

**Q3 Technologies developed a solution for maintaining VIP guests' reservation data on Smart Phones and Web Interface, for various events and parties.**

Q3's global sourcing model gives the maximum benefit to customers in terms of cost savings, improved quality, access to highly talented professionals, flexibility of operations and reduced time to market.

# Case Study - Google Cloud VIP Reservation Application

## Company Profile

The company provides best in class business management software solutions and related consulting services for mid-market goods and services companies. The services are firmly built on knowledge and experience acquired over many successful projects.

The project is about maintaining VIP guests' reservation data for various events and parties. After a guest makes a reservation for a party, his preferences are to be stored and on the day of the event, the end users of the application can guide/serve the guests accordingly. This is a web based project on the BlackBerry platform. Client requires a solution that can handle the following situations:

- » A guest makes a reservation by sending an SMS in a predefined format and the details need to be stored in persistence storage.
- » An interceptor running as a background service on client's Blackberry needs to perform the job of data persistence after doing a number of validations.
- » The data needs to be added or modified via a Web interface.
- » Most of the features provided in this interface should be used only by admin users of the client.
- » On the day of the party/event, the application users can export the list of reservations which is to be used for serving the guests.

## Business Situation

## Challenges

The Google App Engine, which was being used as hosting solution as suggested by the client, had a number of limitations in terms of JRE support. Therefore, Q3 used text export rather than PDF export.

The project requirements suggested that two separate applications needed to be devised. One for BlackBerry and another for providing Web interface. Based on this understanding, Q3 developed an exemplary solution by focusing on the following elements:

- » **BlackBerry application:** Comprises a message interceptor running in the background that intercepts and parses an incoming message and breaks it into extract data, which is then passed onto the website for handling persistence. If in case anything goes wrong in the automatic process, such as network unavailability and bad data format, there is a different application running on the phone that can be used to manually persist the data.

## Technical Solution

- » Web Application - Comprises a Web interface hosted on Google App Engine for adding and editing guest reservation data. Users can view the list of all the reservations for a particular date. Users can also export this list to be used on the day of the event. An admin user of the application can change the preferred language used in the application. The screens used in this application are HTML/JSP screens with Spring Web MVC that handles the presentation and Google App Engine's JDO implementation that handles the persistence.

## Technologies

- » JDK 1.6
- » Spring
- » JSP/Servlet
- » Google App Engine
- » BlackBerry RIM API
- » JDO

- » Handling reservations in similar situations involving a mobile (BlackBerry) interface for communication.
- » Usage of Google App Engine, which provides a less expensive hosting solution for low scale.

## Benefits