Ion Mobile – Making Your Business Mobile

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Mobile Experience

Overview

User Centered Design is at the core of our mobile application design and development strategy on the world’s most widely used mobile platforms – iOS and Android. This strategy builds on the elements of Visibility, Accessibility, Legibility, Language and Usability.

For an individual, smart phones and tablets host an array of mobile applications. Thus, it is important for a mobile application to have a small footprint (Memory, CPU) to avoid the risk of being dumped. At IonIdea, we overcome this challenge by optimally utilizing resources to deliver a wonderful user experience.

The applications we develop, seamlessly integrate with Cloud Based Infrastructure (Amazon EC2, Windows Azure) and social networking applications Facebook and Google+, amongst others.

Our Approach

We understand that unlike normal web based applications, mobile application development is a different ball-game. At IonIdea, we use Agile principles and the SCRUM framework to incorporate changing requirements to deliver Clean and Lean, Interactive, Swift and Small Footprint mobile applications.
Featured Projects

NATIONAL GEOGRAPHIC OCEAN APP

Business Case: The National Geographic Society and Lindblad Expeditions jointly support an innovative program to restore marine ecology. In order to raise awareness on the importance of preserving the ocean and its habitat, they wanted an app that guests could use on cruises organized by them.

Solution: IonIdea developed an iPad app called ‘National Geographic Ocean’. The app displays stunning high-definition videos and images of the ocean and marine life. Our services included information architecture, UI design, iOS development, and Quality Assurance. The application uses stock iOS capabilities and device functions like Image Processing, Audio/Video, Wi-Fi connectivity, and Multi-Point Touch.

Key Features

- Introductory video of oceanic ecosystem and threats faced
- Image/video gallery of sea creatures with detailed description
- Full or medium screen display of images/videos
- Info screen containing tips about preserving the ocean

Technologies

- Objective-C
- iOS SDK
- Incorporated Cover Flow effect for image transitions
**MEDICAL IMAGING APP**

**Business Case:** Our client has numerous clinical systems that provide images required for analysis and diagnosis. They needed a central repository for these images that physicians can remotely access based on specialization, disease, or patient data.

**Solution:** IonIdea delivered a solution based on a medical imaging technology called Picture Archiving and Communication System (PACS). Each imaging machine transmits DICOM (Digital Imaging and Communication in Medicine) objects to a PACS repository. A central server parses and stores DICOM objects received from various machines. The web and iPad applications access the data on the server using web services. The application uses stock iOS capabilities and device functions like image processing, E-Mail, Wi-Fi connectivity, File Attachments, Notifications and Multi-Point touch.

**Key Features**
- Search and filter using patient ID, doctor ID, machine, or clinic name
- Displays diagnosis, recommendations, images, and frames
- Image viewer displays 2-4 frames simultaneously allowing comparative study of series
- Infinite loop for playing images, with loop speed setting for better control
- Doctors can zoom, pan, measure, and modify images
- Snapshots of measurements can be emailed along with doctors’ comments
- Manual as well as automatic timed logout

**Technologies**
- Login authentication with server or backend LDAP/RADIUS
- PACS architecture
- DICOM image storage protocol
- HL7 data transfer protocol
- iOS
- Django
FIELD COLLECTION MOBILITY

**Business Case:** Cablevision uses a large workforce of Field Collectors to collect delinquent payments. This mobile application automates functions of Field Collectors to efficiently manage their tasks at hand.

**Solution:** IonIdea delivered an integrated mobile application on the Android platform to automate the work allocation and collection tasks of Collectors. The mobile application runs on a single platform driven by a single UI interface which is securely integrated with multiple backend systems. RESTful APIs and JSON messages are used. The unified interface has the ability to take pictures, scan bar codes and capture signatures. The application uses stock iOS capabilities and device functions like Image Processing, E-Mail, Wi-Fi connectivity, File Attachments, Notifications, Camera and Multi-Point touch.

**Key Features**

- Authentication using MD5 encryption
- View tasks and update status
- Offline mode - cached locally when no connectivity; synced when connectivity is restored
- Capture signature on mobile device
- Customer information and google maps for route optimization
- Mobile check, credit/debit card payments
- Barcode scan - equipment returns, de-auth, etc.
- Generate completed work orders, receipts - email customer

![Payment/Equipment Receipt](optimum.png)

**Technologies**

- Android OS 2.3.X
- SQLite DB
- javamail-android
- Google Cloud Messaging
- MobileIron MDM
FIELD SERVICE MOBILITY

Business Case: Cablevision had a need to automate the goal of reducing human errors, enhancing user experience and improving productivity of their Field Technicians. They were looking for a system to upload work orders, track inventory, schedule and optimize route, accept payments, accept signatures etc.

