Enhancing Quality of Healthcare with
Mobile and Web Application Development

USA | UK | Poland | UAE | India | Singapore | Australia

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Contents

QBurst has been engaged in software development for over 10 years. We have expertise in creating dynamic mobile and web products—be it a native iOS/Android application, a cross-platform mobile application, an advanced portal, or a complex content management system. Our teams have been developing solutions across various sectors incorporating industry best practices and standards.

We deliver technology driven healthcare solutions that enable our clients to enhance value of their services, improve productivity, and make better business decisions.

A few apps we developed for healthcare organizations include:

An iPhone app for healthcare clinics that provides physicians instant access to their patients' medical history. Physicians can input the diagnosis and procedures performed on a patient (CPT and ICD codes in medical jargon) which is in turn forwarded to the clinic's billing application.

A parental support app on iOS and Android platforms that offers live video chat.

An iPhone app for a leading online fitness company in the United States that helps exercise enthusiasts stay in shape from the comfort of their home.

If you are planning to develop an app (consumer or enterprise), we are the company to hire. We work with you from conception, architecture, and design of the app through getting it listed in the app store.

So if you are looking for a company that also takes into account non-functional aspects like usability, security, and performance—look no further.

Our Approach

QBurst follows agile methodologies such as SCRUM for product engineering and development. By breaking down projects into smaller iterations, we effectively speed up our delivery process for product development.

We use web-based project management and collaboration tools such as Trac, JIRA, and Redmine to ensure quality and successful delivery of projects. Clients are given access to these tools so that they can track progress as we design, develop, test, and deliver applications.

"We really enjoyed working with the QBurst team. They were very responsive to our needs and really helped accelerate our development on a critical mobile project."

Manu Kodiyan, Co-Founder,
AltheaHealth

NYU ER WAIT TIME APP

Business Case: Our client required an app that allows users to view the current ER wait time. They also required a feature that displays the quickest route to the Emergency Room.

Solution: QBurst delivered a solution that displays the ER wait time on the home screen, updated every 15 minutes. The app also displays the shortest route from the user's current location to the ER.

Key Features

➤ Displays ER wait time that's refreshed every 15 minutes

➤ Displays driving directions from user's current location to the ER

➤ Loads directions in WebView using Google Maps
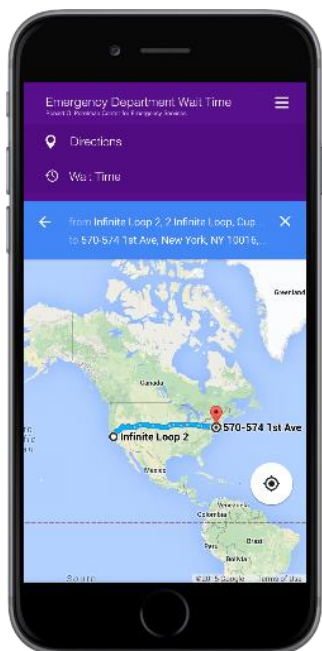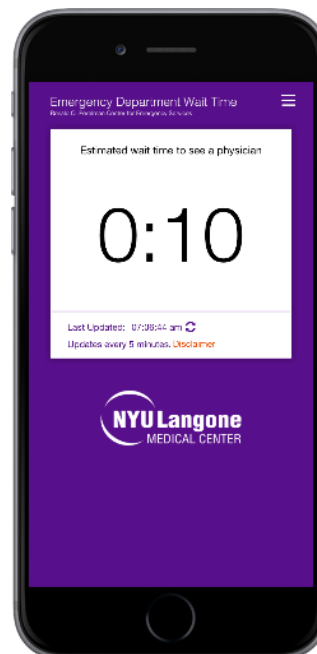
Technologies

➤ iPhone : Xcode, Core Location, AFNetworking 2.0

➤ Android: Android Studio, Fused Location

➤ Backend: Node.js

➤ Google Maps

Client Profile

Founded in 1841, NYU Langone Medical Center is one of the foremost medical schools in the United States.

DRUG DELIVERY APP

Business Case: The client wanted to provide a safe and convenient way for patients to procure quality medical products.

Solution: We developed a platform that connects doctors, patients, and premium medical suppliers. It comprises an HTML5 user app, an iOS driver app, and three RoR admin portals for super Admin, User Admin, and Server Provider. Upon approval, a patient can login and place orders for medicines available within their area. A driver closest to the patient's location gets a notification about the order and makes the delivery.

