



Perfecto

Seek Perfection

Geofencing & Perfecto

Partners Workshop

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- Objectives & Usage of geofence
- What is Geofencing & Dis/Advantages
- Vitals of Geofencing
- Strategy for testing geofencing feature
- Developing geofencing app information for iOS & Android
- Geofencing Demo
- Q & A

Objectives of Geofencing

Now a days applications (in almost all domains) include Geofencing features. Intention here is to look on how to use and test geofencing enabled application using Perfecto's cloud platform

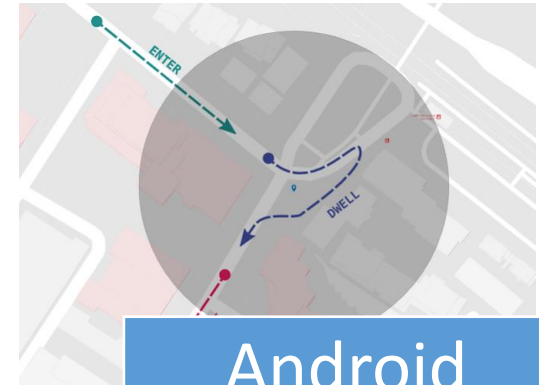
Possible scenarios :

- Marketing - Push notification for Rewards, loyalty points, ads, promotions for upselling, Airline information on landing
- Social network apps - push ads depend on their profiles– Facebook
- Family/kids safety/monitor
- Reminders
- Geofence area for pickup location for transport sectors : Ola, Uber
- Military area restrictions - warning areas
- Tracking – Employee time chart

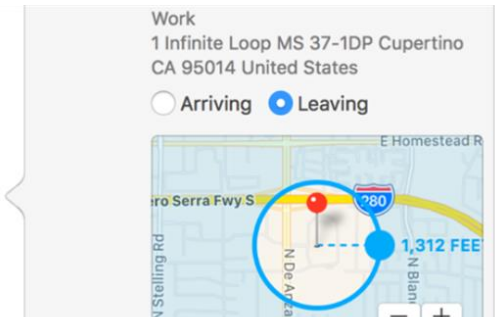


What is Geofencing & Dis/Advantages

- Geo fencing is technology
 - Virtual area on real geographical location
 - Enter/Exit of get push notifications
 - Application must be installed and enabled with GPS / Wi-Fi / Cellular Data interfaces
 - Targeting customers whom : I want GO/Do/KNOW/BUY moments
- Advantages:
 - Customer engagement by providing rewards, loyalty points, coupons, discounts, etc
 - Location based push notifications
 - Customer UX
- Disadvantages:
 - If app turn-off GPS, cellular data connection, Wi-Fi then user will not able to get notifications
 - If app depend on GPS information then user will do turn off because of battery consumption

