



**WAYFINDING
SYSTEM**



Introduction

Finding your destination at large place among hundreds of other visitors, can be very challenging. Often it is also too noisy to give directions via phone. Kara wayfinding system removes this frustration and leads you back to your desired destination in no time.

When you're on the move outdoors, finding your exact location is no problem using your phone's built-in GPS. However, indoors, the GPS signals are too weak to be of any use. Luckily, there are several ways to solve this problem.

Experience Kara indoor navigator which produce a seamless indoor wayfinding with fully customizable, interactive indoor maps products that help your visitors plan and visualize their routes using simple, intuitive ways.

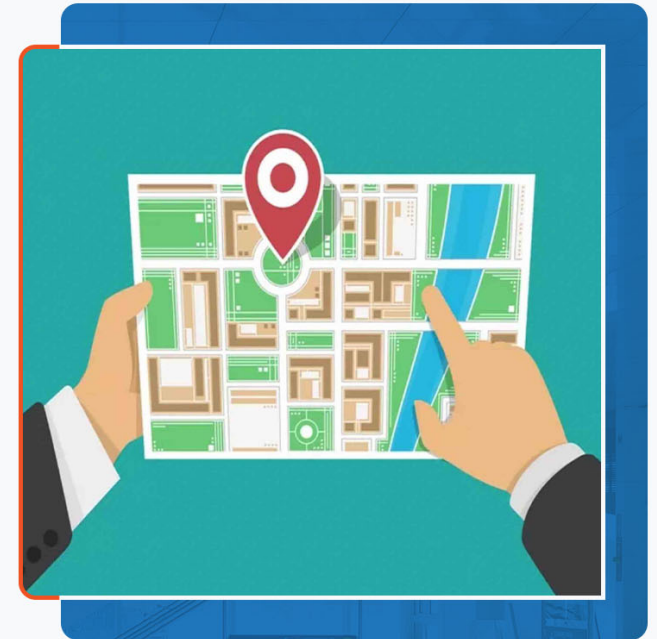
Usage

Kara Wayfinding system is a type of application that aids visitors in navigating through building structures like malls, events, convention centers, and airports. Our indoor navigator applications are custom made to your building and can allow your visitors to search via floor, category, or keyword.

Our indoor navigator will provide an extremely helpful service to your attendees and businesses alike by providing a detailed and interactive map of your facilities. You can additionally include sections for paid advertisements for an extra revenue stream.

Finding your way around a conference venue can be challenging. Communicating to visitors how to navigate and where to go is even more challenging. Our tools improve the visitor experience, allowing attendees to navigate seamlessly and locate their colleagues or contacts, as well as increasing visibility for exhibitors.