Key Features

➤ Doctors can make their services visible and connect to patients

➤ Details of current and previous orders are stored in the app

➤ Auto-update feature pushes new enterprise releases without hampering daily operations

Patients can

➤ Schedule an appointment with a doctor nearby to get verified

➤ Place orders and have them delivered

➤ Select a desired mood to filter medical products

➤ Share on social media; avail discounts

Drivers can

➤ Accept and confirm the order

➤ Get route info and indicate successful delivery

➤ Receive notifications of cancellation by users

➤ Register complaints against users for non-payment or other issues

➤ VoIP calling feature for driver to contact patient without sharing contact information
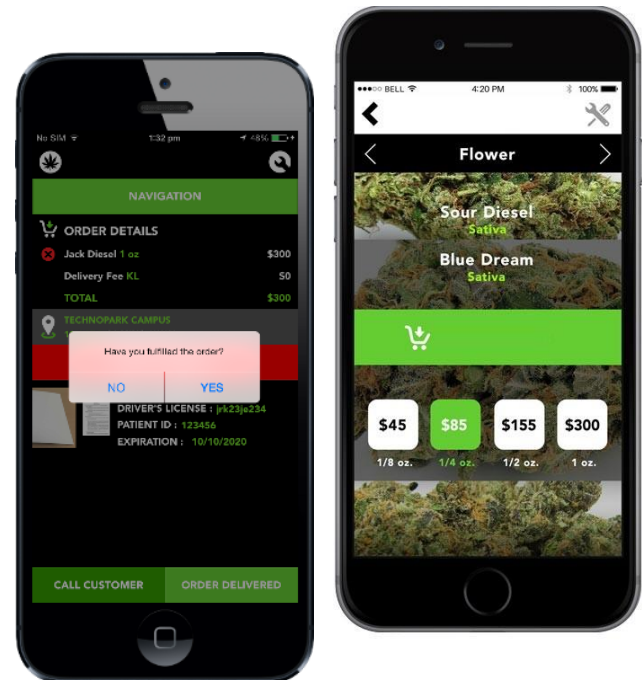
Technologies

➤ HTML5

➤ iOS, Objective-C

➤ jQuery

➤ Ruby on Rails

➤ Ajax, JSON

➤ Google APIs

➤ PostgreSQL

➤ Modal Forms

Client Profile
Based in California, the client is a full service digital agency specializing in the design and development of mobile and web applications.

As the development is bound by NDA, the app links cannot be disclosed.

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: QBurst 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.

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
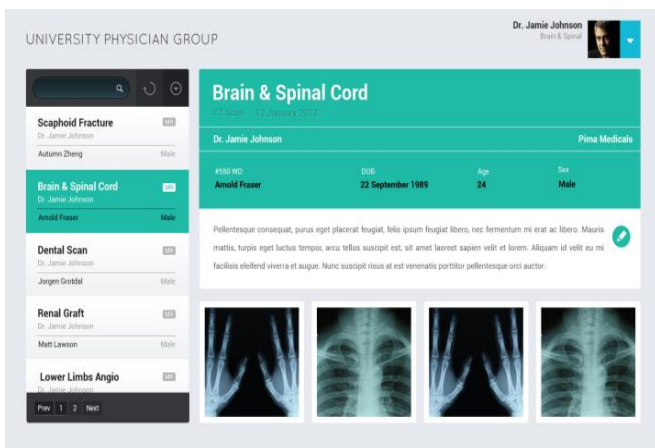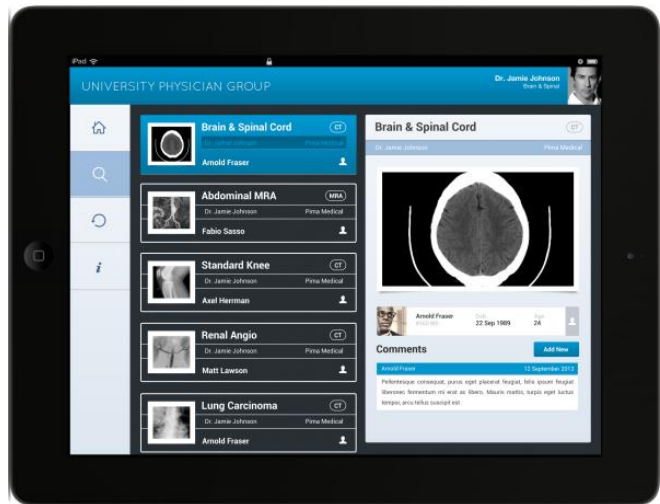
Technologies

➤ Login authentication with server or backend LDAP/RADIUS

➤ PACS architecture

➤ DICOM image storage protocol

➤ HL7 data transfer protocol

➤ iOS

➤ Django

Client Profile

Our client is a leading multi-specialty physician practice group in the USA with more than 2000 affiliated physicians, prominent in their chosen specialties. The nonprofit group caters to over a million patients annually.

