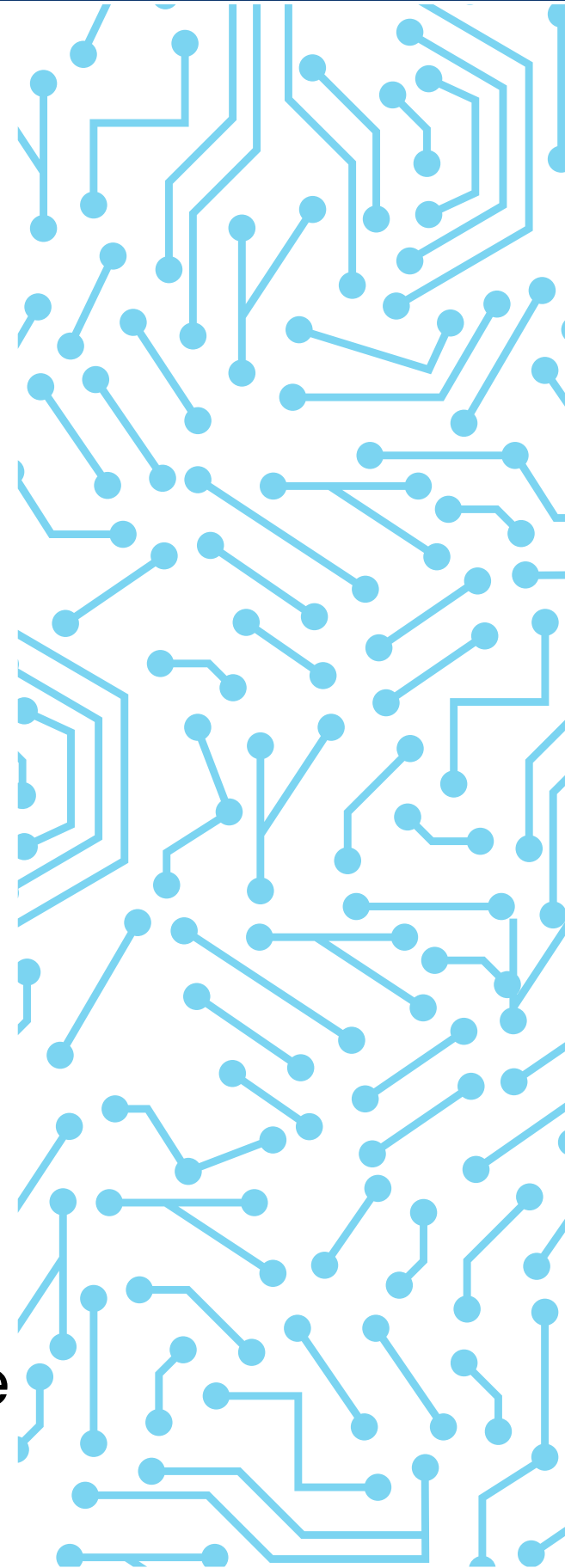
Feed – A basic feed option is included in the app to provide information about the slums to general public.

Scheme details – Information about various schemes have been provided in this application for the welfare and development of the slum people .

For slum upgrading , Tenders are released by the government. Those Tender details are updated in the application.

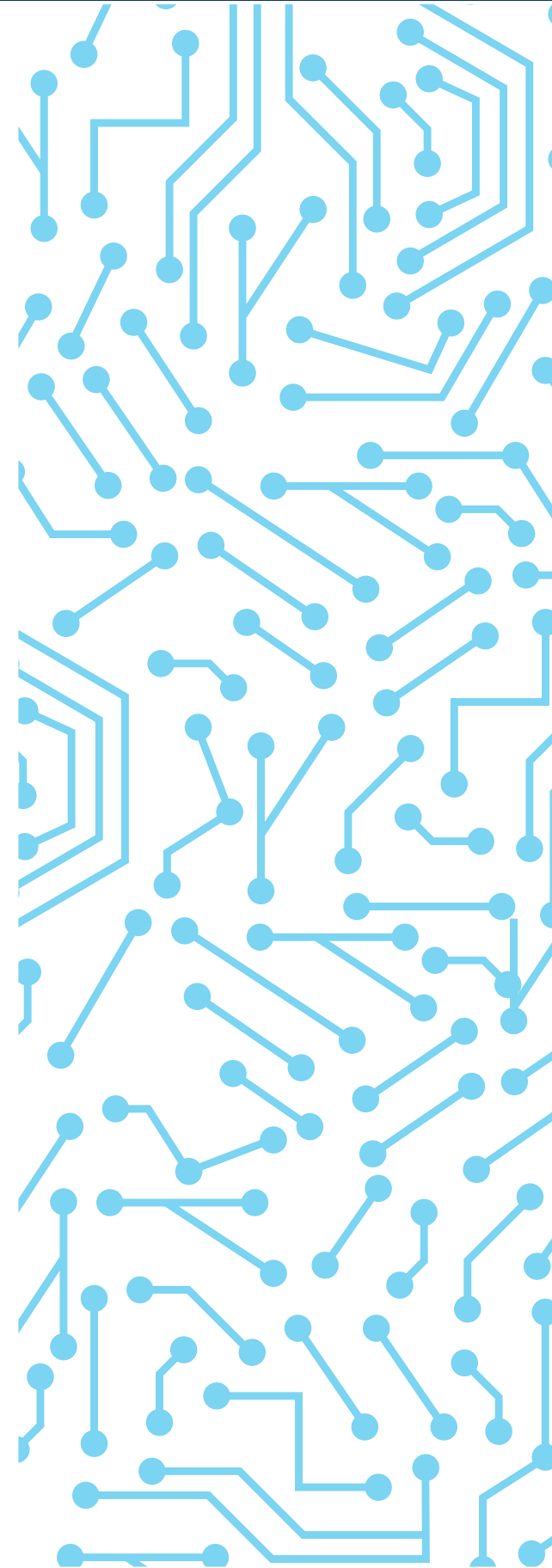
Also this app keeps on updating the current status of the slum using the data provided.

