

MOBILE REALTOR APPLICATION FOR NOKIA



Client Overview

Our client, a Fremont CA based start-up, builds mobile applications that would be natively available on mobile devices including iPhone, Android and Blackberry mobile platforms, with a constant endeavor to incorporate more platforms in the future”. One such application for the real estate market enables users to search for houses for sale, based on their current geographic location and other factors like price, distance, community, and so on. Our client sought to combine the power of location based search on the mobile handset with the typical real estate data available. This would be offered to Realtors® who would be able to sign up customers, and in turn, offer the service during a prospect buyer’s search drive.

Client Requirements

Our client vision for the application was to provide a platform where the participating Realtors® could list his or her available properties for a particular area, while also browsing through the listing based on their requirements on the other hand. Users could access information on the real estate property by querying the RETS server, based on the search criteria. Our client wanted to build a general-purpose search capability that could also extend to the other verticals.

Having recently released the application on iPhone and BlackBerry, our client now wanted to implement the same solution on Nokia Smartphones to be available for downloads on Nokia Ovi store.

While our client employs a group of domain experts who understand the nuances of the real estate market and web-based application experts, they have been working with Xoriant teams, who have the expertise in developing, porting and testing cross-platform mobile applications. Having developed our client’s applications on iPhone and Blackberry platforms, it was natural for our client to choose Xoriant to develop the application on the Nokia platform too

Engagement Situation & Challenges

Engagement Challenges

- The application had to be supported across multiple generations of Nokia devices
- The application had to support multiple properties type Residential, Commercial etc
- The application was required to be built based on the web service calls that were already created by client to access real estate data.
- It was necessary to achieve quick time-to-market: Beta launch was expected in 1 month from project kickoff

- It was necessary to achieve a critical performance benchmark: Support search results for maximum input criteria around 1000 property listing
- The application was expected to display the real time property listing data updates on buying and selling of properties.
- The user interface and user experience should be as similar and seamless across various mobile devices as possible.

Technology Challenges

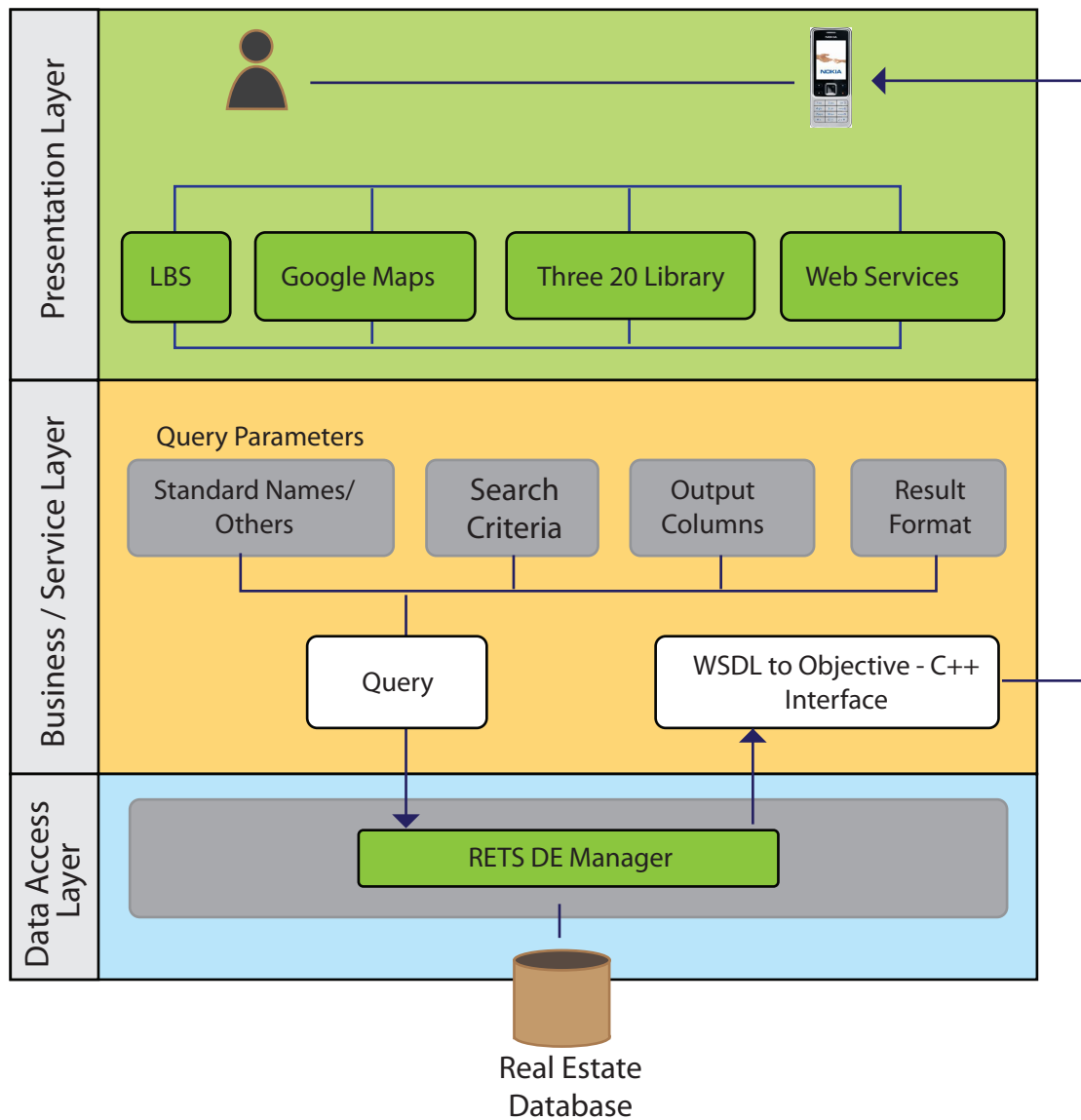
- Having built the iPhone application as per App Store standards and since the Nokia application now had to be built as per Ovi Store standards with minimum customizations, our design team needed to quickly come up with a design for common iPhone and Nokia application that will be sophisticated and meet Human interface guidelines, which may have to be retrofitted if necessary in the next release of the iPhone version.
- The Nokia application needed to be certified before it could be made available on the Ovi store
- Technology shortcomings of specific devices/platforms had to be overcome: Nokia Qt 4.6.2 and Mobility 1.02 does not support some of the functionalities like Finger Swiping of lists, photo browser, map and direction widgets etc. which was required by the application
- The application required features like camera which is not supported by the current Nokia Qt/Mobility framework
- The application had to support multiple OS of Nokia like Symbian^3, S60