As the application is meant for enterprise distribution, it is not available in app stores.
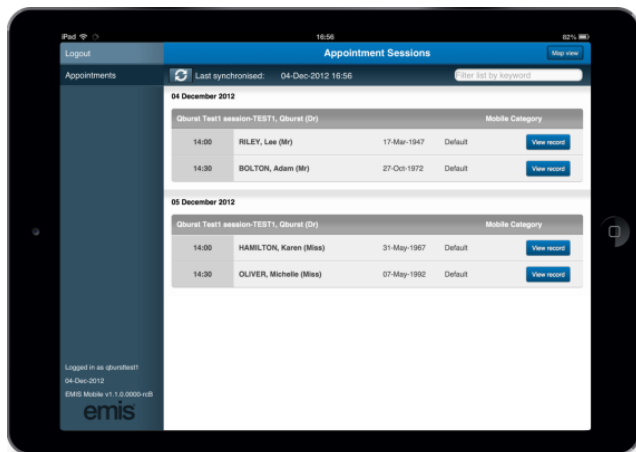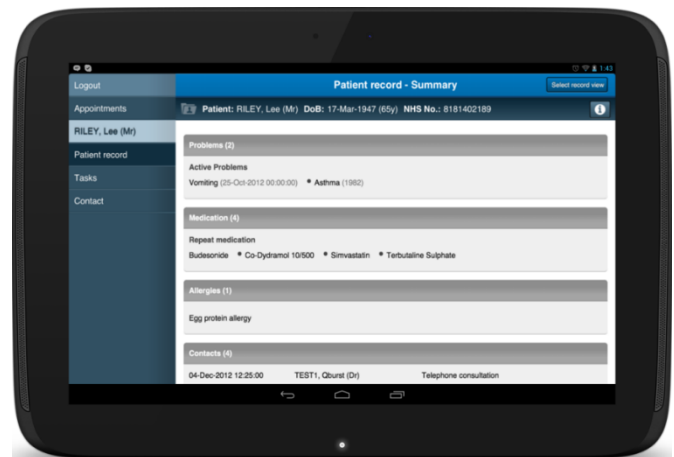
EMIS MOBILE – PATIENT RECORDS APP

Business Case: The client wanted to leverage QBurst's mobility expertise to develop a series of healthcare apps. They needed an app that doctors could use remotely to easily access patient data.

Solution: EMIS Mobile is an HTML5-powered multi-platform application used to present patient reports on a tablet. Doctors can view these details on-the-go and use the app in offline mode as well.

Key Features

➤ Presents patients' medical history in the form of tables, charts, and graphs

➤ Offline Mode: Doctors can access and edit patient data even in offline mode

➤ High Security: Since patient data is confidential, all online data for synchronization is accessed via key fob token; data is wiped periodically and all information is encrypted

➤ One-time password and auto logout mechanisms

Technologies

➤ HTML5

➤ iOS SDK

➤ Android SDK

➤ Windows RT SDK

➤ ANSI C

Client Profile

Egton Medical Information Systems Ltd. (EMIS) is UK's leading primary care software provider that manages more than 39 million patient records.

TABLET ANESTHESIA RECORD APP

Business Case: The client wanted their anesthesia providers to be able to capture data more efficiently throughout the procedure lifecycle. They required a solution that would replace paper forms and reduce time taken for consolidating data and submission to billing.

Solution: We delivered a Tablet Anesthesia Record app (TBAR) for making digital entries during medical procedures involving anesthesia. The iPad app lists medical cases assigned to a doctor on a daily basis. Data entered using the app is synced to the backend server at regular intervals. The TBAR application provided anesthesiologists greater accessibility to data, improving their agility and efficiency. Our solution also significantly reduced the time and effort required to move cases to the billing system.

Key Features

➤ Digitization of medical data:

– Patient information such as risks, allergies, and consultation history

– Case details such as team info, surgical procedures, and diagnosis

– Vitals such as medications, fluids, and labs; vitals grid to input values

➤ Capture events such as complications at any stage (intra-OP, PACU or post PACU)

➤ Bluetooth transfer of cases between providers

➤ Feature to timestamp milestones in a procedure

➤ Attestation to replace signatures on records

➤ Break feature to assign case to another provider

➤ QR code scanning to easily identify patient records and cases

➤ Print option via AirPrint; Search feature

➤ Templates to apply pre-populated values for new cases

➤ Surgical safety checklist; Offline mode support

➤ 'Soft close' option before billing where providers can add mandatory information and events to be captured before case is closed
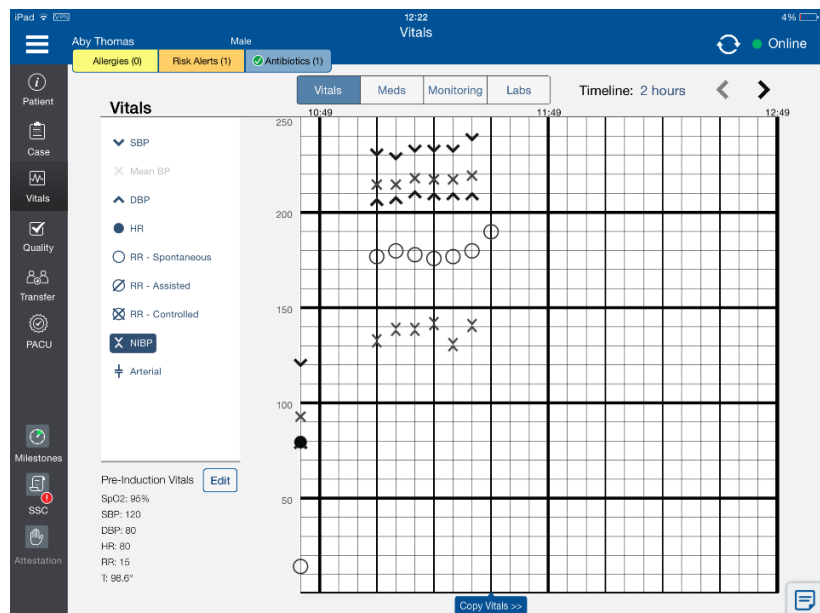
Technologies

➤ Frontend: iOS, Xcode, SQLite, FMDB

➤ Backend: Java, Spring, MySQL

Client Profile

The client is the leading single specialty anesthesia services management company in the United States. They provide perioperative support and comprehensive clinical anesthesia services.

