Mötley Zoo Service Gateway

Project Vision Document

Version 1.4

10/10/2021

Revision History

Revision	Date	Author	Reviewed By	Summary of Changes
1.0	29/09/2021	Vanja Vego	Team 09	Initial Project Vision
1.1	04/10/2021	Vanja Vego		Revision 1
1.2	06/10/2021	Vanja Vego	Team 09	Revision 2
1.3	07/10/2021	Vanja Vego	Team 09	Revision 3
1.4	10/10/2021	Vanja Vego	Team 09	Final Revision

Document Approval List

Version	Approved By	Signature	Date
1.2	Angelica B.	Angelica B.	Oct. 07, 2021
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Document Distribution List

Version	Name of the Receiver/Group	Date
1.0	Team 09 - Jira	09/29/2021
1.1	Team 09 - Discord	10/04/2021
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1.3	Team 09 - Jira	10/07/2021
1.4	Team 09, Angelica B.	10/10/2021

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1   Introduction

Capstone Team 09 will strive to develop a fully functioning system to replace the high cost "Time To Pet" system that Mötley Zoo is currently relying on, at a fraction of their current costs, with expanded features including a more customized set of business requirements for Mötley Zoo's business model. The system will implement several features including a scheduler with varying functionality depending on user type, communications and reporting, report exports to pdf, automated emailing, and a payment gate, with additional features planned for later expansion which TTP does not cover.

1.1   Purpose

The purpose of this document is to give a clear vision of the planned product to the developers, and to be reviewed by all stakeholders for further clarification. With further revision, the scope and planned stages will be narrowed down to a realistic, well defined, yet broad set of features along with meeting all security and business case related requirements.

1.2   Scope

The scope of this project currently covers mainly the systems SPA aspects. It strives to bring all the features needed for Mötley Zoo to succeed, with an open-ended design through RESTful APIs to have the ability to expand the scope to a mobile app at a later stage if desired by, and feasible to Mötley Zoo. For Team 09, this project will also strive to serve as a single instance of a potential new business to provide such services, or a subset of services, to additional clients at a later time.

1.2.1   In Scope

1.2.1.1 Login site – Tracked by encrypted sessions, all or some parts of the   system (depending on user type) will not be accessible without a   registration to the system, and failed logins will be redirected to the login   site with a message stating that login failed
- Login site will also have a password recovery link (1.2.1.2)

1.2.1.2 Password recovery link site – Site will have a single input field for email and recover submit button. Upon submit, system will check database for email existence. If email exists, the user will be emailed with a recovery link, otherwise it will have no effect on the back-end side.
- On the front end, upon submit the site will load a generic message for user to check email and will NOT notify if the user doesn't exist.

1.2.1.3 Registration site – Accessible through the login site, this will be where new users can register. Once registered, the users will be emailed a registration confirmation link which will have a time limit. Failure to confirm will invalidate the process, and the user will have to retry.

1.2.1.4 Owner/admin system – Owners will have the ability to:

- set schedules,

- approve or decline schedule requests,

- override availability,

- read all reports from both staff and users,

- generate end-of-month and set time period reports,

- generate pdf's of said reports,

- control both the staff and user profiles including:

  - manually adding profiles,

  - suspending profiles,

  - completely removing profiles from the system.

- For staff members, the admin system will be able to set whether the staff can create their own schedules or just request a specific schedule with no guarantee of getting their request should the admin need to set their schedule as per business needs

- Owner will have ability to enter user profiles and make adjustments in cases where the user may need assistance due to inexperience with online systems (mainly seniors and such who may not be tech-savvy)

- Owner will also have an ability to fill out fields for promotional purposes, and toggle on/off a RESTful API to send to the maintainer of her main site (www.motleyzoo.ca)

1.2.1.5 Staff system – Staff members will be able to see their schedules, if enabled by admin/owner may be able to set their schedules, put in reports on jobs to either the owner or the customer or both.

Staff members will also be able to confirm how many hours they worked in a set amount of time, and will be able to communicate with both the owner and their clients.

The staff will be able to set their desired/needed maximum workload in terms of how many dogs they can handle at once, including their weight class.

1.2.1.6 User system – Users will be able to see availability of service in the upcoming weeks through the scheduler. If enabled by owner, they may be able to narrow down a preferred walker, and book a time slot or a repeated subscription to a specific time slot.

They will also be able to further fill in details into their profiles, including their own information as well as that of their pets. Once logged in, they will also have a way to pay their bills in a secure manner with the Stripe payment gateway, as well as have the ability to see reports from the dog walkers and leave comments and reviews of their experience in the form of a report. If enabled by owner, they will also have the ability to leave a general business review which may be posted on Mötley Zoo's main site at the owner's discretion.

1.2.2 Out of Scope

Dog walker tracking through GPS will be added at a later time through the later-planned mobile application, with possibility to deny tracking, set per walkers wishes out of privacy concerns.

Angelica has requested that the scope for this system remain for dog walking services only, as she's not sure what the logistics may be like for the remaining services next year, and still has to figure out some business-related issues around that in terms of integrating it into the system.

1.3   Definitions, Acronyms, and Abbreviations

Owner system – The system version that will only be visible to the principal owner of the company who is in effect the administrator of the company. The owner system will have all the features of the staff system as well, as the owner/admin also does dog walking services herself.

Proposed URL: ap.motleyzoo.ca (ap being "admin panel")

Staff system - The system version that will be visible to the staff of the company.

Proposed URL: sp.motleyzoo.ca (sp being "staff panel")

User system - The system version that will be available for use by the client, which will also be accessible by the system owner. Staff will not need access to this unless they are also clients for some reason, in which case they'll be able to toggle between user mode and staff mode.