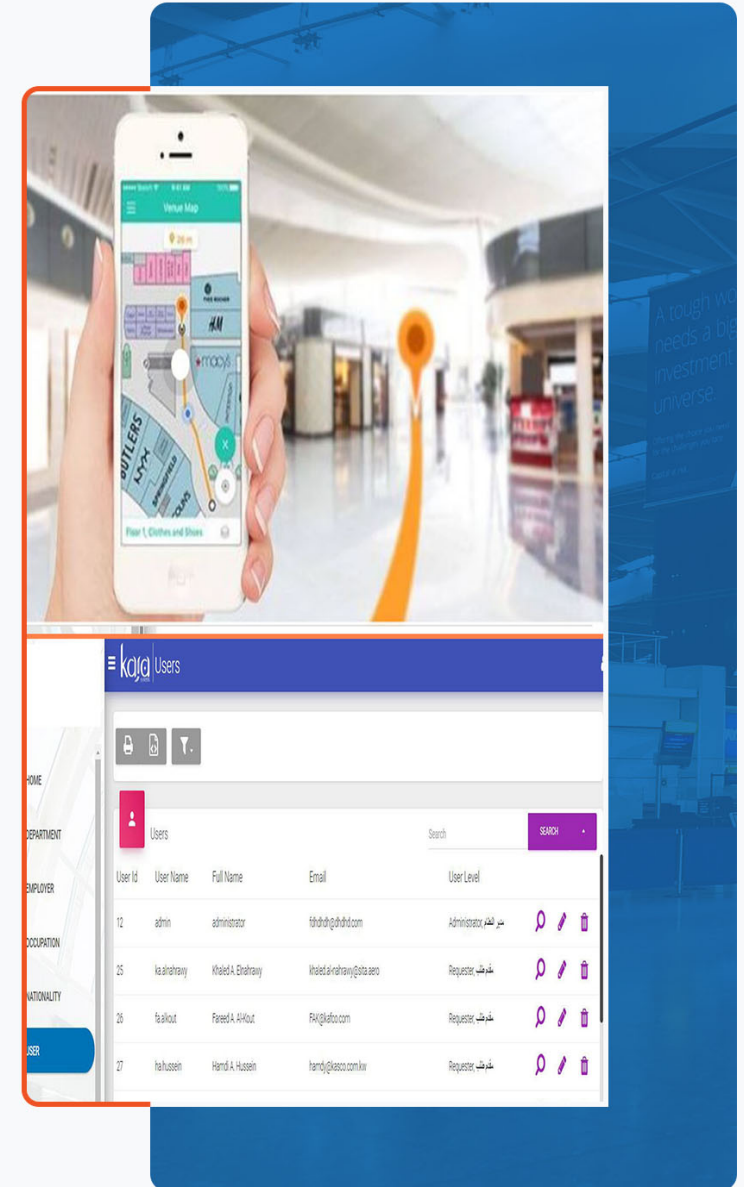
In simple terms, this technology takes over where the GIS cannot reach. While the GIS system rules the outdoor world, GPS helps in navigating the indoor scene. Since the indoor walls can obstruct the mapping of a building, the GPS for indoors program provides the accuracy you require to move from one room to another easily. Since most buildings have digital blueprints and schematics, uploading these images online can help in the mapping process. The GPS relies on the same satellite infrastructure that helps with GIS mapping. Besides relying on the satellite system, the GPS indoor positioning system also takes advantage of ultrasound and infrared waves. The transfer of these waves from one room to another helps the system to visualize the configuration and layout of a room and the location of the major precincts. Once the system develops a digital blueprint of a building, the technicians can label the various parts of the structure before converting it into a mobile-friendly program.



Solution

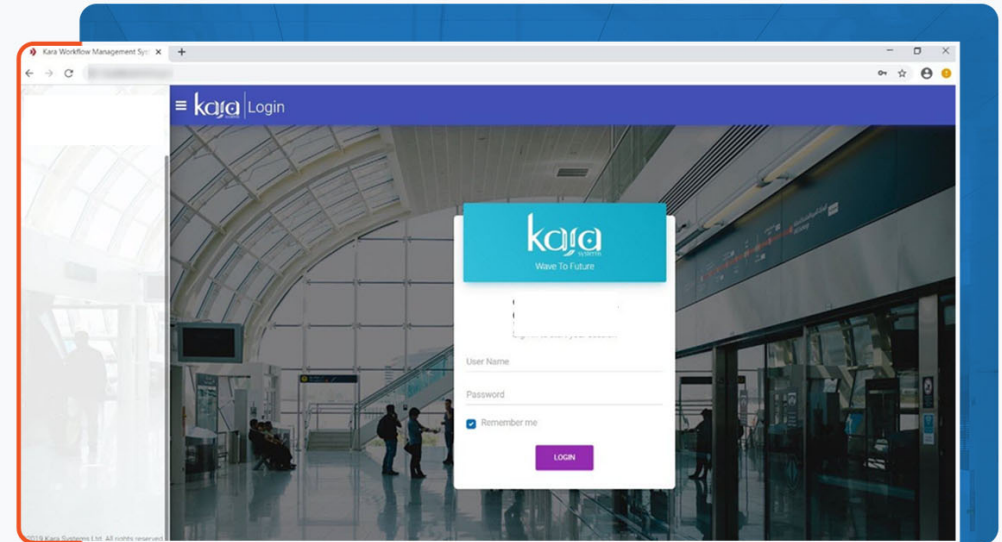
Build interactive maps for all specified zones with consideration of the following technical specifications:

- Transform site and floor plans into vector digital maps and export in GIS GeoJSON format to provide high-quality compatibility for web, mobile and desktop/kiosk applications
- Design all digital maps per client branding guidelines and standards
- Review and update all zones on the corresponding map locations
- Provide administration with a user-friendly portal to relocate or edit instantaneously all locations and information or add any other type of point of interests
- Compute all pathways with the shortest path from the user location to the desired destination with support for motion-handicapped and display indication of duration and direction
- Share pathways in different formats e.g. weblink, QR code or embed HTML
- Provide turn-by-turn direction guide.
- Add value to other management platforms with easy integration possibilities
- Provide effective and easy-to-use search engine for all zones services and facilities
- Secure access to Map data using security tokens and proxy servers
- Support Arabic and English languages