As the application is meant for enterprise distribution, it is not available in app stores.

SALESFORCE CHATTER IPAD APP

Business Case: The client wanted us to develop an iPad App for Salesforce Chatter with PDF links, video-streaming, and chatter feeds. The app would be used for spreading awareness on the client's medical product.

Solution: We developed a hybrid app that educates users through product videos and PDFs. The app has an interactive feature to help users get more information about the product. We provided a custom graphic design to display the Visualforce page on an iPad.
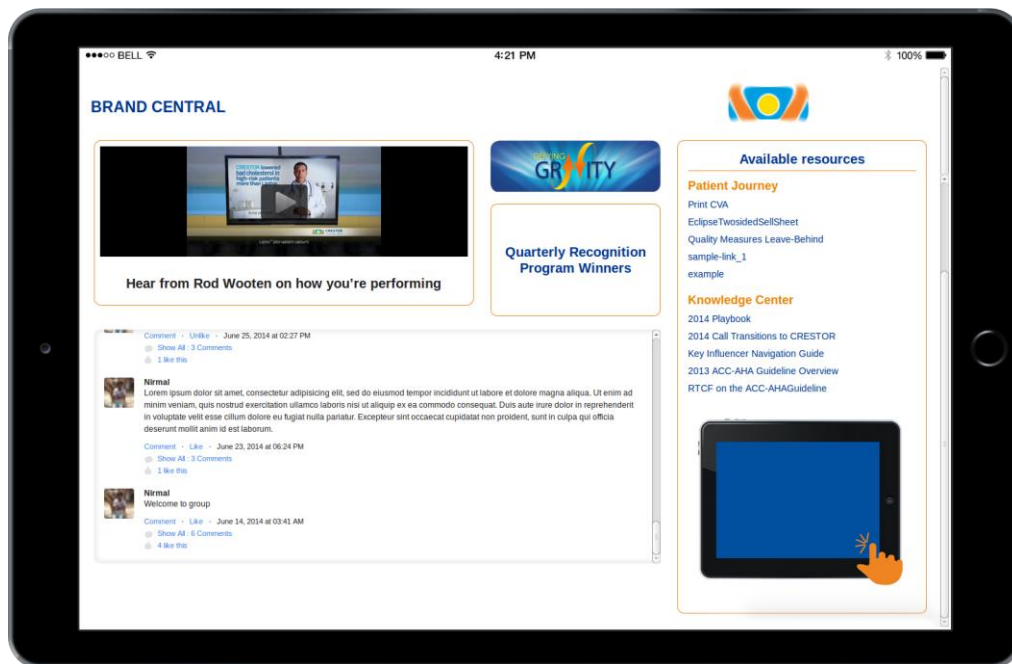
Key Features

➤ Kaltura Video Player: Gives access to client's videos in Kaltura account

➤ Chatter Feeds: An interactive feature where users can post, comment, and like discussions on the product

➤ Available Resources: Displays all available PDFs of the product, which users can view and download

➤ Program Winners: Announces program winners for the quarter

Technologies

➤ Salesforce CRM

➤ Apex

➤ Visualforce

➤ iOS

➤ Salesforce Mobile SDK

Client Profile

A globally recognized biopharmaceutical company that focuses on the discovery, development, and commercialization of innovative medicines.

As the application is meant for enterprise distribution, it is not available in app stores.

SPECIALTY SCORE APPLICATION

Business Case: The client wanted to develop an iPhone app that can be used by any healthcare professional to select a specialty and manage their private practice.

Solution: QBurst developed an iPhone app that provides a specialty score based on the inputs given by the user in comparison with a preset criteria. The app can be used by healthcare professionals and medical students. The app contains three sections that cater to different categories of healthcare providers based on their experience.

Key Features

The app comprises three sections:

**Before Private Practice:** For medical residents and students

➤ Helps in specialty selection based on income and personality preferences

During Private Practice: For physicians, doctors, and other healthcare professional

➤ A pro forma budget generated to determine annual net income based on projected figures

➤ "Cash flow" report extrapolates data from previous months to determine credit required for future 1

➤ "Lease or buy" report helps decide between buying and leasing equipment, comparing cost of each

➤ "Benchmarks" report assesses front office functions and billing service effectiveness

➤ "Marketing" report determines advertising worth, comparing cost of acquiring patients against their lifetime value

After Private Practice: For experienced doctors looking to sell their practice or seeking business opportunities

