



SALON MANAGEMENT SYSTEM
CHALLENGES AND BEST PRACTICES

WHITE PAPER

ABOUT

A USA based client providing online web-based services for salon industry across the various countries considered as United States, United Kingdom, Australia and Canada. Client provides cloud-based salon and spa software for professionals. They offer all of the tools to run registered professional people's business right from their phone or tablet, credit card processing, automatic notifications, an app for end clients to book with the registered professional, and so much more.

ABSTRACT

This is online software for salon industry on SaaS model for different saloon owners / beauty professionals. Subscribing to this software the salon owner / beauty professionals can have their own online store in a new way to do their business. This software provides convenience to the end customers to book online appointments using website or mobile application through user friendly calendar. The software suggests nearest store location to the end users also. The website is having mainly four types of users such as: Salon Owner, Salon Services Provider Person, Customers and Website Super Administrator. Software is having comprehensive features with robust architecture. Software is very user-friendly and has efficient accessibility to the application users. Software is also integrated with social networking sites (i.e. Twitter and Facebook). Inventory Management, Payroll Management, Call-To-Confirm Appointments and Sending Out Reminders are the key features of the system.

PROJECT

KEY CHALLENGES:

- Outlook type calendar development and management on a web based application.
- Payment gateway integration for recurring payments, card present transactions and card does not present transactions with refund facility.
- Proximity search based on the zip-codes in 100 miles radius to search the salons in specific state and city.
- Ensuring the security of personal data of users.
- SEO implementation and dynamic URL re-writing.
- To minimize the number of post-backs to make AJAX enabled web site.
- Implementation of more than 70% of web site functionalities in iPhone application.
- SOA Architecture (using LINQ) to communicate to iPhone with live database. changes instead of whole application
- Implementation of Credit Card Reader and Bar-Code Reader for POS.
- Implementation of IOU and its management.
- Managing emails and text messages for appointments.
- Hourly backups and restores between two machines. So when one dies the second activates.
- Sending special promotions through emails and text messages to all the customers who come under specific radius enters by the user at run time.
- Managing the timings of all the salons reside in different states of USA by considering the time difference between them and day light saving.
- Browsers compatibility for IE / Firefox / Safari / Google Chrome.
- Credit card payment with credit card swipe.
- Online appointment search:
 - By multiple booking
 - In less than 5 second
- Graphical Report
- Synchronization of Database
 - Client website is developed in more than one platform via single database synchronization.
 - Concurrency Issue: Online booking for hair cutting by more than one user at the same time

PROPOSED SOLUTION:

Looking to the client's requirement and complexity Silver Touch proposed web-based backend solution using .Net Based Technology Platform over the window server 2008 operating system. The interfaces of the proposed web-based application are designed to have rich user experience and a user-friendly way to access functionalities. The proposed solution also makes use of mobile platform and has apps available for iPhone/iPad and Android. Two different mobile applications are developed, one for Business Owners and other for end Clients. The web-site is having a role based access for each user and provides powerful & unique features to the following user types:

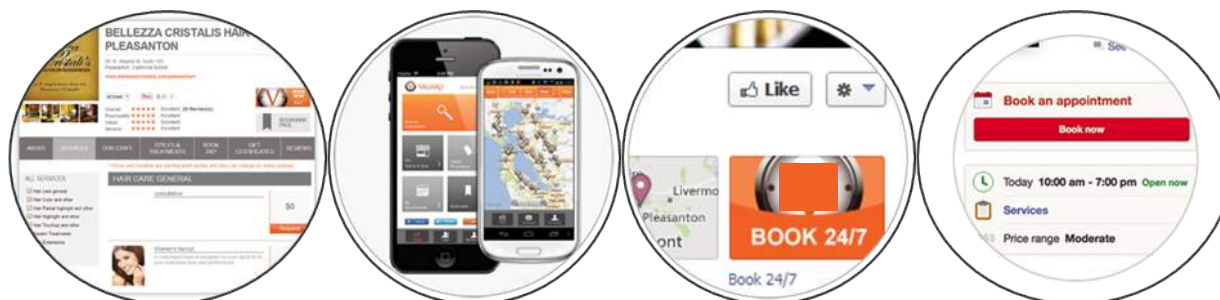
Calendar Management

This is full featured calendar management functionality. It enables each service provider (saloon owners / businesses) to manage their customer appointments by having multiple types of schedules on daily, weekly and monthly basis. Each service provider can manage their working hours, prices and service durations through this functionality. On the other end, each customer has the option to book their appointment by choosing specific salon services, specific service provider under a specific salon.