Features

- Secure Web portal is an all-in-one solution that enables secure use of Web 2.0 with real time multi-layered protection against web-borne malware, largest application coverage and granular application control, centralized intuitive management. It is built with the most powerful combination of Web security.
- Simple indoor positioning with building, floor detection and 3D orientation
- Wayfinding engine is a universal geolocation engine. This means that it works both indoor and outdoor spaces, anywhere in the world, always providing the best possible position.
- High accuracy thanks to sensor fusion, in addition to WiFi & BLE signals, Wayfinding engine leverages on other sensors such as the smartphone accelerometer, gyroscope, magnetometer, and barometer, in order to accurately estimate if the user moves, how much, in which direction and whether he/she is changing floors
- 1-3 meters of average positioning accuracy.
<15 degrees of average orientation accuracy.



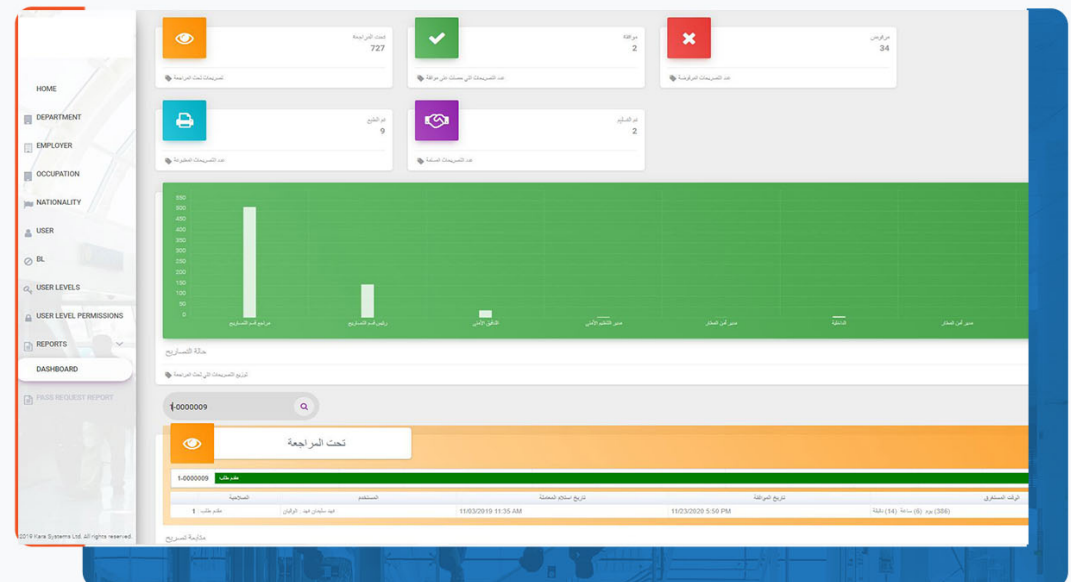
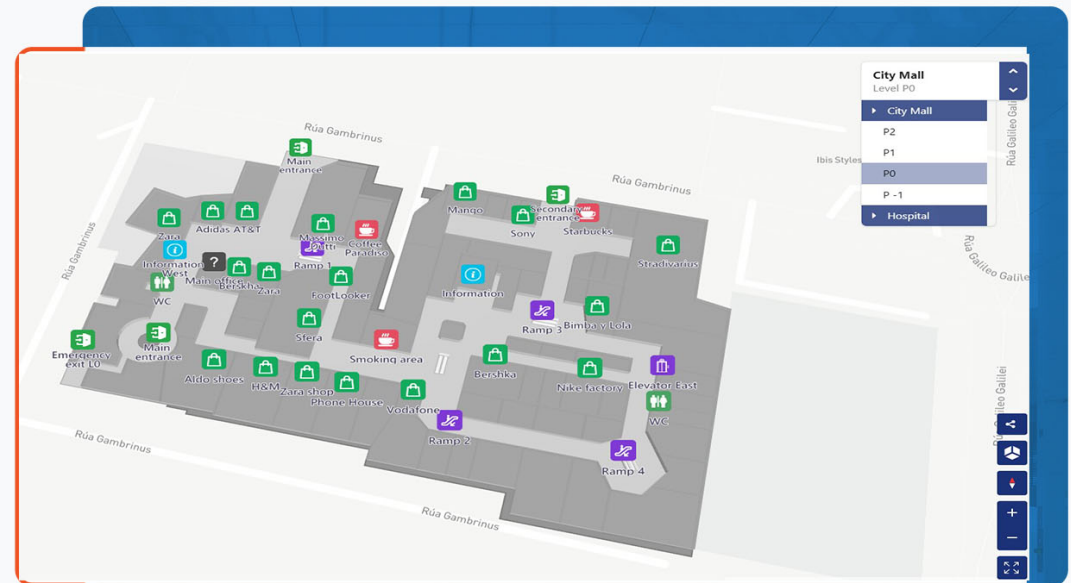
- Offline mode also works for cartography: users will be able to review maps, search for points of interest or compute the shortest route to a destination without needing continuous internet connectivity.