➤ Valuation of a practice based on assets/income or ROI of the purchaser

➤ Entrepreneur quiz matches the user's personality traits against known entrepreneurial traits
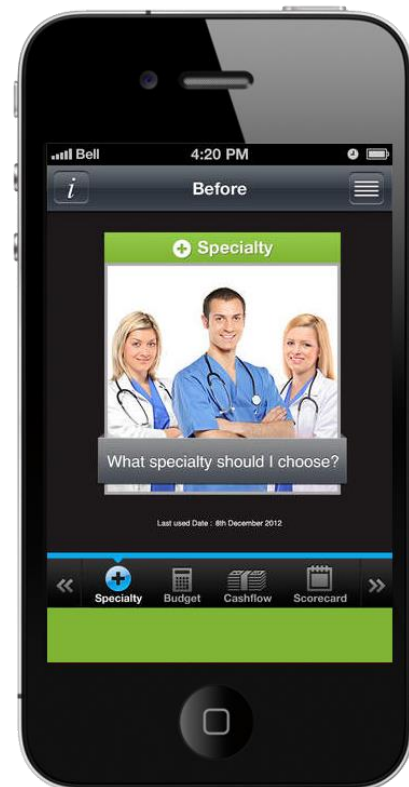
Technologies

➤ iOS

➤ Python-Django for Web Services

Client Profile
The client is based in the USA and provides interactive content and software for healthcare providers.

QBurst

CARE PROVIDER MANAGEMENT APP

Business Case: The client required an application that would help associate companies streamline personal wellness services for patients through timely resource allocation. They needed a mechanism to track appointments, vacations, and generate reports.

Solution: We provided a solution consisting of a web and a mobile application. The web application allows the client to add new associate companies to the system. Associate company admins can schedule patient services and manage their employees. Using the mobile app, employees can visit patients based on the schedule, and provide the required services.
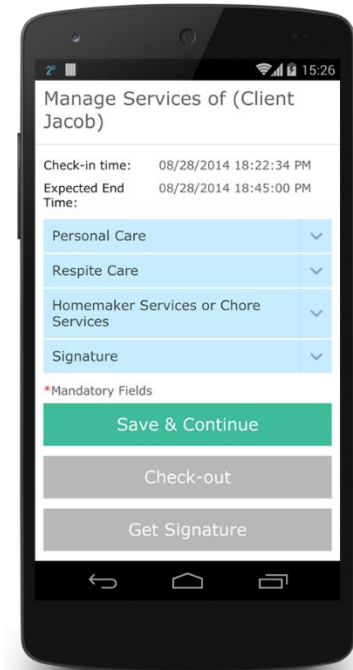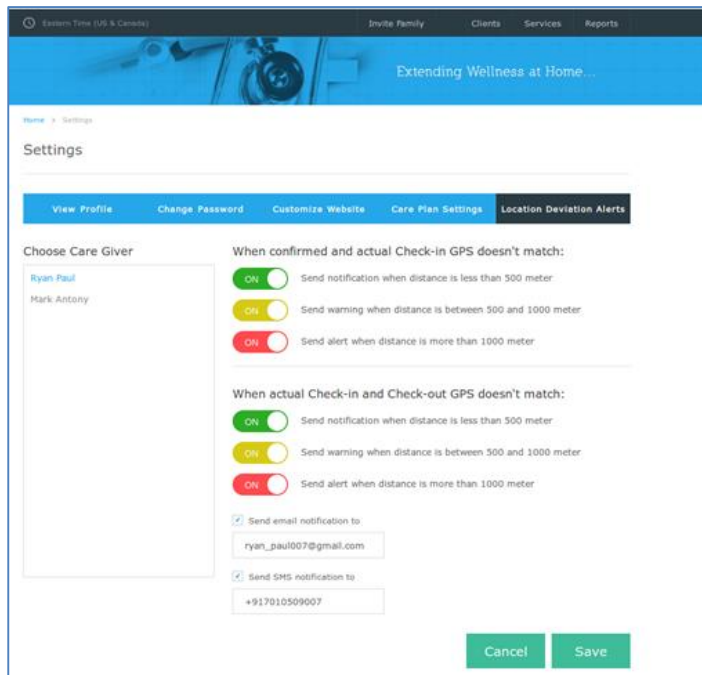
Key Features and Technical Highlights

➤ Full-calendar functionality to manage appointments and events for employees and patients

➤ Admin can schedule jobs and enable reminders/alerts for late check-in/check-out

➤ Employees can view all appointments, check-in, complete all services associated with the appointment, and check-out

➤ Vacation management to help in resource allocation

➤ Automated assignment algorithm developed to assign jobs as per client requirement and employee availability

➤ Implemented background job using Sidekiq and Redis server to manage alerts/reminders and automation process

Technologies

➤ Rails 4.x, Ruby 2.x

➤ PostgreSQL 9.3.x

➤ HTML/CSS

➤ jQuery

➤ Phusion Passenger

➤ NGINX

➤ Redis server

➤ Google Maps API

➤ Twilio API

Client Profile

The client helps care providers define comprehensive wellness plans and facilitates the extension of wellness at home by connecting patients with professional care providers.

As the development is bound by NDA, the app links cannot be disclosed.

IPAD PRESENTATION TOOL

Business Case: The client wanted to develop an iPad presentation tool for medical representatives to market their products in a better way.

Solution: QBurst developed an iPad application for the client. The tool helps to simplify presentations enabling medical representatives to demonstrate to medical practitioners the key benefits of the product along with analytics and trends.

Key Features

➤ Displays product information

➤ App analytics to track page views and the average time on page

➤ View product demo videos and animations
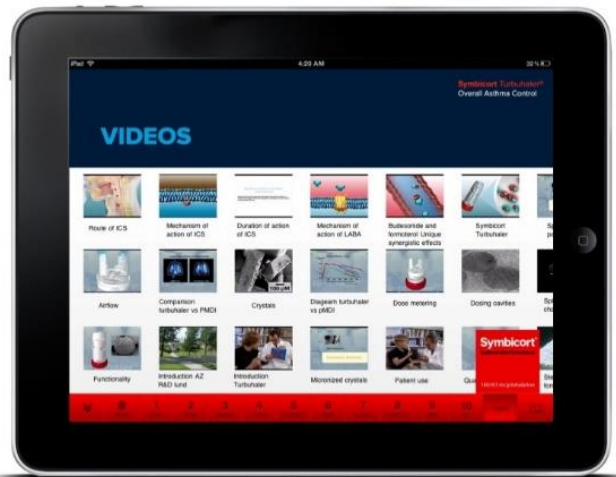
Technologies

➤ iOS

➤ Objective-C

Client Profile
A globally recognized biopharmaceutical company.

As the application is meant for enterprise distribution, it is not available in app stores.

PHARMACY APP

Business Case: Rx Systems required an app that allows patients to order repeat prescriptions remotely. The client also required a pharmacy app to relay information to the patient's mobile device.

Solution: QBurst developed a mobile app for patients and a web app for pharmacies. The mobile app contains information and support content from UK's leading independent health site. The web app can be used for promotional activities and includes systray application for Windows.

Key Features

Patients can:

➤ Securely reorder prescription drugs from the preferred pharmacy; review history of all repeat medications

➤ Set reminders on medications to be taken and track the status of orders

➤ View information on various health conditions and drugs

➤ Locate pharmacies and local health services

Pharmacies can:

➤ Push marketing material, promotional offers, and alerts to customers

➤ Capture nominations for Electronic Prescription Service (EPS)

➤ Customize UI and update data
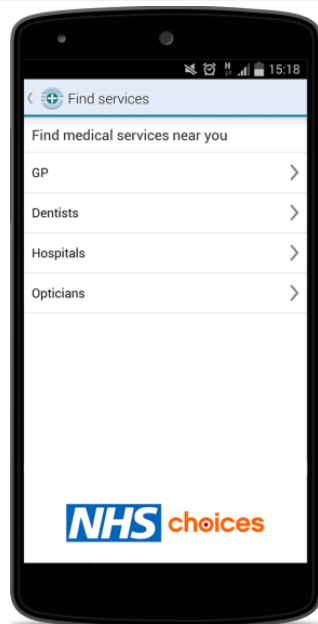
Technologies

➤ Objective-C for iOS

➤ Java for Android

➤ C# for MS Windows systray application

➤ PostgreSQL and Pgpool

➤ Django

➤ JavaScript

➤ Nginx

Client Profile

Rx Systems is a leading software and services provider that developed UK's most widely used community pharmacy software. They offer pharmacists software connectivity across pharmacy and Electronic Point of Sale (EPoS) systems.

App Store Links
iOS
Android

INFRASIGN

Business Case: The client wanted a solution to streamline the review of dictated reports to ensure faster document delivery.

Solution: We developed InfraSign, a medical transcription document e-Sign off app, for iPhone and iPad users. The app can be used for document review, feedback capture, and to eSign documents. PDF is rendered using WebView.

Key Features

➤ Flexible review options

➤ Backend speech recognition

➤ Transcription processing with a built-in word expander

➤ Medical spellcheck dictionary

➤ Automated document delivery options

➤ Blank subject lines supported

➤ A management console to streamline administrative and quality assurance processes

➤ Intuitive InfraWare platform

➤
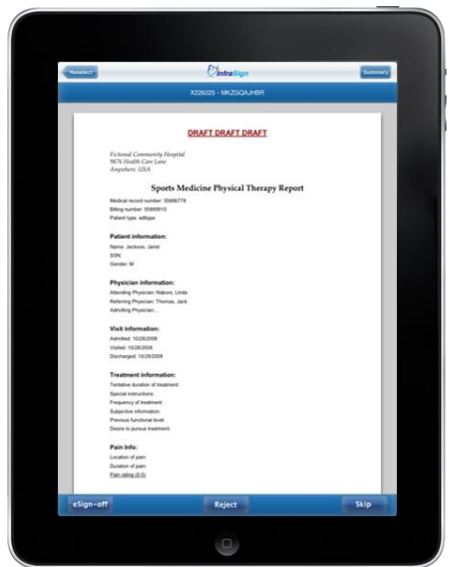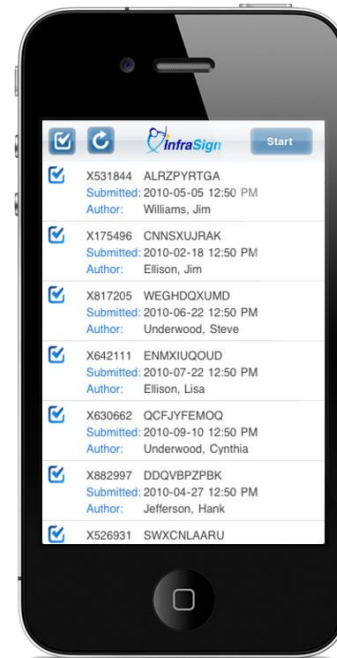
Technologies

➤ iOS SDK

➤ Objective-C

➤ SVN for version control

Client Profile
InfraWare is one of the medical transcription industry's fastest-growing software companies that serves Medical Transcription Service Organizations (MTSOs) and healthcare providers.

