Augmented Reality SDK for Indoor Navigation

Augmented Reality (AR) tech has come a long way since its original inception decades ago. But although the possibilities are almost endless, one area has remained firmly out of reach so far: indoor navigation.

Despite the apparent applicability of AR tech to indoor navigation apps, solutions have yet to be developed and reliable indoor navigation technology is still out of our grasp. However, with developer-friendly Software Development Kits (SDKs), developers may be on the cusp of unlocking AR's full potential for this market.

GPS vs Indoor Navigation

GPS is already a technology that millions of people use every day. In fact, most drivers totally rely on GPS-based apps and systems, like Google Maps, to navigate everywhere instead of regular maps or personal directions.

However, indoor navigation still has a way to go, at least from the average consumer's standpoint. Almost everyone knows the frustration of trying to find a store or kiosk in a mall, only to see that a GPS-based app can't pinpoint your location or help direct you to your goal.

However, Indoor Positioning Systems, or IPS, are rapidly being developed by major companies and software enterprises with the goal of providing consistent indoor navigation for use with consumer-friendly apps and ancillary purposes, like emergency services and security systems.

These days, many developers are looking to combine IPS with augmented reality. Since augmented reality tech already works by taking identifiable information and cross-referencing it with databases to construct location maps and pins, the two technologies should be combined to great results.

The Benefits of AR Indoor Navigation Apps

Should AR indoor navigation apps be fully developed and realized, the benefits will be wide-ranging and surely shake up the app industry. Not only will these apps be great for consumers, but they could revolutionize more serious industries, such as emergency response services.

Consumer Benefits

It's easy to consider that AR indoor navigation apps could allow consumers to locate shops, restaurants, and other destinations within malls and other expansive indoor spaces. Furthermore, consumers could use certain apps to, for instance, locate the gate for their flight at an airport, find their hotel room in a huge resort or in a cruise ship, and so on.

Navigation in New Places

People hate feeling like they don't know where they're going. Augmented reality-powered indoor navigation apps could allow people to take a tour of their new office, school, or even their prospective home before they set foot inside.

Object Identification

Imagine walking through a museum while AR-powered an indoor navigation app pointed you to specific statues or paintings based on your preferences? Or consider being able to walk a historical landmark and have your smartphone point out points of interest for pictures. These possibilities are firmly within your reach with the right software.

Emergency Services Assistance

More seriously, indoor navigation apps could provide major benefits for emergency services. Police or paramedics could use augmented reality tech to find patients or injured people inside complicated building layouts without having to stop to ask for directions or becoming lost.

<<Video - https://bit.ly/hospitalhcg>>
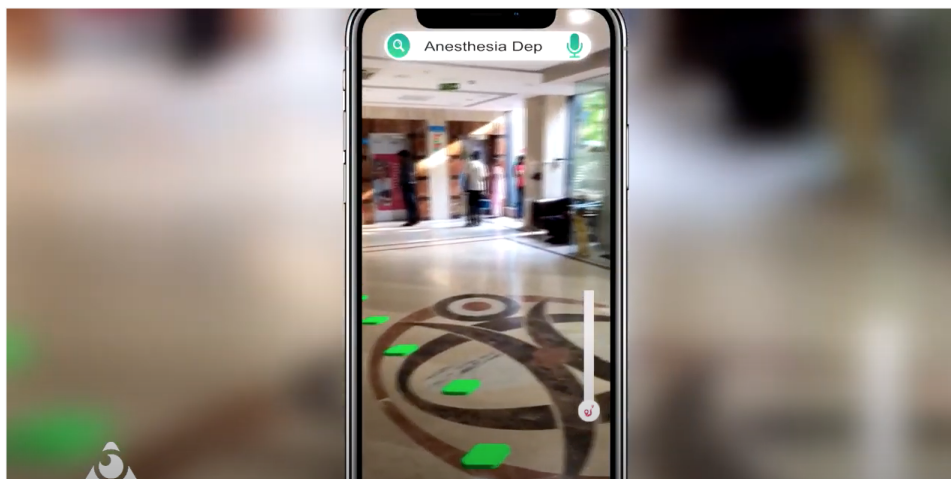
ARWAY completed a successful AR indoor navigation integration with HealthCare Global (HCG) Group in their Bangalore-based Hospital.

These benefits have yet to boom in consumer markets simply because of the development challenges that come with them. In short, even tech-giants like Google haven't fully developed an augmented reality SDK that allows for the creation of indoor navigation apps.

Until now.

ARwayKit: The Mobile SDK for Indoor Navigation App Development

Enter ARWAY's propriety mobile SDK: ARwayKit. This revolutionary technology is set to shake up the indoor navigation app industry and finally give developers the tools and convenience they need to realize their vision for authentic, AR-powered navigation solutions. By powering camera devices with AI and cloud support, ARWAY can help develop some of the most hyper-accurate location apps ever envisioned.

