

Guide on P&G System

Our system was developed with two things in mind: ease of use, and workload management. We focused on creating a user interface that was friendly to all users, including customers, so that the experience of creating a service and handling the workflow is straightforward. Employees are able to monitor individual customers throughout the entire process using the customer landing page. This allows for oversight of services where customers information, reports, and their statuses are stored. Our hope was to create a system that moved the client's current outdated paper system to a totally online system, accessible on all devices, and we believe we did that.

How to update and support the system

Unlike software systems that can be purchased online, our system covers the exact needs and requirements that the client approached us with. This ensured that we developed a system customized for our client that fit their business and their workflow.

Since Green Valley does not have an in-house IT team to continue the development of the system, we recommend that the company looks to hire or outsource IT functions to a 3rd-party or an independent developer. Since the system is functional and self-sustaining, hiring a full-time developer may be unnecessary and costly to constantly monitor the system. However, if Green Valley decides to expand business in the future, hiring a developer may be inevitable in order to provide scalability to the system.

Moving forward, it is very likely the system will need maintenance to ensure that operational effectiveness is maximized. In order to solve these issues, we recommend that Green Valley looks into a freelance developer or contractor to familiarize themselves with the system and establish a baseline for configuration management. Costs for independent developers vary, but since our system is relatively small, Green Valley should be able to contract someone for around \$60 per hour, but prices can range closer to \$100 per hour depending on the skills and past work of the developer. This would allow for routine changes and other small features to be implemented into the system without disrupting the normal course of business. It's also imperative that the system's security be improved along with growing business needs. An independent developer would be able to implement improved security functionality into the system, and since the system is customized and not widely known to attackers, security can be more enhanced than most off-the-shelf software products.

How to use the system

Starting file- LandingPage.aspx

1. Choosing your login - After running the initial starting file you will be given a choice on entering through the employee or customer login. They will use different credentials linked to different tables in the database so one credential can not enter using the other login.

The Employee Side

After successful sign in you will be greeted with the employee home page. Here you will find 3 panels on the main page.

1. Customer Statuses - Lists the last name, service type, order status, and date of service so you can view any orders that are coming up and its corresponding information. Clicking on any of these rows will send you to the individual's customer portal.
2. Search Customer - This is the main gateway into entering a customer portal. Typing in a customer's last name, or the start of their last name, and hitting search will display the records of the customers whose last name starts with what was searched. It displays the last name, phone number, and email. Clicking on the row will send you to the customers portal.
3. Search Records - This feature allows you to search 4 different options that are expressed as important to the client. The dropdown list will give you 4 search options.
 - a. Active Customers - Type in a date of a service, and choose the city of the customer from the dropdown list and it will display all customers that correspond to those criteria
 - b. New Customers - Type in the date the new customer was created and it will show the customers.
 - c. Date of Service - Type in a date of the service and it will pop up any corresponding customers.
 - d. Storage - Choose a storage location from the drop list and it will display all inventory stored there.

After clicking a row from the Customer Statuses or Search Customer panel it will send you to the customer portal. Here you can see the name and created account date on the top along with 3 tabs

1. Customer Information - the default tab upon entering. It displays basic customer information and can be edited.
2. Forms - will give you the 4 form options, Orders, Assessments, LookAts, and Appraisals. Clicking any of these will show a list of records that exist pertaining to that customer whose portal you are in. Depending on which form is clicked it will show a row with different columns. Clicking the row will display the form under the list with that specific records information autofilled into the form. Clicking the add form buttons will display a fully functioning blank form where you can input the information and save it to the database.
3. Statuses- Will display current customer order statuses. Here you can change the status pertaining to that customer as well as the status notes for it for additional information. Click on a row to fill the information and click edit to save changes.

Heading Information

1. The Green Valley Auctions Logo on the top left will always be a clickable action that brings the user back to the employee home page.
2. New Customer - Will bring you to the initial contact information page where you can create a new customer. The email and password in the form, after successful submission, can be used by the customer to login through their page.
3. Reports - Displays important data
4. Profile - Will direct you to the employee information page of the user that is signed in.
5. Logout - Will direct you back to the login page.

The Customer Side

After logging in through the customer login you will enter the customer home page. Here there are 4 main options.

1. Contact- This button will send the customer to the contact page, here they can fill out an informational form and hitting send will submit the form and its details to the email that is registered in the backend.
2. Services - The user can see all the services that pertain to them.
3. Profile - The user can edit their name, address, and phone number if necessary.

Object Oriented Programming

Abstraction

Our program demonstrates Abstraction when a customer fills out an initial request and an email automatically gets sent to Green Valley Auctions. All the customers can see is the information they are inputting because the process of automatically emailing Green Valley Auctions when they press submit is not necessary to be seen by the end user.

Encapsulation

Our program demonstrates Encapsulation by using the password hashing method. With this method, the user is only able to see their password, but when the user logs in to the system the password is protected by the hashing method. This is beneficial because the login page is more secure and the likelihood for data to be stolen or compromised is very unlikely.

Inheritance

Our program demonstrates Inheritance by our forms Inheriting the initial contact form. Once the initial contact form is created it is, then, auto filled into the assessment forms. Once an assessment form is created, the service forms use the assessment forms data to complete the service order form for that particular customer.

Section	Requirement	Tests	Executed?	Defects	Defect Description	Defect Status
Initial Conversation & Point of Contact Form	Identify Services the Customer will need	Customer can identify which services are needed	Yes	None		N/A
		Client can correctly record customer requests	Yes	None		N/A
		Information/Notes gathered can be stored	Yes	None		N/A
	Customer Creation	Email Notification once file is uploaded	Yes	None		N/A
		Create Customer Folder upon customer creation	Yes	None		N/A
Status Bar	Customer Status Creation/Update	Customer is correctly added to the form	Yes	None		N/A
		Status can be manually changed to matching customer name when entered	Yes	None		N/A
		Ticket data entered matches with data stored in database	Yes	Yes	Incorrect ticket data displayed after entering in status	Resolved
Design/Functionality Implementation	Employee Side	Landing Page	Yes	None		N/A
		Home Page	Yes	None		N/A
		View Service Page	Yes	None		N/A
		Add Service	Yes	None		N/A
		Add Customer	Yes	None		N/A
	Customer Side	Home Page	Yes	None		N/A
		View Service Page	Yes	None		N/A
		Profile Page	Yes	None		N/A
		Contact Page	Yes	None		N/A
		Edit Profile Page	Yes	Yes	Email not matching username results in error	Resolved
Assessment Forms	Gather pertinent information for pricing quotes	Initial Contact information is filled in	Yes	None		N/A
		Information gets stored			Database and C#	

		in database	Yes	Yes	Database and On side did not match	Resolved
Auction Look At Form	Gathered information that is needed for auction items	Fill information in database	Yes	None		N/A
Service Order Forms	Reference assessment information	Auto fill assessment information	Yes	None		
	Gather additional information for each form		Yes	None		N/A
	Photo upload for Appraisal		Yes	None		N/A
Client Reports	Display client data in charts	Upcoming services report	Yes	Yes	Could not get reports to show in real time	Unresolved
	Tableau	Customer hear about company	Yes	Yes		
Pop Up Notes	Add notes to customer profile	Open & collasp notes	Yes	None		N/A
Completion Form	Auto fill all service forms		No	None		N/A
AWS	Upload application to a localhost	Ran system through AWS	Yes	None		N/A

Use Case for Green Valley Auctions Online
Data System