App Store Links
iOS

Business Case: As part of their requirement for a series of mobile apps to promote healthy living, the client wanted a mobile solution that would help users track their weight.

Solution: QBurst developed an app on iOS and Android platforms that helps users achieve their target weight through daily tracking and analysis. Users can manually enter their weight or use a Bluetooth-enabled weighing scale.

Key Features

➤ Option to set 'Goal Weight'

➤ Bluetooth scale integration (BTWS 10) for weight entry

➤ Use of BMI and graphical weight chart to track progress

➤ Option to share progress on Facebook manually or automatically

➤ Photo repository to view date-wise progress

➤ Password protected security

➤ 'Weight Help' provides informative health tips
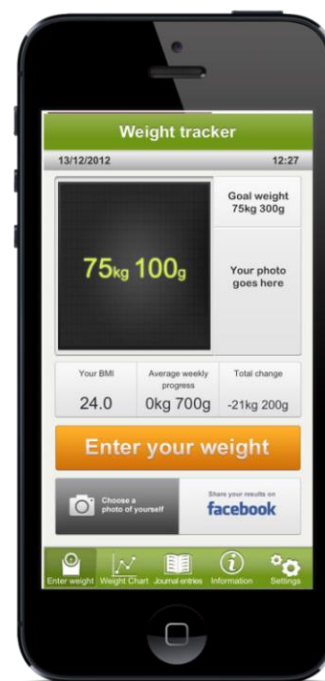
Technologies

➤ Eclipse

➤ Android SDK

➤ Xcode

➤ iOS SDK

Client Profile

Egton Medical Information Systems Ltd. (EMIS) is UK's leading primary care software provider that manages more than 39 million patient records.

View Demo

APP FOR DIAGNOSTIC DEVICES

Business Case: The client wanted an iPad application that can stream series of images from a cloud, record remarks on them, and relay them back to the server.

Solution: We developed an application that improves accessibility to reports generated by imaging devices, such as CT scanners, X-ray, and ECG machines, manufactured by the client. Hospitals that subscribe to the system receive a licensed desktop application which is connected to these diagnostic devices. A consultant doctor can access DICOM data (sent from the imaging device) from the cloud using their iPad application. Case details can be viewed and notes added against each frame. The hospital can then view the doctor's notes using its desktop application.

Key Features and Technical Highlights

➤ Our solution comprised:

- An Azure cloud which acts as the central node for storage

- A desktop application

- An iPad application that renders DICOM image/cines

➤ Streaming of DICOM images as a cine/single frame from the cloud

➤ TCP socket connection for streaming and data encoded in BSON format

➤ DICOM images compressed using OpenJPEG2000 format for maximum efficiency over 3G network

Technologies

➤ OpenJPEG2000 encoder/decoder in C++

➤ Azure/.NET on server end

➤ Objective-C on client side

Client Profile

The client is a global leader in electrical and electronics engineering, operating in the fields of energy, and healthcare. They focus on providing medical technologies such as advanced imaging, diagnostics, therapy, and healthcare IT solutions.

As the application is meant for enterprise distribution, it is not available in app stores.

Business Case: MyFit.Ca is a leading online fitness, exercise and nutrition information provider. They wanted a custom made iPhone mobile application with built-in exercises and custom routines which can be used by all exercise enthusiasts.

Solution: QBurst developed an app on iOS platform that helps users to stay in shape from the comfort of their home. The mobile application has built in exercises, custom routines, current status, image record and downloadable exercises. MyFit is a huge hit in the US and Canada, and features among the popular apps listed by Apple in the 'Health & Fitness' section of the App Store.

Key Features

➤ Users can customize workouts and gain access to detailed exercise instructions

➤ Sync phone with website for exercise/routine updates.

➤ Online account keeps track of progress

➤ Generates statistics of body measurements, weight exercises report, cardio progress, and other logs

➤ Centralized unit conversion system quickly converts kg to pounds and cm to inches

➤ MyFit Score analyzes fitness workout data and provides a fitness and improvement score

Technologies

➤ iPhone SDK 4.2

➤ Objective C

➤ Flurry

➤ Core plot

➤ StoreKit

Client Profile
MyFit.Ca is a leading online fitness company in the United States.

PHYSICIANS' HUB

Business Case: The client is one of the largest physician groups in the US with numerous clinics and doctors associated with them. They wanted to replace their current communication system with a mobile app and several value-added features.

Solution: QBurst developed a solution that allows them to communicate via chat and video/voice calls using their smartphones. We incorporated the telemedicine feature using Zoom, a cloud video-conferencing platform. Other features in development include online consultation and diagnosis as an added benefit for patients.

