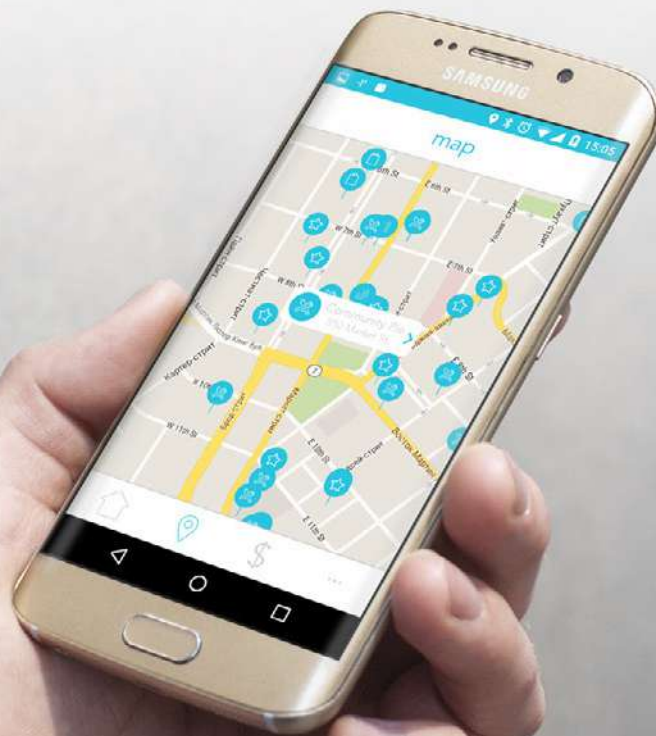




The app we have developed allows you to interact seamlessly with local businesses when you are inside or nearby. Receive secret offers and exclusive content, take virtual tour, and even earn loyalty points towards awesome rewards from restaurants, retailers, and local attractions.

