1. System Objective

Develop a computerized software system that enables RV Park staff to check the availability, register RV clients and book RV sites. On each event, the system will display on a large screen a digitized RV park map showing sites by type and status. This system will help to manage the RV Park reservation more conveniently.

2. Project Roles/Responsibilities

Client Staff

- Matt Townsend Chair RV Committee Project sponsor and contact, responsible for providing information and for approving deliverables
 - e-mail: mtownsendipm2017@gmail.com phone: 519 523 9190
- Jim Prior –RV Committee Consultant Responsible for providing technical information and approvals, especially regarding the IPM server resources (ISP).

e-mail: jprior@jpcs.on.ca phone: 519 887 9300

Technical Staff

- Dr. John Akinyemi Project Advisor, responsible for advising the team
 - e-mail: jakinyemi@conestogac.on.ca
- Alfredo Morgado Developer, responsible for systems analysis, design and development
 e-mail: amorgado1650@conestogac.on.ca phone: 226 748 4976
- Kangryong Choi Developer, responsible for systems analysis, design and development
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3. Business Benefits

The new system will:

- Reduce the time needed to process registration and booking.
- Improve the accuracy of information gathered through computerized validation.
- Accelerate searches for information about RV Park sites, customers and payments.
- Perform accurate storing and tracking of RV Park site's information and its status.
- Manage the reservation data more easily by displaying the major information in a large screen.

4. Requirements

a. Functional Requirements

Event	Source Actor	Use Case ID	Use Case Name	System Response	Destination Actor
Add a customer	RV Park Staff	UC01	Add customer	-	RV Park Staff Customer
Change customer's detail	RV Park Staff	UC02	Update customer	Update confirmation displayed	RV Park Staff Customer
Add a country	RV Park Staff	UC03	Add country	Add confirmation displayed	RV Park Staff
Update country detail	RV Park Staff	UC04	Update country	Update confirmation displayed	RV Park Staff
Add a province	RV Park Staff	UC05	Add province	Add confirmation displayed	RV Park Staff
Update province detail	RV Park Staff	UC06	Update Country	Update confirmation displayed	RV Park Staff
Add a party member information	RV Park Staff	UC07	Add party member	Add confirmation displayed	RV Park Staff
Update a party member information	RV Park Staff	UC08	Update party member	Update confirmation displayed	RV Park Staff
Add a staff representative	RV Park Staff	UC09	Add staff	Add confirmation displayed	RV Park Staff
Update a staff representative	RV Park Staff	UC10	Update staff	Update confirmation displayed	RV Park Staff
Reserve a RV Site for a customer with payment	RV Park Staff	UC11	Reserve a site	Booking confirmation displayed	RV Park Staff Customer

Event	Source	Use Case	Use Case	System	Destination
-1	Actor	ID	Name	Response	Actor
Change reserve information or include payment information	RV Park Staff	UC12	Update reserve information	Update confirmation displayed	RV Park Staff Customer
Cancel a RV Park site reserve	RV Park Staff	UC13	Add cancel reserve information	Delete confirmation displayed	RV Park Staff Customer
Add customer check-in information	RV Park Staff	UC14	Add check-in information	Add confirmation displayed	RV Park Staff
Change customer check-in information	RV Park Staff	UC15	Update check-in information	Update confirmation displayed	
Add customer check-out information	RV Park Staff	UC16	Add check-out information	Add confirmation displayed	RV Park Staff
Change customer check-out information	RV Park Staff	UC17	Update check-out information	Update confirmation displayed	RV Park Staff
Staff creates a new event	RV Park Staff	UC18	Create a new Event	Receive event information and save into database	Staff
Staff uploads and parses a KML file	RV Park Staff	UC19	Upload and Parse a KML file	file, parse and generate site objects	Staff RVSite, StyleURL table
Staff inserts site type information	RV Park Staff	UC20	Insert site type information	Retrieve RVSite and StyleURL	Staff

Event	Source Actor	Use Case ID	Use Case Name	System Response	Destination Actor
				lists from database	SiteType table
				Receive SiteType input related to each StyleURL, and save SiteType, SiteRate into database	
Staff Updates Event's Information	RV Park Staff	UC21	Update event's information	Retrieve information from database and save update	Staff Tables
Refresh Sites Display	System Timer	UC22	Refresh Sites Display	Retrieve update of site's book information and redraw them	Staff & Customer

b. Non-functional Requirements

- The system must be easy for new staff to learn and use
- Site status update on the large screen must not exceed 2 minutes
- System response time must not exceed 5 seconds
- The system must be backed up daily

c. Optional Requirements

- Clients book sites through the IPM website
- Online payment processing
- Schedule of sanitizing services
- Convert map files in DWG format
- Wide range of patterns to indicate site status

5. Project Critical Success Factors

- The project sponsor must approve deliverables and make decisions in a timely manner
- The project contact must be available to answer questions at least one day a week
- IPM Event must arrange an internet server provider (ISP) to host the system
- IPM Event must provide a network connection for the system devices to access the web
- The map input in the system must be in a file format known as KML (Keyhole Markup Language)

6. Technical Architecture

• Web Server: IIS (Windows)

• Application Server: ASP.NET 4.0

• Database Server: MySQL 5.6

• Development environment: MySQL Workbench 6.2.5, Visual Studio 2015 MVC4 SOLID, Github

• Client devices: Windows 7 or higher

• Network Diagram:

