

# Artificial Guide: A Detailed Site Map With Current Position & Details

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**Abstract-** *The concept of our project Artificial Guide is adopted for smart city. In smart cities, there are very large organizations having big infrastructure. So, for any person who is not aware about that place, it is complicated to find out their desired location. The Artificial Guide provides visualization of an organization that gives whole information about it. There is no need to ask anyone about that place, users can carry their own guide with them. They just need to scan QR code of organization to get whole visualization of that organization. User can get all the information including organization layout, user's current location, nearby block details, authenticated workers' details, etc.*

**Keywords-** GPS, Current positioning, sitemap, animation, indoor map, navigation

## I. INTRODUCTION

We observed, in cities there are lots of big organizations. Structure of such organization is quite complex to understand. Any new person who visit such place gets confused, it's hard to decide how to reach at desired place.

For that visitors have to ask some one for help. They need some directions, where to go. It takes a lot time and efforts of human being. Sometimes, person fails to reach at desired place. Artificial Guide provides users their personal guide in their mobile. We provide whole site map of respected place in mobile, not only just site map but we also provide current location of them. All users can find layout and detailed information about that place in mobile, they get to know where to go and whom to contact. They do not need to ask for help.

After visiting whole place, as user go out side that organization, sitemap is erased from their mobile, because data is stored on that particular sever. It's good for organization to maintain privacy and security.

## II. PURPOSE

The main purpose of Artificial Guide is to provide a platform for user's convenience. It reduces time and efforts of

users. application and software, we can used directly by the cloud so we can't purchase license version of that particular software. we made our own cloud so no need to purchase from and other industry.

## III. SCOPE

- Scanning of Q-R code for location is easy
- No need to pay, it's free of cost.
- Admin has to manage all data on the sever.
- User can see details only when she/he is in organization.
- As user exit the place data is automatically erased.
- Provides detailed information of interior structure

## IV. CURRENT SYSTEM

Now a day, we use google maps to reach at our desired location. Google Maps is a web mapping service developed by Google. It offers satellite imagery, street maps, 360° panoramic views of streets (Street View), real-time traffic conditions (Google Traffic), and route planning for traveling by foot, car, bicycle (in beta), or public transportation.

Google Maps began as a C++ desktop program at Where 2 Technologies. In October 2004, the company was acquired by Google, which converted it into a web application. After additional acquisitions of a geospatial data visualization company and a real-time traffic analyser, Google Maps was launched in February 2005. The service's front end utilizes JavaScript, XML, and Ajax.

In google map we enter our desired location and then it gives result related to our search. According to those results we reach to that location. Now the problem arises when it's a big organization having complex structure. At this time, people get confused about how to reach at desired location!!

In such situation they have two options: either they ask to someone or just go to each place and check whether it is desired location or not. In both conditions there is possibility of both, success or failure. If they succeed to find perfect

location then it's fine but if they get failed to reach at the location then there is no meaning of google maps

In both the cases the procedure to reach at desired location takes lots of time and struggle

## V. IMPROVED SYSTEM

The main working ARTIFICIAL GUIDE starts when user reaches at organization's gate or entrance. There is a Q-R code is placed over there, which user need to scan in their mobile phone. After verification user will redirect to the whole site map of that organization with their current location. As, he/she move the position also changes in their mobile. According to movement.

Let's see how it actual works:

1. First of all, according to site map, animated view is created, this animated view contains whole interior details of that organization.
2. Now, this site map is embedded with actual latitude and longitude of current organization, for that we have to find out at least three pairs of each corner
3. After that device is calibrated, in that developer conforms that all required sensors are working properly, i.e. gyroscope accelerometer and magnetometer.
4. Once device is calibrated, path creation process begins:
  - a. Go to any one position of organization.
  - b. Mark current location as pin in site map.
  - c. Make another pin where you will reach after walking some steps.
  - d. Without shaking device, walk and reach to the other pin marked on the map.
  - e. After reaching that position create desire path
5. Repeat step D until all the paths of origination are included.
6. Generate API of the site map along with generated paths.
7. Embed that API with application and upload it on server
8. Generate Q-R code

Now place this Q-R code to the entrance of organization, anyone who want to take a tour can scan Q-R code and after verification they can enjoy their visit without any problem.

## VI. CONCLUSION

Artificial Guide is a mobile application that can be beneficial to users in many ways. The main objective of this project is to provide internal path navigation of any organization or government sectors which are very big in infrastructure. So, people can't find path easily if they are new. At that time this application provides the best way.

Artificial Guide also provide the information about the places that covers into the infrastructure. User can see their profile and places that he/she already visited. Concept of Artificial Guide adopted for smart city so it will helpful for user and it will be beneficial to users by saving their time, efforts and resources.

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The template will number citations consecutively within brackets

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