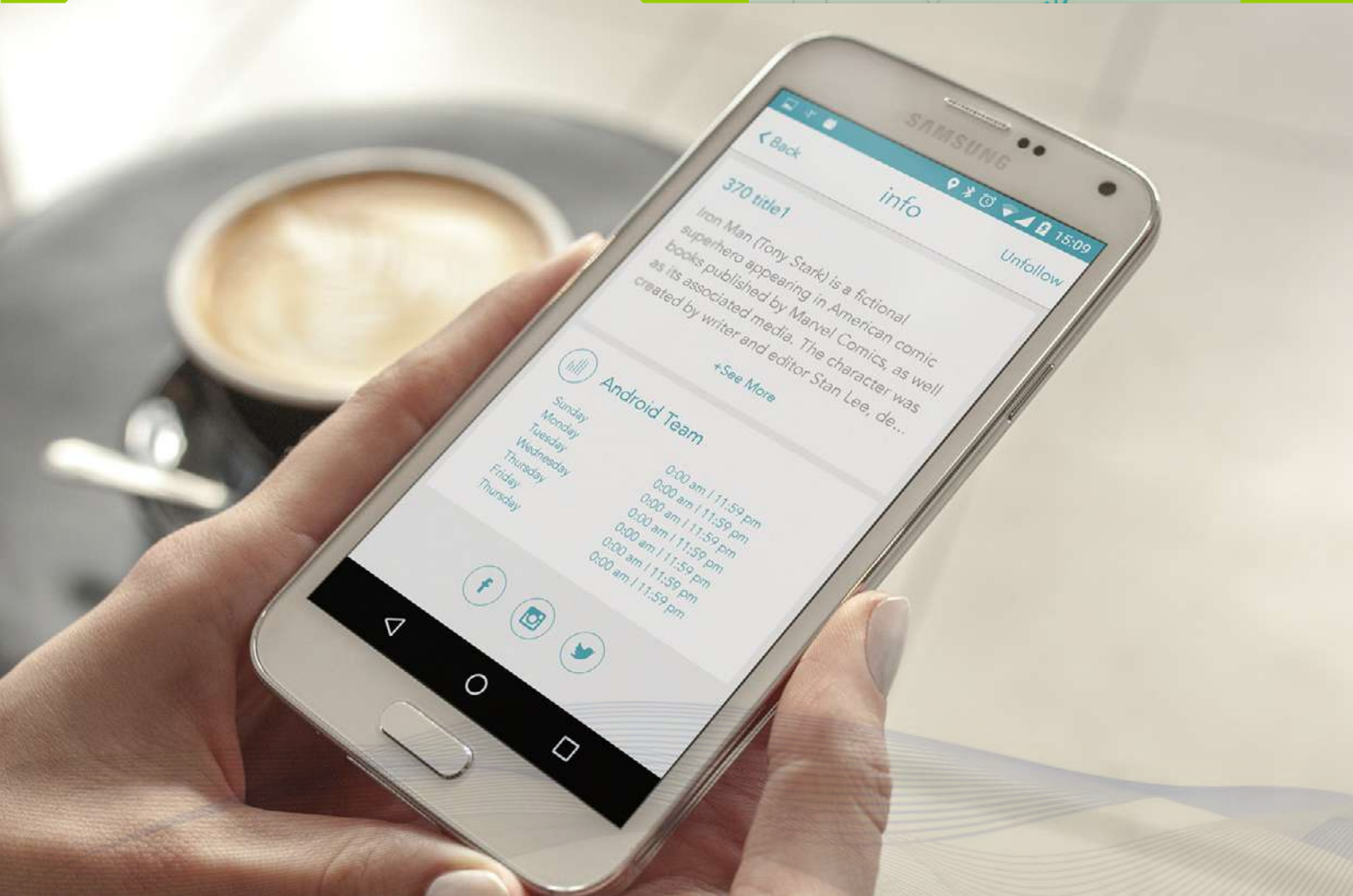
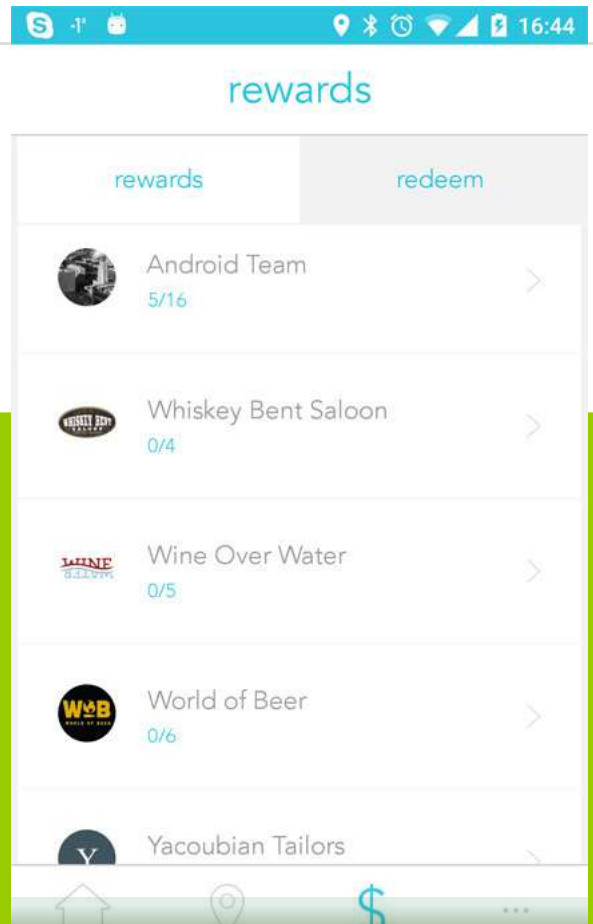
About the project

The app uses proximity sensors called “beacons” that allow businesses to send you location-aware content once you come within the range. That means that you can get timely, unique info when it is most relevant to you.



Challenge

- create beacons' search within working radius; provide proper work with beacons when they are located within one cluster
- caching of video resources
- data synchronization with specific schedule
- map customization: develop custom markers and info windows



Solution

Using AltBeacon protocol, we've solved the problem of beacon detection.