Solution: IonIdea developed a TechMobility application on the iOS platform and a middleware to integrate it with backend enterprise systems like fleet management, billing, inventory etc. The mobile application is driven by a single UI interface and includes device functionality such as clicking pictures, scanning bar codes and capturing signatures, etc. The application uses stock iOS capabilities and device functions like Image Processing, E-Mail, Wi-Fi connectivity, File Attachments, Notifications, Camera, Bluetooth, Google Maps and Multi-Point touch.

Key Features
► Route optimization as per job list
► Mobile Payment Collection (Card/Check/Cash/Money Order etc)
► Authentication
► Installation image collection
► Equipment barcode scanning
► Generate work orders with signature

Technologies
► Cocoa Touch, Bluetooth Manager, Google Map Frameworks
► iOS Barcode Reader SDK
► Requests processed using XML over HTTP-protocol.
► Supported Orientation Portrait, Portrait Upside down, Landscape Left, Landscape Right
DEFINITELY DUBAI - MOBILE APP FOR TRAVELERS

**Business Case:** The client wanted to develop a mobile application that would revolutionize shopping experience and recommend entertainment options in and around Dubai city.

**Solution:** Definitely Dubai is an application that helps visitors explore and find information on the merchant outlets in Dubai. The app provides a location-based mobile information portal for tourists, business travelers, and residents. Features such as ‘Deals’ and ‘Explore’ help users find shopping opportunities, restaurants, and nearby attractions. The application supports English and Arabic. The application uses stock iOS capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Camera, GPS, Audio/Video and Multi-Point touch.

**Key Features**
- Locates businesses within a pre-defined radius
- Provides a list of merchants based on categories and sub-categories
- Provides a summary of promotions and offers available at stores
- Advanced search
- Custom modules such as photo album, panoramic view, sponsored ads, affinity message scroll, and share on Facebook/LinkedIn
- Info tab including currency converter, emergency numbers, and ‘About Dubai’ video

**Technologies**
- GPS-based location services
- OpenGL ES provides a panoramic view of the location
- Augmented Reality used to render on-top camera view
- Extensive caching mechanism to handle connectivity issues

**App Store Links**
- iOS
- Android
BiipNet

Business Case

IonIdea developed a name card sharing and social networking mobile application for one of our clients. As we know, our name card or business card is one of our most important networking tools we will ever need. It might be easier to accept a physical, paper business card, but we still have to enter that person’s email address and phone number into our contact book. Instead, using this mobile app developed by IonIdea business cards can be imported or shared with your friends with just two or three taps eliminating post-event busy work.

This revolutionary app strives to potentially change the way individuals and organizers of seminars, exhibitions and workshops manage their networking efforts by instantly allowing a group of individuals to exchange their business cards with one another so that everyone has everyone’s business card! The application uses stock iOS and Android capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Camera, and Multi-Point touch.

Key Features

1. Create Personal Cards - Add that professional touch to your personal branding with a Personal Card customized to your needs. *We are adding the ability to create your own template soon. Hang in there!*  
2. Create Corporate Cards - Digitize your existing corporate/ business cards with this feature, add your own details to categorize your services.  
3. Create or Join Card Holders - Imagine Card holders as a virtual space for everyone to put in their name cards as well as to retrieve name cards that they want to collect (instantly!). With this app, all you need to do is create a card and share that card via a Card Holder (Create or Join). Invite everyone to join your Card Holder by telling them to key in the 4 Letter Code and everyone is ready for card exchange.

Technologies

- HTML5
- PhoneGap
- jQuery Mobile

App Store Links

- Android
- iOS
Brabble

Business Case

IonIdea developed and maintains a video-based social networking app for its client. Brabble is a 100% free social sharing app that allows sharing of video, photo, audio and text all in one network. You can reply or comment back (aka 'brabbleback') using any of these formats creating rich conversations.

Share life's moments with your friends, the Brabble world, or privately - and to Twitter and Facebook's card! The application uses stock iOS and Android capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Location, Camera, Audio/Video and Multi-Point touch.

Key Features

1. Enjoy richer conversations - comment using video, photo, audio and text.
2. Share instantly to Facebook and Twitter.
3. Record audio direct from your iPhone.
4. Don't just like a post - you can LOVE them too.
5. My Feed: displays the Brabbles for the users you follow and your own Brabbles.
6. Explore: displays the Brabbles of all the other Brabble users.
7. Support for front and back cameras.

App Store Links

Android

iOS
LEAPSET – RESTAURANT APP

Business Case: The client required a mobile app that lists restaurants in and around California. The app would help users find restaurants, view deals, and place orders.

Solution: IonIdea developed an iPhone app that helps users find restaurants, check in, and place orders using their credit cards. The app utilizes GPS to locate restaurants in an area. Users can also check in to any of the restaurants in the network using social media. The application uses stock iOS capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Location, Camera, Maps, GPS and Multi-Point touch.