Key Features

- Physicians can search for providers, specialties, and other details
- Telemedicine feature helps schedule meetings, share meeting details, and organize video conferences
- Barcode scanner scans patient data and communicates with the backend
- Notification on alerts related to critical patients
- Rounding list displays patients under a physician with details that can be used for bill settlement
- Secure chat that uses encrypted content for communication between physicians
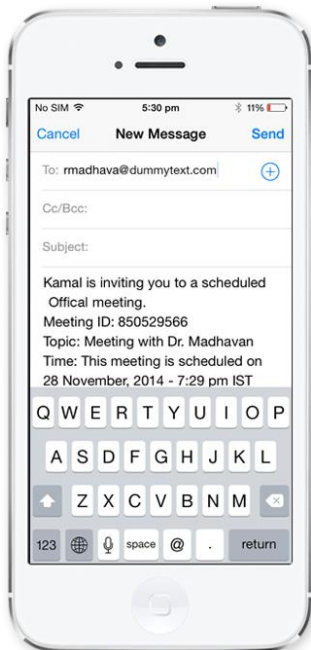
Technologies

- iOS SDK
- Android SDK
- Zoom SDK
- Google Maps API, GPS and web services
- Git
- QuickBlox
- ZXing library
- Groovy on Grails

Client Profile

Our client is a leading multi-specialty physician practice group in the USA with more than 2000 affiliated physicians. The nonprofit group caters to over a million patients annually.

As the application is meant for enterprise distribution, it is not available in app stores.

INFANT CARE AND PARENTAL SUPPORT APPLICATION

Business Case: The client wanted an app to make parenting easier. They have a network of nurses, dieticians, and lactation consultants to deliver on-demand advice for a child's specific needs, rather than using generic information available online.

Solution: QBurst developed an application that allows new parents to contact a network of infant healthcare providers through mobile phones. The app connects new parents and childcare experts using video call 24/7.

Key Features

- On-demand video enables one-on-one connection
- User can choose the provider according to their needs
- Star review system lets the user see the feedback and credentials for each provider
- Feedback and ratings after every video call
- User can create and manage an account on the client website and have easy access to in-app features
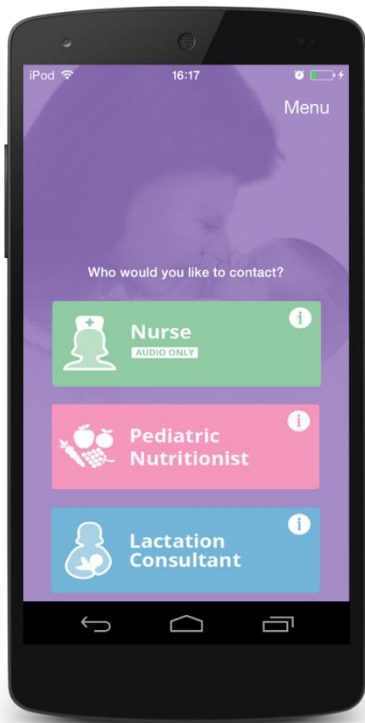
Technologies

- Sightcall: WebRTC Video Communication Service-HIPAA compliant
- Xcode 6.1, Objective-C, iOS SDK
- Android Studio, Java, Android SDK
- Git
- TrueVault for encrypted HIPAA-compliant storage of sensitive information
- Ruby on Rails
- Recurly for user subscription
- MySQL

Client Profile

The client is a US-based telemedicine company offering on-demand healthcare services to new parents.

As the application is meant for enterprise distribution, it is not available in app stores.

Why QBurst

300+ Mobile Resources

350+ Web Resources

100+ Big Data and Analytics Experts

150+ QA Resources

50+ DevOps Resources

Streamlined Development Process

Strong Capabilities Across UX, Design, and QA

Cross Industry Experience

Highly Qualified Resources with Diverse Skill Sets

Focus on Quality

At QBurst, products are developed in a strict, quality-controlled environment. We follow best practices such as continuous integration, unit testing, and frequent releases. We ensure personalized attention to each and every client. By adopting a customized and transparent approach in product development, we have been winning the confidence and trust of our clients.

Cross Industry Expertise

Automotive

eCommerce

Entertainment

Healthcare

Technology

Retail

Media

Public Sector

Travel & Tourism

Global Delivery Model

Agile Methodology

Transparent Communication

Web-based Collaboration

Timezone Advantage

"QBurst engineers have played an essential role in the evolution of our product. We have always found QBurst to be accommodating, capable, and professional. I would recommend their services."

Cliff Peskin, Co-President,
BuzzBuzzHome Corp

QBurst at a Glance

FACT FILE

- Global IT Product Developer
- Established in 2004
- 1200 Workforce
- 75+ Active Clients
- 650+ Completed Projects
- 12 Offices across the Globe
- Focus on New Technologies
- Fast and Steady Year-on-Year Growth
- Profitable Since Inception

SERVICE PORTFOLIO

- Mobile Development
- Web Development
- UX Services
- Design Services
- IT Infrastructure Management
- Quality Assurance
- Big Data & Business Intelligence
- Cloud Solutions
- Social Media Analytics

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MAJOR CLIENTS