As a mobile SDK, it goes where your team needs to go. In fact, ARwayKit works perfectly for indoor navigation app developers looking to build and test their software on location.

ARwayKit is Built for Real-Time Cloud Mapping

One of the big challenges for developing augmented reality indoor navigation apps is the difficulty in finding pins or feature points in an indoor environment. ARwayKit allows developers to capture specific feature points in every camera keyframe, then match those features in each frame.

The result? Hyper-specific and accurate positioning in real-time for the user. The secret is a "point cloud map" stored in cloud infrastructure owned by ARWAY alone. That means no server sharing and no downtime.

ARwayKit Operates with Cloud Localization, Cross-platform and Existing Software

ARwayKit demonstrates the benefits of cloud technology even further to localization services. ARWAY's cloud services can return the positions of devices in pre-mapped environments. Additionally, ARwayKit will enable developers to integrate localization services into existing apps.

This is valuable for developers and existing enterprises since you don't have to redesign your app from the ground up or completely rewrite perfectly good code. Just integrate localization into your existing app, market it as a feature for your users, and benefit from the results.

ARwayKit is a No-Code Platform

These days, tech companies are run by more than just the programmers who know the bones of the enterprise's software inside and out. Plus, many effective software companies can operate without having to force code knowledge on every one of their employees.

That's why ARwayKit includes a Web Studio which is a no-code content platform that allows users to edit and manipulate AR location based content through the development kit without having to personally code changes in Unity Editor. This both makes your AR Locations Apps easier to scale and allows for easier editing of maps data once deployed and evolving as your business's needs change.

It's just another way in which ARwayKit is the ultimate, developer-friendly SDK.
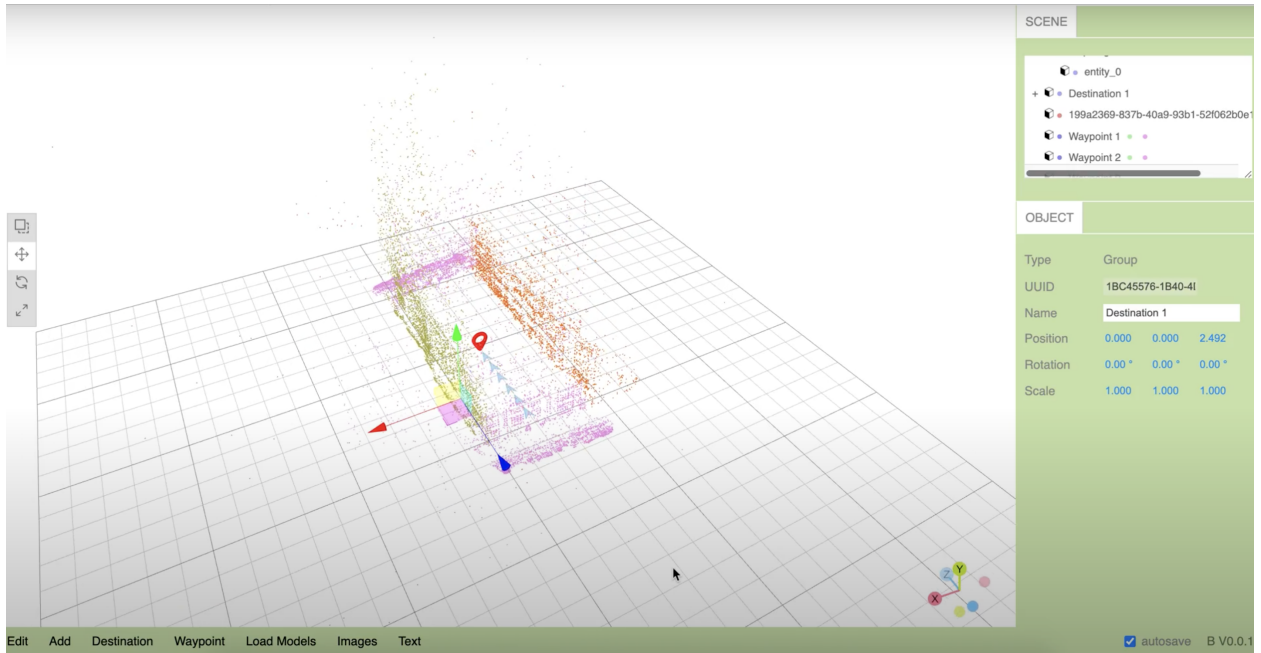
Arway Web Studio for easy management of Location based AR content

Be Among the First to Try ARwayKit

With all the benefits it's set to bring to the table, there's no reason to not try ARwayKit. In fact, it's easier than ever to get early access and start applying this software development kit to your own development cycle. Chances are that you won't want to go back to your old kit before once you see how it works.

You can sign up for ARwayKit for free and be among the first to utilize this revolutionary SDK by contacting us today.