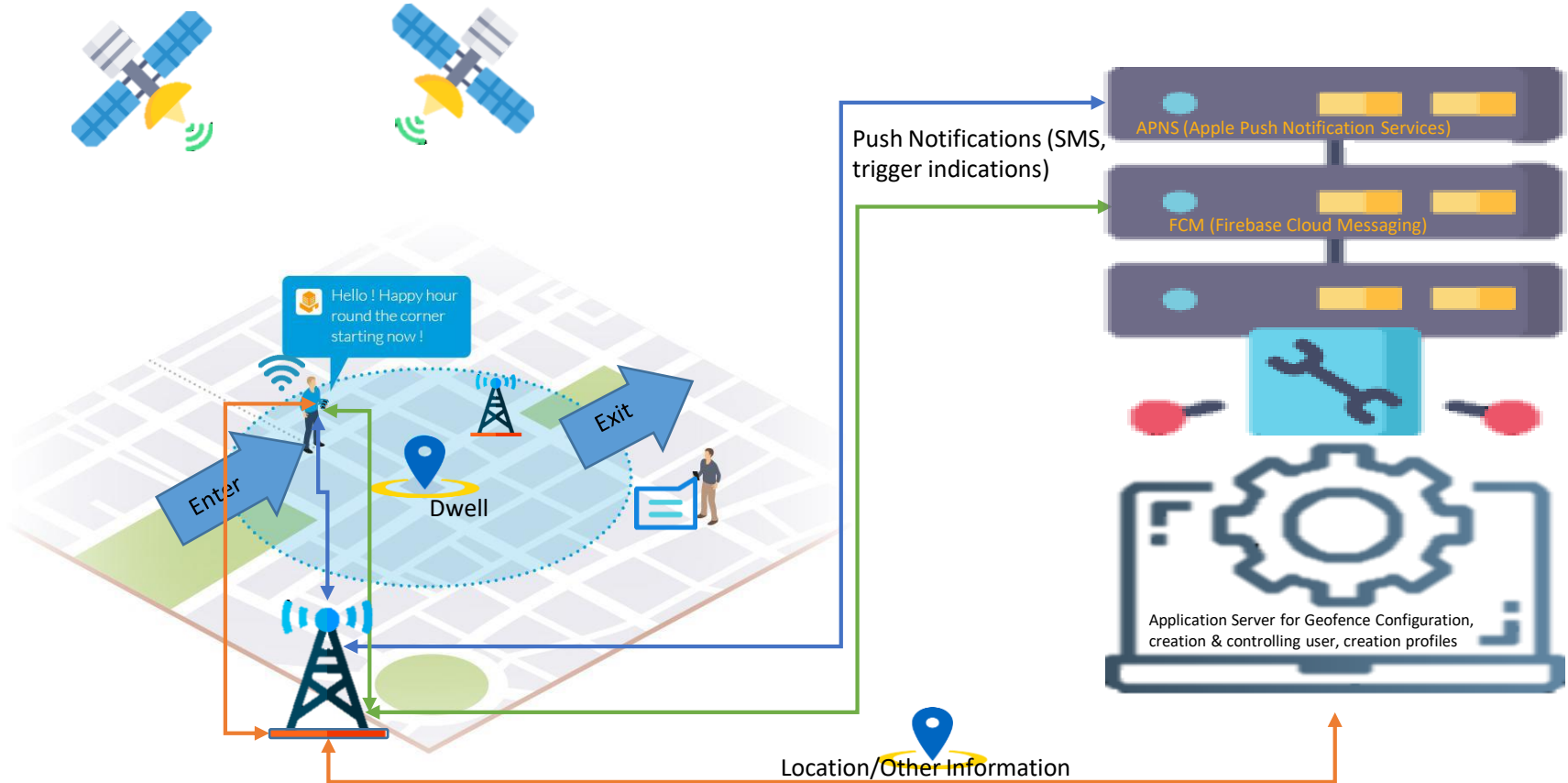


Android



iOS

geofencing Architecture



Strategy for dev/testing geofencing feature

Pre-conditions on developing geofencing application as server :

- Google/iOS/Windows Maps geo fence API's – register for Google maps Key for API's to develop your own web site/application server
- Client should develop Geofence user/client Application & User, geofencing controller server Application too – Web based or any kind of application
- Depend on lot of feature available on Geo Fence – client can implement depending on their requirement all the features which can be pushed to Geofencing application, so user's can be benefited by using up-sell, pre-sell push notifications/ads/coupons/info/alerts/etc mechanism's

Pre-conditions for application to be tested :

- Location mocking is required – **Perfecto “Set Location” feature** to be used here
- Application should have capabilities (one of these) to enable GPS settings, Cellular data, Wi-Fi
- Server/Admin Application should have Admin UI access to allow tester to able to create Geo-Fencing area ranges and configure all notification accordingly – this could be mobile/web app.
- Client/User Application should have geofencing feature where real user can be tested for getting all these notification depending on Geo-Fencing area ranges in application and requirements of project to be tested.

Geofencing Demo

Vitals of Geofencing

- Not dependant on GPS – battery drain.
- Accuracy & battery optimization – use GPS, wifi, cellular data, etc to optimize battery drain.
- Location data collection – visits, monitoring, Dwell time to create user profiles.
- Easy geofence management - own dashboard, giving you full control to easily create, manage and optimize your geofences
- Anti-spam tools – too many spam of notification can be avoid by short space time.
- Use of local notifications instead of push notifications - push notifications can take up to ~15 minutes to be sent, and configuration and handling push notification is bigger task.
- Use of standard iOS & Android geofencing APIs – to reduce time for approval.

Developing geofencing app information for iOS & Android

Android links : Geofencing developing

1. <https://developer.android.com/training/location/geofencing#java>
2. <https://www.youtube.com/watch?v=8fMCQQmkHj8>

iOS links : Geofencing developing

1. https://developer.apple.com/documentation/corelocation/monitoring_the_user_s_proximity_to_geographic_regions
2. <https://medium.com/elevate-by-lateral-view/geofences-how-to-implement-virtual-boundaries-in-the-real-world-f3fc4a659d40>

Windows links : Geofencing developing

1. <https://dzone.com/articles/executing-and-testing>

Common :

1. <https://www.pusher.com/tutorials/geofencing-angular/>
2. <https://www.zoho.com/creator/blog/geofencing-custom-applications.html>
3. <https://www.plotprojects.com/blog/7-features-to-look-for-when-choosing-a-geofencing-partner/>
4. <https://www.salesforce.com/products/marketing-cloud/best-practices/geofencing-marketing/>
5. <https://www.propellant.media/geofencing-marketing-company-providers/> → geofencing marketing companies list.

Q & A

Thank You

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