Abstract

Problem Statement

These days people complain about different issues in neighbourhood to the government in two ways -
1. Either via social networking apps like twitter, facebook, e.t.c., and tag the government officials
2. Or directly report the problems through the department specific apps (mostly web or mobile apps)

Do the above mentioned ways solve the problems effectively?

Let us differentiate them!

1. Social Networking Apps
   a. These are never meant to perform as an alert systems. Their sole purpose is different!
   b. They do not provide any APIs to report a problem to the government and track them.
   c. Only minimal number of people belonging to nearby area can interact about the post, i.e., it may never reach all the people in your neighbourhood
2. Government Provided Apps
   a. These do not allow people who live nearby to see the complaint posted by others to the government. Hence not allowing the people to interact about the problem!
   b. All these apps ever released by the government can only achieve one to one communication.

How do we solve this problem efficiently

Here an application can be made (mobile and web) and is *provided by the government*. This application provides two features
1. An API to submit complaints to the government authorities (Context: GHMC, Municipalities)
2. A local wall* in the app where the complaints submitted get posted (every user gets notified as an alert) and duplicates are merged, better information can be updated to it using different people suggestions about the problem. Hence government always get updated with the better information.

*wall: A page where all the unique submitted complaints get posted (similar to the facebook wall) and can be seen by the neighbourhood

By publicizing the submitted complaint to local people as a post -

- Every other people in the neighbourhood be aware of the problem.
- Local people can prioritize the problems according to their severity and pressurize government to do them first.
- People do not try to post the same complaint and there can even be options to update the existing complaints with better data like photos!
- People can even address similar problems and tag them to the posted problem, so that *once the government officials come they can resolve all the similar issues once.*
- Some people can even volunteer to solve the problems to clean their streets. Yes, it promotes *Swachh Bharat.*

How the App works?

When first a user sees a problem in his colony, he logs into the app and files a report about the problem i.e., by taking pictures of the problem, adding sufficient information about geolocation, his suggestions to solve the problem and e.t.c.,

Then the second thing is the complaint gets posted on to the local wall. One can think of local as maintaining a geo boundary Ex: Take different colonies as geo boundaries. And all the people get notified about the problem, this provides a way for local people to interact about the problem and results in other people updating the post with better details.

Later if the similar issues like that exist in the colony in different areas they are tagged to the existing post and government officials get aware of it. After that government can fix the problem by sending workers or technicians who can fix that. Once it is fixed a government official can update the post as ' Work completed! '.

Note: Local Wall is the thing that can be seen by the local people and government officials
(A shared area to people and government). Higher officials can be given a dashboard in the app to provide metrics.

Difference between posting the complaint in already existing social networking apps and this app.

Main difference is that the complaint gets *multicasted* in the apps like facebook, twitter e.t.c., i.e., the posts may only be seen by the people who follow them or although the post is made as public it may never reach the whole people in your neighbourhood!

Here, in our app, one can observe that the complaints posted onto the local wall are *broadcasted* to all the local people (as alerts). This app doesn't provide things like timeline, chat api, making friends, follow people e.t.c., Ex: Suppose your colony has a huge wall that can be seen from every house and people stick problems on it.

Advantages

- It works as an efficient alert system.
- Issue resolution is faster than traditional system.
- Complaints can be prioritized from the feedback of local people.
- This app can also facilitate local social networks.
- This mechanism can also be beneficial to keep the colonies clean and green.

App Instance

Your Area

| Complaint 1 |
| Complaint 2 |
| Complaint 3 |
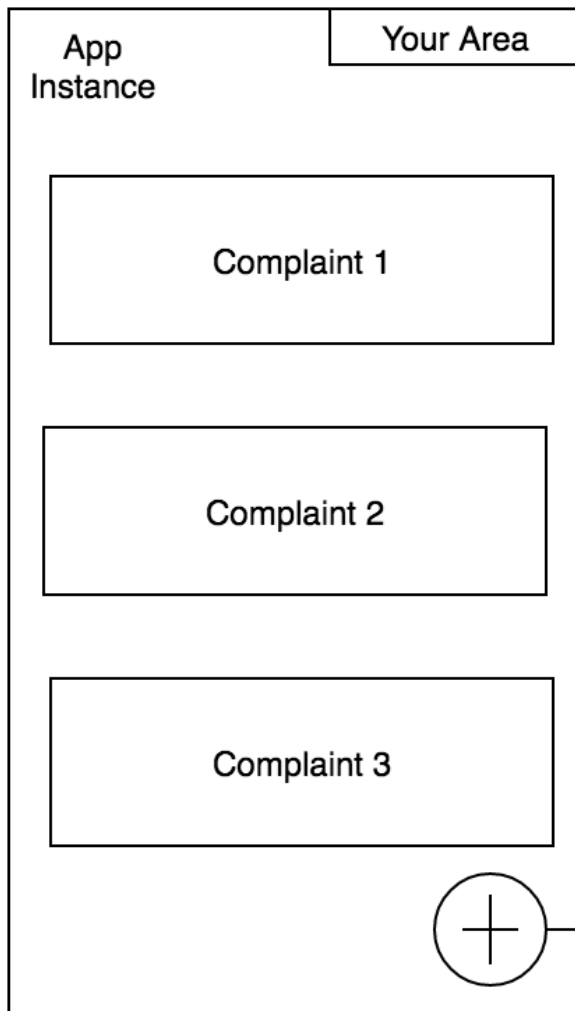
⊕ → Add new complaint

- A Wall where
  complaints get posted.
- Seen by the local people and
  government officials

- One can change the area
  and see other area complaints

```
         ┌─────────────────┐
         │  start by       │
         │  identifying    │
         │  problem        │
         └─────────────────┘
                 │
                 ▼
         ┌─────────────────┐
         │ submit the      │
         │ complaint       │
         │ using the API   │
         └─────────────────┘
                 │
                 ▼
```

Merged with existing complaint on wall ◀── Yes ── Complaint already exists ── No ──▶ Gets posted to the local wall

Local people can update details about the problem ◀── Local people get alerted and be aware of the problem

Problem is assigened a priority and simliar issues are tagged to it

Government officials resolve all the problems and update the post

People can confirm it, and post gets archived

Stop