- Battle-tested for tracking, many indoor positioning technologies are either suited for wayfinding or tracking applications, but not both. Wayfinding engine is an exception, since it combines the accuracy & robustness required in wayfinding applications with other features that make it ideal for tracking use cases.

- Raster & tiles floorplans provide a visual representation of each floor, so the users can know where they are, their way around, and have a sense of the building elements at a glance. Wayfinding engine supports two kinds of floorplans: raster floorplans and tiled floorplans.

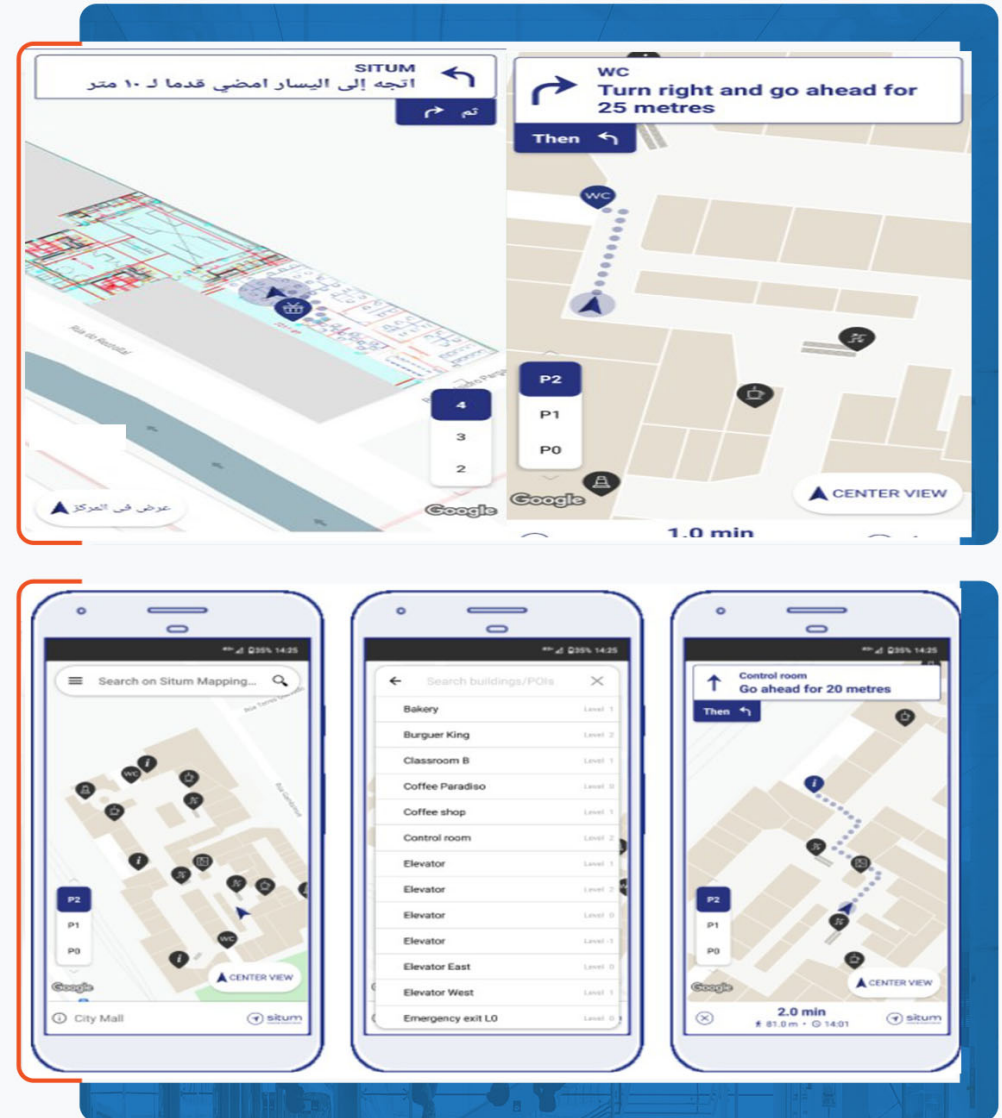
- Automatic re-routing wayfinding engine is constantly checking whether the user is following the desired route and, otherwise, computes a new one.