Xoriant's contributions in the engagement

Xoriant's team worked closely with the client to understand the requirements and created an engagement roadmap. The engagement roadmap was planned with due consideration to engagement objectives and some key decisions were taken early in the engagement cycle.

Xoriant was involved in complete SDLC process in building the application, following the agile execution methodology to meet demands of evolving requirements without compromise on the client's Time-to-Market goals.

Xoriant used tools like Unfuddle and GoTo Meeting for requirement gathering and implementation design discussions. This ensured that Client team in Fremont and Xoriant's off-site team always had a common understanding on the requirements. This proved to be effective to avoid "requirement gaps" and "quick to changes".



Significant Contributions included

- Configuration management using SVN and Eclipse for the milestone based code branches as defined in the application
- Creation of test cases, test plans and UAT for application. QA testing involved for every milestone
- Location based services (LBS) for determining current location of the user and search based on same
- Integration with Google Maps for driving directions

- Integration with Three-20 library for Photo Collage implementation
- Web Service (WSDL) to C++ conversion for accessing the remote data
- Building of reusable components to be used across multiple real estate projects
- Involvement in entire life cycle of mobile application development right from requirement capture, design, implementation, QA testing to delivery phase
- Providing Call, SMS and Email interface for listed Agent and agent offices
- Implementation of feature to enable the application to restart from the last exited state of the application
- Support for the beta application after its launch and submission of application to Nokia Ovi store
- Creating custom widgets to meet the functionalities not available by default in the Nokia SDK:
 - Finger Swiping of lists
 - Photo Browser
 - Clickable widgets that would get their own picture from the server
 - Map and direction widgets using Google maps API
- Implementation of a S60 Symbian layer over the Qt platform to use mobility features
- Certified applications for the latest Nokia Smartphones such as Nokia N8, E7

Tools & Technologies

- Xcode 3.1.2
- Google Maps API
- Three-20 lib APIs
- Location Services
- Photoshop and Dreamweaver for UI designs
- Nokia Qt SDK 4.6.2
- Nokia WRT
- QML

Engagement Results

- Our client was able to launch the beta version of the product on the Nokia platform in 1 month and it was widely accepted by user community. Xoriant's experience on working in mobile applications and the specific domain were keys to achieve this tight timeline for mobile application development
- User interface was implemented of using human interface guidelines from Nokia Forum. User experience was well received after the beta launch. Xoriant provided simple and highly cost effective solution to our client by incorporating open-source and free technologies
- Due to these features our client was able to position itself in the same / other verticals very quickly which enabled him to get work in new accounts

Client Testimonial

“Our biggest pain point when we engaged Xoriant was we wanted a team that was already ramped up on the technology, except for RETS which we planned to train them on. We might have lost the customer if we did not get timely help from Xoriant. We really liked Xoriant's dedicated and motivated team of trained professionals and their on demand resource engagement”