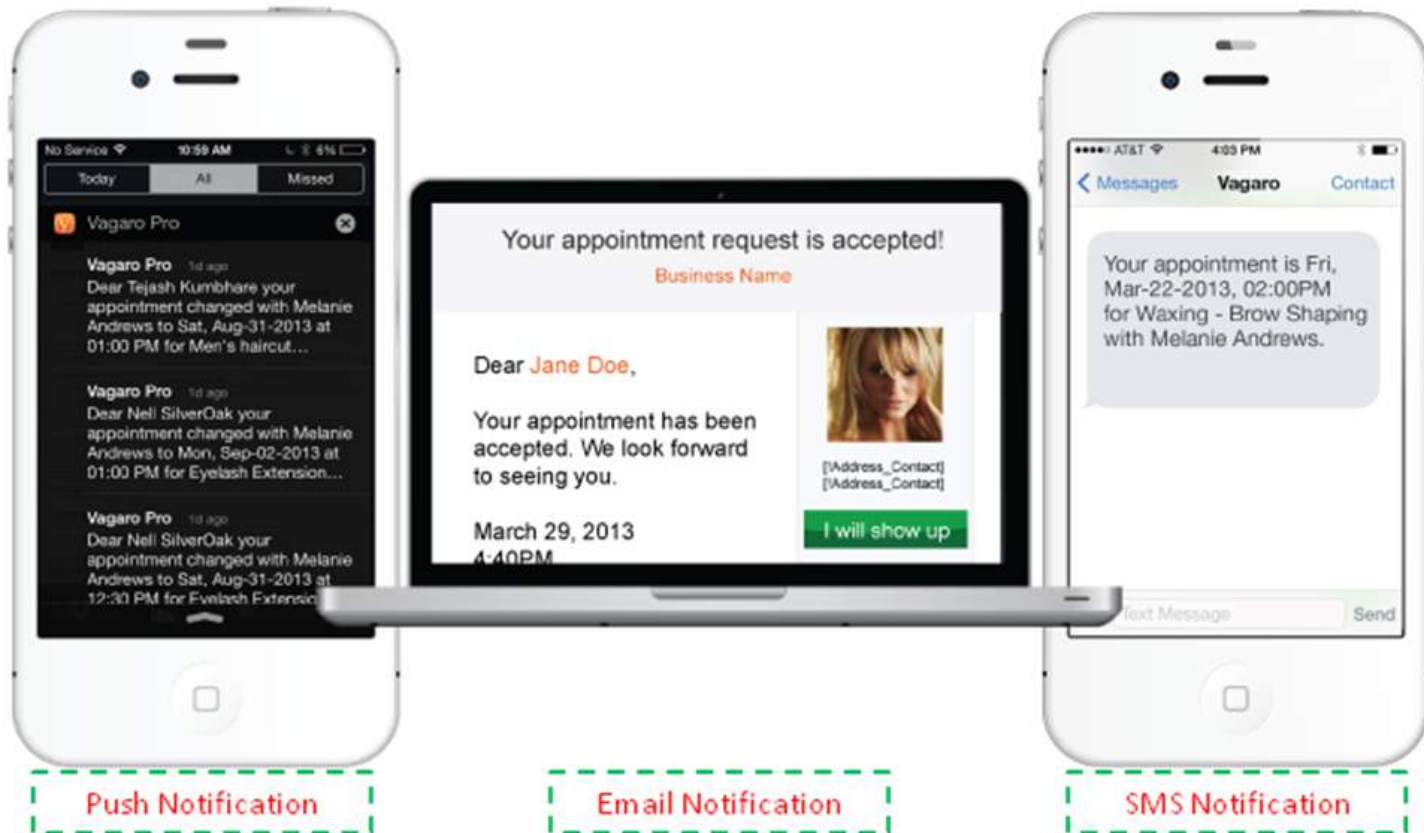
Online Appointments

This feature allows user to book online (24/7) appointments. Customers can also book appointment for multiple services with multiple service providers at once. Application will display only available timings of each service provider to the users for faster selection. Software also supports 24/7 bookings through client's Facebook and Yelp page.



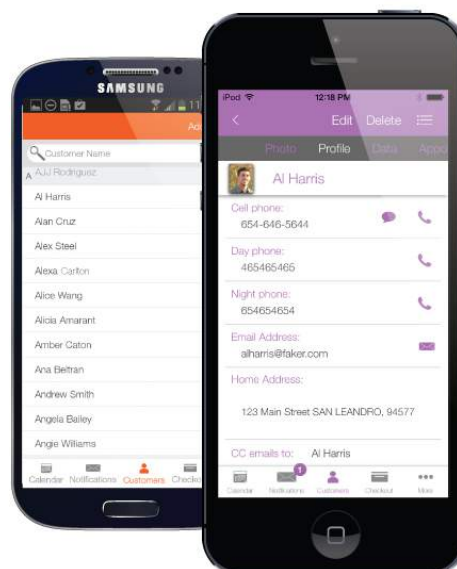
Email / Text / Push Notification

This solution makes use of emails and SMS notifications and enables salon owner / beauty professional to update their customers frequently. The saloon owners / beauty professional can let their customers know about their upcoming events and / or any promotional offers run by them. This is a very useful tool for the salon owner / beauty professional from which they can get increase in their business.



Customer Tracking

Using this functionality each salon owners is able to track their customers. This include accessing the information like contact details, services availed, retail history, IOUs, formulas, allergies, general notes, attendance, reward points and feedbacks posted. This information can be pulled for any selected salon and/or service provider.



Point of Sale (Taxes, Inventory and Inventory)

This solution makes use of emails and SMS notifications and enables salon owner / beauty professional to update their customers frequently. The saloon owners / beauty professional can let their customers know about their upcoming events and / or any promotional offers run by them. This is a very useful tool for the salon owner / beauty professional from which they can get increase in their business.

Reporting

The solution offers salon owners to generate trend reports on a daily, weekly, monthly and annual basis. They are also able to generate progress reports, revenue summary, service spread, retail sales spread, service-provider sales, product sales and customer retention reports. Each report can be exported to Excel, CSV, PDF or text format.



Payroll & Employee Management

The solution provides ability for the saloon owners to manage the employee data and payroll. The payroll related data is captured into the system. Saloon owners can customize payroll report per service provider, pay period and Commission structure.

Own Webpage Creation

The solution offers the saloon owners to create their own website. This feature (website) is included in the SaaS based delivery. The website created for each saloon owner has well structured information management of their own. This information include Promotions, Styles, Services details, Service provider tails, Reviews, Contact information, Email address, Salon website and Directions. Whereas the customer can able to view salon specific information each as different services, prices and service providers related details.



