artistree

Artistree: iOS location based marketing app for music retail

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University of Redlands MS GIS program
Music Retail: Record Stores v.s. Online Content Providers

Introduction

Artistree: iOS application for music retail

Online Content Providers
- Pandora
- iTunes
- Spotify

Music Retail: Record Stores
Solution: Artistree app
storeowner creates trigger and its tag
artistree app

record store

user visits store
user ignores if not interested

user breaches store’s trigger boundary

user ignores if not interested not stored as message or email

Push notification: “Sale at Fingerprint records and books! Stop by today and get 20% off vinyl.”

user downloads app
user registers account
user tags

user adds store’s tag

User story

Artistree: iOS application for music retail
Mobile platform:

iOS 7 and 6: iPhone
  very popular
  lots of support, documentation
  quality control

Software development kits:

Parse.com SDK .......................................................... no need for PHP
takes complexity out of server side operations

ArcGIS Geotriggers SDK ........................................ adaptively moderates GPS usage
manages battery use
easy to edit map users view in app
content management system: very comprehensive

Development platforms
Artistree: iOS application for music retail
PlaceGuides  
Use geo-triggers and push notifications to notify attendees on promotions, samples and sales  
i.e. Nespresso campaign  
America's Cup Village at Marina Green  
San Francisco, CA

REI app  
Users receive notifications on REI sales events delivered to REI message center on users phone

Background  
Artistree: iOS application for music retail
Datasets

- **eventsList**
- **users**
- **userTags**
- **storeInfo** hosted on parse.com
- **tagsList** hosted on parse.com
- **triggers** hosted as AGO app
- **feature service** hosted as AGO service
- **web map** AGO web map service

Artistree: iOS application for music retail
User
- Register for store triggers
- Manage subscription to store triggers

Store Owner
- Create/customize triggers, push notification details

Application requirements
Artistree: iOS application for music retail
Using tags to relate data
Storeowner: System Design

Artistree: iOS application for music retail
User: System Design

Artistree: iOS application for music retail
System design: map popups

Artistree: iOS application for music retail
### Store information table

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Address</th>
<th>City</th>
<th>Google Search</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>University of Redlands</td>
<td>1200 E Colton Ave</td>
<td>Redlands</td>
<td>Find on Google</td>
<td>34.069953</td>
<td>-117.1746375</td>
<td>University of Redlands</td>
<td>(909) 739-2121</td>
</tr>
<tr>
<td>User</td>
<td>Katz Alley Record Store</td>
<td>214 E Redlands Blvd</td>
<td>Redlands</td>
<td>Find on Google</td>
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<td>-117.179929</td>
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<td>(909) 796-3444</td>
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<tr>
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<td>Redlands</td>
<td>Find on Google</td>
<td>34.054415</td>
<td>-117.182092</td>
<td>Redlands Vinyl Records</td>
<td>(909) 793-5252</td>
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<tr>
<td>User</td>
<td>Central Ave Apartments</td>
<td>1111 First Central Ave.</td>
<td>Redlands</td>
<td>Find on Google</td>
<td>34.0590517</td>
<td>-117.165675</td>
<td>Central Ave Apartments</td>
<td>(240) 338-4335</td>
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<tr>
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<td>Wombleton Records</td>
<td>5123 York Blvd.</td>
<td>Los Angeles</td>
<td>Find on Google</td>
<td>34.121147</td>
<td>-118.203872</td>
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<td>(213) 422-0009</td>
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<tr>
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### User table

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<th>AuthData</th>
<th>EmailVerified</th>
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<td>artistree</td>
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<tr>
<td>User</td>
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<td>[hidden]</td>
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### User's tags

<table>
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<th>Updated At</th>
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<th>ACL</th>
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<th>Tag</th>
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<tbody>
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<td>Long Beach</td>
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**Database on parse.com**  
**Artistree: iOS application for music retail**
Interactive Development Environment:
  X-Code

Software development kits:
  Parse.com SDK
  ArcGIS Geotriggers SDK
  ArcGIS iOS Runtime SDK

Hosting:
  Parse cloud hosting
  ArcGIS Online (both triggers and feature service)
Tested:

Small and large triggers fire

Notifications easily updated via ArcGIS Online

Results vary:

Proximity to cell towers

Summary

Artistree: iOS application for music retail
Front end:
Streamline user interface
Incorporate social media
Go beyond Los Angeles music retail
  Expand nationwide, internationally
  Include concert venues

Behind the scenes:
Add more stores, store information
Create a trigger monitoring service; user analytics
Upgrade hosting capabilities

Recommendations
Thank you

Artistree: iOS application for music retail

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