Update – The government officers using this application can then and there update the status of slum.

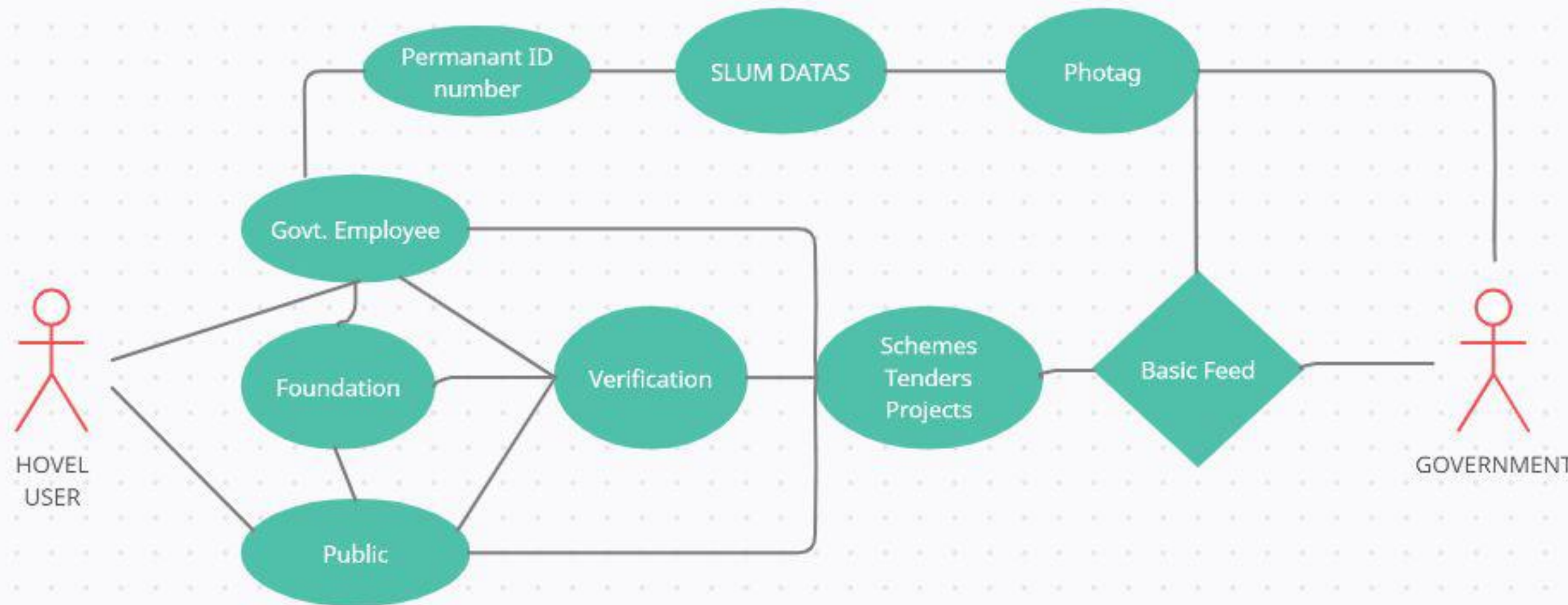


REFERENCE IMAGES AND VIDEO OF IDEA

[click here](#)



Give more details about your approach and flow of development, as well as the tech-stack.



TECHNOLOGY STACK

FRONT END:

Mobile App:

Framework: React native

Business logic –JAVASCRIPT

User interface - JSX

Algorithms –Machine Learning

Website: HTML, CSS, JAVASCRIPT, ReactJS

BACK END :

Programming language – node.js , python

Database – MySQL

Algorithms –Machine Learning