Key Features

➢ Easy mobile ordering for pickup or delivery
➢ Dedicated tab to facilitate credit card orders
➢ Re-order button, Up-to-date restaurant menus
➢ Loyalty program with push notification integration for frequent visitors
➢ Automatic check-in informs restaurants when a user is in the house
➢ Updates to users’ friend circle about most visited restaurants along with reviews
➢ Detailed order and check-in history
➢ Social network integration with Facebook, Twitter, Foursquare, and Google Latitude

Technologies

➢ iOS SDK
➢ Objective-C
➢ Push Notifications
➢ Maps and GPS

App Store Link

iOS
MOBILE BANKING APPLICATION

Business Case: The client wanted a wallet-like Android banking application for their customers. They required functionalities that would enable users to add multiple bank cards and transfer money after bank account verification.

Solution: IonIdea developed an app that can be used by customers to access their accounts and transact on-the-go. Customers can use the locator module to find the nearest ATMs and branches with detailed information on each facility. An interactive ‘Contact Us’ page with access to information on the bank’s history and policies are also part of the offering. The application uses stock Android capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Location, Camera, Maps, GPS and Multi-Point touch.

Key Features

➤ Access to account balance, statements, and transaction history
➤ Ability to make transfers, pay bills, and store receipts
➤ Account personalization with images
➤ Access to payment and transfer history with option to cancel pending payments/transfers
➤ Enrollment and password reset via in-app web views
➤ Supports Spanish and English

Technologies

➤ Android Development Tools
➤ Eclipse IDE
➤ Android Support Library
➤ BugSense
➤ Google Maps Android API v2
➤ Google Play Services SDK
➤ Flurry
➤ GIMP, GIT
**Business Case:** The client needed a hotel software suite that would cover the entire gamut of hotel activities right from tracking of room cleaning to managing reservations. They wanted an alternative to the complex and heavy hotel software currently in the market.

**Solution:** IonIdea developed an enterprise Property Management System (PMS) for hotels, with a mobility platform for enhanced guest and staff experience. The solution comprised a mobile application for guests along with web and PhoneGap-based tablet applications for hotel staff and admin. The application uses stock iOS capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Location, Camera, and Multi-Point touch.

**Key Features**

- Handles all common tasks of staff, including room allocation with RFID key, and dispensing of MSR keys at kiosks
- Facebook and PMS integration with email notifications

**Guests can**

- Choose to pick up keys from the kiosk or front desk’s expedited line and check-in/out from anywhere
- Make reservations and payments, upgrade room, and request for F&B services
- Access eConcierge, eCompendium, and social lobby; avail loyalty benefits

**Staff can**

- Access guest reviews and connect with guests
- Process check-in/check-out from anywhere
- Assign/find rooms, attend to service, and get full room status and guest information

**Technical Highlights**

- The smartphone app for guests includes an iOS application integrated with iBeacon technology
- Back-end is an RoR-based middleware that interacts with multiple backend applications such as PMS, Payment Gateway, and Room Key Management Solution

**Technologies**

- iOS Core Location Framework
- Ruby 1.9, Rails 3.2
- PhoneGap
- JavaScript
DENONO WELLNESS - LIFESTYLE MANAGEMENT APP

**Business Case:** Denovonow offers a digital engagement platform that helps users make informed lifestyle choices. They required a mobile alternative for the web tool kit used by their customers.

**Solution:** ionIdea delivered a cross-platform mobile application developed using Sencha Touch and Apache Cordova that can be used interchangeably with the web tool kit using the same credentials. The application uses stock Android & iOS capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, and Multi-Point touch.

### Key Features
- Helps users track daily lifestyle, diabetes, and dental activities at a basic/detailed level
- Users track their activities to earn points that can be used to redeem rewards
- All activities and points are compiled and presented to the user via cards, graphs, and timelines
- Users can also create and participate in challenges, and keep a tab on their progress

### Technologies
- **Server Side:** Node.js—specifically an MVC framework called Sails.js
- **Database:** MongoDB
- **Frontend:** Node.js and EJS templates
- **Mobile App:** Sencha Touch/Apache Cordova
- **Push Notification:** Real-time notification system built using PubNub for web app, Google Cloud Messaging (GCM) for Android, and Apple Push Notification System (APNS) for iOS

### App Store Links
- Android
- iOS
NFC PAYMENT APPLICATION

Business Case: The client required a Point of Sale (POS) solution that would enable them to accept payments via smartphones. They required a mobile application that would enable shoppers to make purchases at the store along with a terminal app to accept payments.