- Lots of readily available reports wayfinding engine Dashboard implements the most common indoor geoanalytics reports out of the box. You will be able to retrieve, among others, heatmaps to view at a glance where people spend more time in your building.



Additional Features

- English, Spanish, French, Japanese and Arabic (Right-To-Left) available, wayfinding engine can show the indications in five different languages: English, Spanish, French, Japanese and Arabic. Wayfinding engine Dashboard is also internationalized appropriately to those languages.
- Real-time tracking, see where everybody is at a glance, each second, wayfinding engine computes the geolocation of the smartphone & sends it to wayfinding engine Platform. Wayfinding engine Platform stores these geolocations (so later we can compute geoanalytics), but it also shows them in our Real-Time panel. Therefore, you will be able to see where everybody is in real-time very easily.
- The user turns around and starts walking in an opposite direction, so Wayfinding engine indicates to “Turn around” and after a while, a new shortest route is recomputed
- Define special routes for People with Reduced Mobility (PRM)



Highly customizable UI

- Wayfinding engine can be customized to match your desired look & feel. You'll be able to:

Show it in full-screen or on a constrained part of the interface.

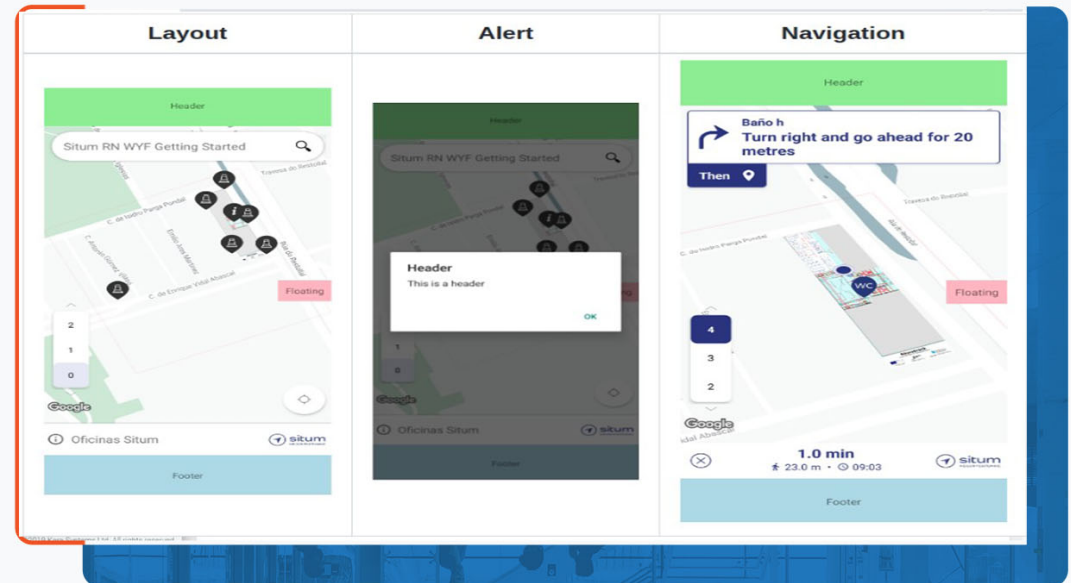
Show your own logos.

Adapt the main colours to your colour palette.

Provide your own positioning & orientation icon.

Show or hide UX components, such as the POI search bar, the floor selector, the positioning & routing Floating Action Buttons, etc.

Display your own UX components on top of the wayfinding interface. A typical example is to build your own POI search bar.



Qualifications

We have successfully delivered our services to businesses worldwide facing the ever-changing technological challenges of our clients and providing them with scalable solutions.

Our specialists are equipped to create a dynamic intelligent system to facilitate your work, develop truly functional software to control your business processes, adding functionality and effectiveness to your system. Our proven strategy and attention to details applied to our technical expertise ensures our customers robust and cost-effective solutions.

Our solution is built on top of a solid software development engine which produce many benefits as it's a fully customized software. Customizable solutions are great for your business because they fill your needs perfectly. You don't have to overpay for modules that you can't remove or replace. In the final application or platform version, only the necessary functions will remain.



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