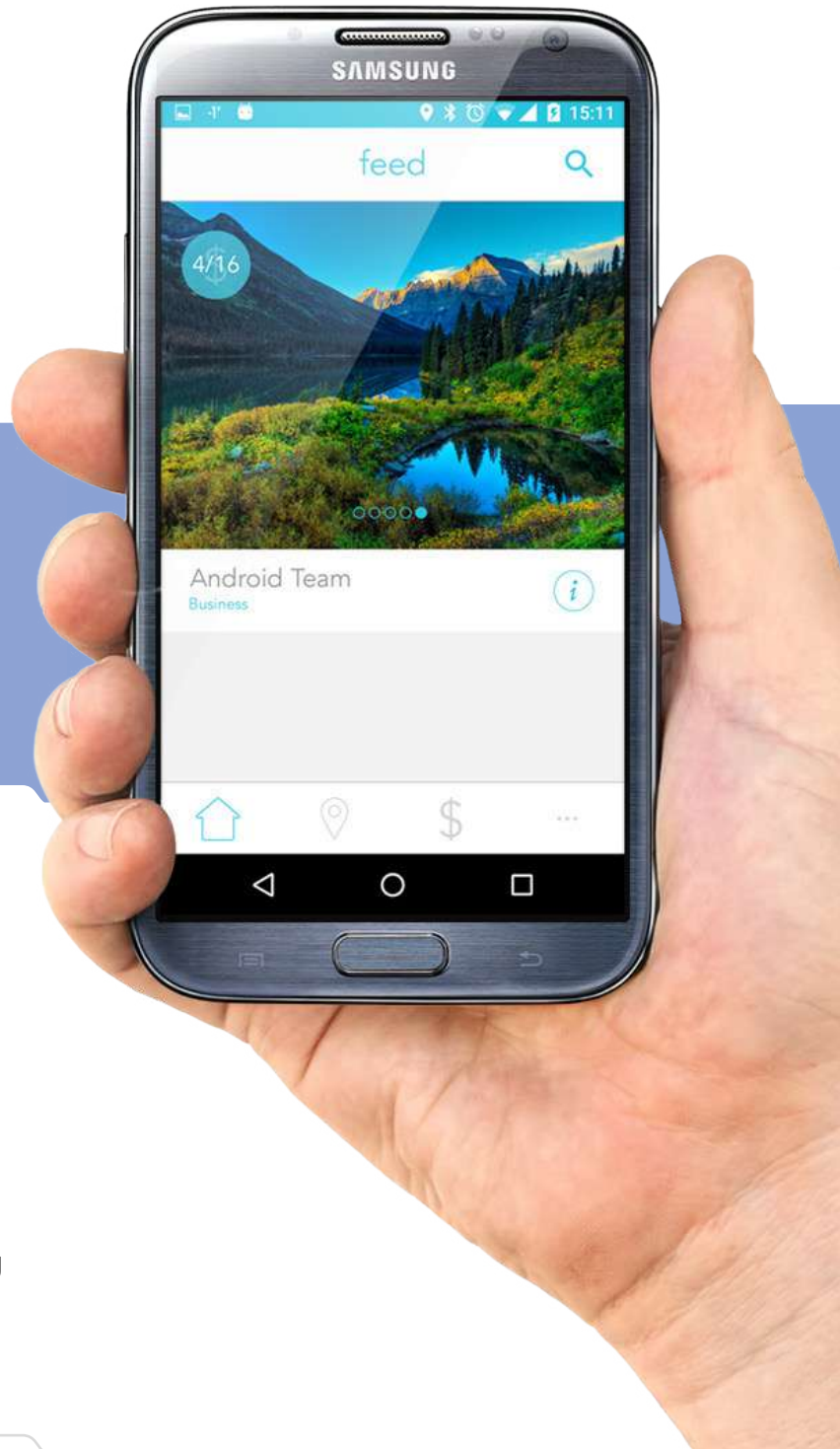
AltBeacon's default settings (RSSI, scanning period) were changed to detect the beacon properly.

We also developed a complex UI component, which has one of the main features - video playing.

Added custom logic using proxy server on mobile device to solve the problem of caching video data. We made wrapper over MediaPlayer to have flexible settings of video playing.

To solve the problem of Data synchronization, we added custom logic using GcmNetworkManager. It is powerful API for executing background tasks with specific schedule.

We have a big count of markers which we should view on the map when using some sorting rules. To solve this problem, we added custom filters for sorting and showing markers on the map.



Key Features:



find participating vendors near your location



receive secret offers & exclusive offers when you visit your favorite spots



get notified of new info & deals right when you walk in



earn loyalty points as you spend time inside a business

Technologies Used

Bluetooth Low Energy, AltBeacon library
Google Play Services (Maps, Cloud Messaging, Location, Analytics)
Crashlytics, Flurry analytics
Material Design (custom widgets)
Event-Driven Architecture
Retrofit, OkHttp, Picasso, Gson
Facebook SDK