Solution: Leveraging Near Field Communication (NFC) technology, IonIdea developed an Android application that allows merchants and shoppers to easily make secure payment transactions at the store. The system has two interfaces—Terminal App for merchants and Cash App for shoppers. Both apps use NFC to make payment transfers using a secure internet connection. The application uses stock Android capabilities and device functions like Image Processing, Wi-Fi connectivity, Notifications, Location, Camera, Maps, GPS, NFC and Multi-Point touch.

Key Features
- Mobile payment functionality
- Transfer or request money from other users
- View balance and transaction history
- Locate nearby merchants using GPS
- Search for nearby deals broadcasted by merchants
- Avail coupons and discounts
- Integrated with Square and UniMag

Technologies
- NFC and Card Swipe
- Android
- XMPP
- QR Code, PDF417
- Google Maps and OpenStreetMap
- Access .pkpass files using PassWallet
Business Case: The client wanted a mobile application that would enable prospective buyers to experience two of their new car models without stepping into a showroom. They needed an app that would provide a 3D view of the cars, highlight key features, display customization options, as well as enable users to take a virtual test drive.

Solution: IonIdea developed an application that incorporates Augmented Reality to provide users with a virtual experience of the car. The app provides a virtual driving experience with speed control, cockpit view, and feature descriptions from a driver’s point of view. Other features include color customization and 3D views. The application uses stock Android and iOS capabilities along with device functions like Image Processing, Wi-Fi connectivity, Notifications, Location, Camera, Maps, GPS, Accelerometer, Gyrometer and Multi-Point touch.

Key Features

- Customize in stunning 3D, view interiors, and experience a virtual drive
- Zoom-in, view hotspots, and other controls
- **GPS-based** location service to identify dealers
- Images can be emailed or shared on Facebook
- **Accelerometer** and **Gyrometer** are used to detect motion
- Core Location framework to determine user’s current location

Technologies

- iOS SDK, Android SDK, Android NDK
- 3D Augmented Reality
- Unity 3D, Core Animation, Continuous Scroll
- OpenGL for embedded system
- Core Location framework and location services
- FFmpeg

App Store Link

- **iOS**
- **Android**
IonTime Mobile

**Business Case:** IonIdea has created a mobile application for its employees, which can be used for managing employee timesheet. It gives employee an option to enter data daily and submit to their Supervisor/Manager on weekly basis. Supervisor/Manager can use this application to review and then approve or reject the submitted timesheet. This application improved the overall productivity and timesheet compliance rate for all the employees. The application uses stock Android capabilities.

### Key Features
- LDAP integration for user authentication
- Log current time on the go. User can start an activity, when it starts and then stop the same on completion. Upon submission this activity will be added to weekly timesheet.
- Submit timesheet on weekly basis
- View approval status of current and previous week’s timesheet.
- Approver can review and approve/reject timesheet
- Submitter can re-submit rejected timesheet
- Setting up reminder on phone for timesheet submission.

### Technologies
- Android SDK
- HTML5
- PhoneGap
- jQuery Mobile
- Bootstrap
Why IonIdea

1000 R&D Resources
Web and Mobile Application Development Expertise
Big Data and Analytics Expertise
Enterprise Systems Implementation Skills
Strong Capabilities Across UX, Design, and QA
Cross Industry Experience
Highly Qualified Resources with Diverse Skill Sets

Focus at IonIdea

At IonIdea, our mission is to help our customers succeed. Through consulting and outsourcing, we deliver effective solutions to your critical business problems, to enable you to win. Our success has emerged from our commitment to the core values of honesty, reliability, dedication, teamwork, innovation, and customer satisfaction.

By combining our expertise and solutions in information technology and business processes, we develop effective solutions for you, and help you succeed quickly and cost effectively.

Enhance your Competitive Edge by partnering with IonIdea. Let us help you today. We assure you the best of our services and solutions at all times, and look forward to a long and mutually beneficial relationship with you.

Cross Industry Expertise

Government
Banking and Finance
Insurance
Healthcare
Telecommunications
Interactive Media
Data Science and Analytics

Global Delivery Model

Agile and SCRUM Methodology
Transparent Communication
Web-based Collaboration
Timezone Advantage
IonIdea at a Glance

FACT FILE

➤ Global IT Product Developer
➤ Established in 2004
➤ 1000 Workforce
➤ 50+ Active Clients
➤ 650+ Completed Projects
➤ 6 Offices across the Globe
➤ Fast and Steady Year-on-Year Growth
➤ Profitable Since Inception

SERVICE PORTFOLIO

➤ Focus on New Technologies
➤ Mobile Development
➤ Web Development
➤ BSS/IT Consultancy
➤ Independent Integration and Verification
➤ Big Data & Business Intelligence
➤ Cloud Solutions Based on Amazon EC2, Windows Azure
➤ BPO
➤ Staff Augmentation

CERTIFICATIONS

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