

Vacation Villa Manager

Software Requirements Specification Document

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Backend (2-4 weeks)

Website (2-4 weeks)

Deployment (1-2 weeks)

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4.2.1 Website Hosting

5. Supporting Information

5.1 History of Changes to the Document

1. Introduction

1.1 Purpose

This SRS document is being written to communicate the general functional requirements of the Vacation Villa Manager (VVM) web software system to the client, Lisa Sedore (henceforth referred to as “the client”). It will outline acceptable behaviour and present an expected timeline of feature delivery. This document will also act as a piece of reference documentation for individuals who will maintain and/or modify the system at a later date.

1.2 Scope

VVM (Vacation Villa Manager), the software outlined in this document (henceforth referred to as “the product”), is a web-based system composed of a database for information storage (henceforth referred to as “the database”), a front-end consumer-accessible website for information display and interaction (henceforth referred to as “the website”), and a controlled-access panel for managing administrator-level information and generating reports on database information (henceforth referred to as “the backend”).

The purpose of the system is to display important information regarding vacation homes being managed by the client, prominently communicate pertinent business information on a home page, and facilitate the easy management of houses and bookings while at the same time allowing for robust reporting on the database’s information set. Furthermore, the product will allow for user-friendly addition and modification of individual vacation home pages, and automate the generation of such pages without the need for specific technical knowledge. A more detailed explanation of the product’s full functionality can be found in section 2.2.

1.3 Definitions, Acronyms, and Abbreviations.

VVM - Vacation Villa Manager, the name of the software system that is outlined in this document.

the client - refers to Lisa Sedore and any other business associates for whom the software system will be employed.

the product - refers to the entire software system that is outlined in this document.

the database - refers to the aspect of the software system which deals with data collection, querying, storage, and organization.

the website - refers to the aspect of the software system which is made viewable publically to the consumer.

the backend - refers to the aspect of the software system which is made accessible only to authorized users and which allows for modification and analysis of the database information set.

1.4 References

- HomeAway Vacation Rentals: <http://www.homeaway.com/>
- Wayne Manor Florida Villa: <http://www.waynemanorfloridavilla.com/>

1.5 Overview

The rest of the SRS following this section will describe VVM in greater detail. Specific system requirements can be found in Section 2, while database information can be found in Section 3. A development timeline and analysis of post-production costs can be found in Section 4.

2. The Overall Description

2.1 Product Perspective

This will be an ASP.Net application which depends on IIS and the ASP.Net stack. It will be running on a Windows Server, and will use ASP.Net Membership Provider with Forms Authentication for user data and authentication. Both backend and website users are assumed to have limited technical expertise.

The product will be designed in a style that resembles that of the reference website provided by the client (see Section 1.4), and extended to facilitate both the easy management of information and the easy addition of vacation homes. The product will be

largely stand-alone, with minimal connection to established rental services such as HomeAway. Because of limitations in the information provided by HomeAway to third parties, however, information regarding bookings and houses must be entered manually by a user with access to the backend.

2.2 Product Functions

The product is required to function in the following ways, broken down into categories as follows:

2.2.1 Website

The website portion of the product denotes areas which the consumer will be allowed access.

2.2.1.1 Home Page

The consumer-accessible homepage must contain general business information related to the client's business affairs and organized in a manner outlined by the client and agreed upon by the developer. The homepage must also contain easy and obvious navigation to the individual vacation home pages, as well as access to the restricted administrative backend.

2.2.1.2 Vacation Home Pages

The consumer-accessible vacation home pages must contain all relevant home information, including amenities, attractions, costs, and photos (see Section 3 for a complete breakdown of stored home information). These pages must be generated dynamically based solely on information provided to the database via the backend, and the information displayed on these pages must be easily changed without technical understanding of how the pages themselves are generated. Furthermore, these pages must contain a map of the home's location, a calendar of the home's current booking schedule, and a form where a user can submit an inquiry regarding a potential booking.

This inquiry form must contain the following fields:

- First and Last Name (Required)
- Email (Required)
- Phone Number
- Number of Occupants
- Booking Start Date

- Booking End Date
- Questions/Comments

Customer inquiry information must be stored in the database and also emailed directly to a preset administrator email account upon submission by the customer. Each inquiry must be stored in the database with the setting “Pending” until manually set to “Resolved” by an administrator or deleted from the database entirely.

2.2.2 Backend

The backend portion of the product denotes areas with restricted access which grant the ability to modify and act on database information.

2.2.2.1 Vacation Home Functions

The Vacation Homes module is responsible for the management of individual vacation home entries in the database. An authorized user must be able to perform the following functions within the Vacation Homes module of the product backend:

- Adding a home to the database, which in turn adds a corresponding page to the Vacation Homes website section (see Section 2.2.1.2).
- Removing a home from the list of active homes, which removes the home from the Vacation Homes website section and prohibits any further actions on that home until it is reactivated.
- Reactivating a deactivated home, which must also place that home in the Vacation Homes website section.
- Viewing and modifying a home’s information, in which case the modified information will be reflected instantly in the Vacation Homes website section. However, any cost-related changes (such as rate or additional cost modifications) must not affect previously recorded booking entries.

See Section 3.1.1 for a complete list of the information handled within the Vacation Home module.

2.2.2.2 Booking Functions

The Booking module is responsible for the management and collation of individual vacation home bookings in the database. An authorized user must be able to perform the following functions within the Vacation Homes module of the product backend:

- Adding a booking to the database. Each booking must reference a single vacation home and a date range that does not overlap with the date range of any other

booking of that same vacation home. Furthermore, the booking must contain independent cost information that is not affected by later changes to the vacation home's cost structure.