Solution Architecture

Development Architecture Overview

IDEs	<ul style="list-style-type: none">• Visual Studio 2013• Android studio 1.4• Xcode 7.0• Windows Software Development Kit (SDK) for Windows 8.1• SQL Server 2012
Platforms	<ul style="list-style-type: none">• ASP.NET Website• Android Phone / Tablet / Wear App• iOS iPhone / iPad / Watch App• Windows Phone App• Web App• Facebook App
Presentation Layer	<ul style="list-style-type: none">• Angular JS• XML• Cocoa Touch Layer
Cache Layer	<ul style="list-style-type: none">• ASP.NET Cache
Error Layer	<ul style="list-style-type: none">• ELMAH (Error Logging Modules and Handlers)
Business Layer	<ul style="list-style-type: none">• Web API 2.0
Data Access Layer	<ul style="list-style-type: none">• Entity Framework 6.1.2

Deployment Architecture Overview

- 6 load balanced web servers (Least request load balancing)
- 6 load balanced cache servers (Least request load balancing)
- 15 window services for background tasks
- 4 load balanced database servers (Always on load balancing)
- Rackspace Akamai servers for CDN

Technology

Development Platform

Technology	Specifications
Technology & Framework	.NET Framework 3.5
Third party tool	Technical control
Database	SQL Server 2008
Email	SMTP
Web Server/Hosting Platform	IIS 7.0
Languages	ASP .Net, C#
Operating System	Windows 7

Development Platform

Technology	Specifications
Technology & Framework	.NET Framework 3.5
Third party tool	Technical control
Database	SQL Server 2008
Email	SMTP
Web Server/Hosting Platform	IIS 7.0
Languages	ASP .Net, C#
Operating System	Windows server 2008
Email	Compcast
Hosting (Website & Web-services)	3rd Party Cloud Servers
Number of Servers	More than 7 Servers (web servers and database servers)
Security	SSL Certificates, Captcha
Encryption	TripleDES Cryptography Algorithm
Prevention	Custom Code deployed for preventing SQL Injection and DDOS Attacks

User Base

There are five types of users using this solution.

- Customers: 17 Million (Approx)
- Service Providers: 53 Thousand (Approx)
- Receptionists: 10 Thousand (Approx)
- Account Owners: 15 Thousand (Approx)
- Super Administrator: 30

Key Highlight of the Project

- Most of the features available in Website is also available in Mobile Application
- Mobile Application is available in iOS and Android Platform
- Online Booking & Scheduling System
- Payroll & Inventory Management
- Shopping Cart with Credit Card & Barcode Reader
- Feature for Gift Certificate
- Currently it has 6000+ Saloons & Spa in USA, Canada, Australia and United Kingdom.
- Secured environment for personal data of users

Screen Shots

- Online salon finder facility with multiple filter criteria
- Customers can search salon services using this website and have Appointment & Scheduling for salon services as per their convenience
- Customers is also able to choose desire Service provider after selection from specific salon industry



DELIVER BEST PRODUCTS, SOFTWARE SOLUTIONS AND SERVICES, ON TIME WITH QUALITY, AND AS PER CUSTOMER EXPECTATIONS

About SilverTouch

SilverTouch, a company established in 1992 is widely accepted for its IT solutions with a huge customer base in more than 20 countries across the world.

SilverTouch is actively engaged in Enterprise software development, enterprise content management, document management and IT consulting services such as Business process optimization, process consulting, implementation and customization of ERP. SilverTouch leads brilliantly in new technical developments such as: Mobile Application development services on iPhone, iPad, Blackberry,

and Windows mobile platforms. Even now, SilverTouch helps its global clients for major developments, deployments and managements of their mobility solutions and enterprise application development programs.

SilverTouch has alliance with several industry leaders such as Microsoft, Apple, Cisco, IBM, Oracle, SAP, Java, Dell, VMware, Symantec, Sonic Wall which provides a competitive edge over other industry peers and targets to understand and cater to all types of requirements that concern our clients, thereby, leading to serve them precisely to their satisfaction.

For more information, please visit www.silvertouch.com or email info@silvertouch.com

Why Silver Touch?

Established in
1992

 **20+**
Years of
Experience in IT

 **CMMi**
Level 5
Company

 **2500+**
Projects Delivered
Successfully

 **1000+**
Highly Skilled
IT Professionals

 **100+**
e-Commerce
Websites Developed

 **1200+**
Clients all over
the world