- Removing a booking from the database, which removes the entry entirely and eliminates it from appearing in reports.
- Viewing and modifying any information stored in a booking entry. Modified booking information must conform to the date range requirements mentioned in the add booking section above.

See Section 3.1.2 for a complete list of the information handled within the Booking module.

2.2.2.3 Inquiry Functions

The Inquiry module is responsible for the management and collation of customer inquiries made through the website regarding vacation home bookings. An authorized user must be able to perform the following functions within the Inquiry module of the product backend:

- Viewing customer inquiry information.
- Replying over email via a button to customer inquiries.
- Deleting completely from the database any inquiries which may be deemed spam or no longer needed.
- Marking as "Resolved" any inquiries which have been answered but must be kept in the database for the purposes of record keeping. Such inquiries will be moved from the "Pending" list to the "Resolved" list, where they can be accessed if necessary.

See Section 3.1.3 for a complete list of the information handled within the Inquiry module.

2.2.2.4 Special Functions

The Special module is responsible for the management of specials and other deals related to the rates charged to customers over select periods of time. An authorized user must be able to perform the following functions within the Special module of the product backend:

- Applying a new special to a vacation home. Each special must link to a vacation home and define a date range as well as updated rate information. Special rates must be reflected in the Vacation Homes website section during the range specified in the entry, and the date range itself must be displayed as well.
- Removing a special from the database. The removal of a special must not affect any bookings issued that took advantage of the special in question.
- Viewing and modifying special information. Modified special information must be reflected instantly in the Vacation Homes website section, but must not affect any

bookings issued that took advantage of the special prior to its changes.

- Deactivating active specials and reactivating deactivated ones. Deactivated specials must not be visible to a website user, but can be seen and modified by an authorized backend user.

See Section 3.1.4 for a complete list of the information handled within the Special module.

2.2.2.5 Report Functions

The Report module is responsible for the management and execution of reports run on the set of information present in the database. An authorized user must be able to perform the following functions within the Report module of the product backend:

- Executing new reports over the set of booking information. Reports are run over a date range and can display information pertaining to single or groups of homes related to criteria provided by the client. Previous reports are stored in the database so that they can be easily accessed at a later date.
- Executing previously run reports that are stored in the database.
- Deleting completely from the database any old reports which may be deemed no longer needed.
- Exporting report information to an external software system such as Microsoft Excel.

See Section 3.1.5 for a complete list of the information handled within the Report module.

2.2.3 Miscellaneous

2.2.3.1 Google Analytics

The product must integrate with Google Analytics in order to provide information on traffic volume and type.

2.2.3.2 WordPress

If possible, the product should be built in such a way as to make integration with WordPress trivial.

2.3 User Characteristics

Both website and backend users are assumed to have limited technical knowledge. However, backend users are expected to be familiar with the purpose of the various pieces of information contained in the database and accessed through the backend modules.

2.4 Constraints

The system will run on Microsoft Windows Server 2008, is required to use ASP.Net 3.5 or 4.0 and Microsoft SQL Server 2008, and must be written in C#. The product is a web application whose communication with client web browsers is expected to be rendered correctly on modern web browsers. Low volume of concurrent traffic is expected.

2.5 Assumptions and Dependencies

This document assumes that the product will not be used to store confidential or sensitive personal information.

Furthermore, the product depends on a hosting solution that is able to serve a large volume of photographs quickly and efficiently.

3 Database Information

3.1 Stored Information

3.1.1 Vacation Home (House)

- Name
- Address
- City
- State/Province
- Country
- ZIP/Postal Code
- Description
- Rate
- Additional Costs
- Flyer (Image)
- Virtual Tour (Video)
- Photos (Images)
- HomeAway Listing ID

3.1.2 Booking

- Booker's Name
- Phone Number
- Email
- Number of Occupants
- House
- Date Range
- Rate
- Additional Costs

3.1.3 Inquiry

- First/Last Name
- Phone Number
- Email
- House
- Number of Occupants
- Date Range
- Questions/Comments

3.1.4 Special

- House
- Date Range
- Special Rate
- Special Rates on Additional Costs (if any)

3.1.5 Report

- House/Houses
- Report Criteria
- Date Range

4 Timeline & Post-Production

4.1 Timeline

Backend (2-4 weeks)

- Implementation of backend administrative modules.
- Database bug testing.
- Integration of backend modules with database and with later website design.

- Implementation of Report functionality.

Website (2-4 weeks)

- Home page layout and design
- Vacation home page layout and design.
- Integration of backend home information with website page generation.

Deployment (1-2 weeks)

- Testing (bugs, acceptance, integration).
- Deployment to hosting solution.
- Deployment debugging, load testing.

4.2 Post-Production Expenses

4.2.1 Website Hosting

The product must be deployed on Microsoft Windows Server with Microsoft SQL Server 2008 and ASP/IIS or on Linux with Mono. Microsoft hosting must be compatible with .NET 4/4.5 and ASP MVC 4.

GoDaddy: Currently on sale for \$2.99/month (\$35.88/year), original \$5.99/month (\$71.88/year).

SmarterASP: \$2.95/month (\$35.40/year).

5. Supporting Information

5.1 History of Changes to the Document

Date (MM/DD/YYYY)	Person Responsible for Change	Revision Number	Description of Change
05/14/2013	Ryan Taylor	1.0	Document created.