Proposed URL: up.motleyzoo.ca (up being "user panel")

TTP - Time To Pet (Competitor system to be replaced by this system)

SPA - Single Page Application

Owner/Admin - Owner or Admin may be used interchangeably, they are both the same

RESTful API - Representational State Transfer based Application Programming Interface

SHR-A-<num> - Id format, Stakeholder Requirements – Admin

SHR-S-<num> - Id format, Staff Requirement

SHR-U-<num> - Id format, User Requirement

SF-A-<num> - Id format, Admin SHR correlated System Feature

SF-S-<num> - Id format, Admin SHR correlated System Feature

SF-U-<num> - Id format, Admin SHR correlated System Feature

1.4   References

Reference File Name	Version	Description
Persona – Angela B.	Final	Fictionalized Persona of Owner based on Angelica
Persona – Jeff Benton	Final	Fictionalized Persona of dog-walker/co-owner
Persona – Jessica Z.	Final	Fictionalized Persona of dog-walker/staff member
Persona – Robbie Stronza	Final	Fictionalized Persona of user
Persona – George Walker	Final	Fictionalized Persona of user
F21_T09_Project_Summary	Final	Project Summary of this project, which is a generalized version of this further expanded document.

2   Positioning

2.1 Business Opportunity

The business opportunity for Mötley Zoo stems in a) having everything in-house without linking to a third-party site, which may offer services from other companies which compete with Mötley Zoo. b) Overall cost saving in terms of having their own system instead of relying on a costly third-party SaaS which increases in cost as Mötley Zoo grows their own services and staff. c) No additional costs beyond marginal increase in hosting cost of additional database entries as their clientele and staff grows.

The business opportunity for Team 9 stems in having a fully working instance of a service offering which can later be abstracted and applied to offer services to several other companies, including in completely different industries. If the system is loosely coupled and made to be modular, this could be expanded into a viable business model of it's own. Having an already working and successful business like Mötley Zoo as a client can also serve as a proof of concept to draw in other clients which may need similar or the same type of services.

2.2   Problem Statement

The Problem of	Overall cost and expandability
affects	Mötley Zoo
the impact of which is	Reservations and hesitation to grow business and staff in a scalable organic manner, and having a more customized system for their specific business model.
a successful solution would be	A fully scalable independent in-house system with full control of assets and no restrictions or paywall from a third-party company based on number of staff.

Table 1 Problem Statement

2.3   Product Position Statement

For	Mötley Zoo
Who	Wishes to expand with more control of their own systems
The in-house system	is an administrative tool set and business commerce system
That	Provides them with full operational independence, including low-cost growth scalability in terms of clients and staff
Unlike	Time to pet
Our product	Is a one-time-paid product/system, with complete autonomy given to Mötley Zoo in terms of growth, look, and no reliance on a third-party company including their (TTP) overall costs changing, and dependence on TTP's own business viability and future.

Table 2 Product Position Statement

3 Stakeholder and User Descriptions

3.1 Stakeholder Summary

Stakeholder Name	Represents	Role
Angelica B.	Angelica is the primary owner of Mötley Zoo and as such the business' primary administrator	Angelica will advise what she needs from the system, how she would like it to look and feel, and what business requirements take precedence over others.
Jeff Benton	Jeff is the secondary co-owner of Mötley Zoo and has some input in administrative matters.	Jeff will primarily work with Angelica to finalize business requirements. Communications will be done exclusively through Angelica.
Vanja Vego	Vanja is the project director of Team 9	Vanja will be responsible for communications and meetings with Angelica, and seeing the project through to the end. He will also be responsible for gauging the viability of further expansion of team 9's product into a separate new business afterward.

3.2   User Summary

User Name	Description	Responsibilities	Stakeholder
Jessica Z.	Jessica is a staff member at Mötley Zoo	Jessica is giving input of how she'd like the staff system to work with user stories and will provide the outline of future use cases for her role	Angelica B.
Robbie Stronza	Robbie is a client of Mötley Zoo	Robbie is the first of two clients who agreed to add some user input to creating the new system	Angelica B.
George Walker	George is a client of Mötley Zoo	George is the first of two clients who agreed to add some user input to creating the new system	Angelica B.

Table 3 User Summary

4   Stakeholder Requirements

ID	Requirement	Stakeholder
SHR-A-01	High security encryption	Vanja Vego, Angelica B.
SHR-A-02	Sectioned off systems per user type	Angelica B.
SHR-A-03	Ability to schedule services	Angelica B.
SHR-A-04	Ability to control all accounts and their permissions	Angelica B.
SHR-A-05	Ability to make changes in user accounts when needed	Angelica B.
SHR-A-06	Ability to see and if needed, save pdf's of one or more reports	Angelica B.
SHR-A-07	Ability to approve or decline scheduled requests	Angelica B.
SHR-A-08	Ability to override scheduling availability	Angelica B.
SHR-A-09	Ability to read all reports	Angelica B.
SHR-A-10	Ability to set up webhooks for API's to be used by main site	Angelica B

ID	Requirement	Stakeholder
SHR-S-01	Ability to see booked schedule	Jeff Benton, Jessica Z.
SHR-S-02	Ability to set schedule of availability if given permission	Jeff Benton, Jessica Z.
SHR-S-03	Ability to set desired/needed workload in terms of number of dogs and their weight class	Jeff Benton, Jessica Z.
SHR-S-04	Ability to see hours worked in a given time period	Jeff Benton, Jessica Z.
SHR-S-05	Ability to write reports to owner	Jeff Benton, Jessica Z.
SHR-S-06	Ability to write reports to clients	Jeff Benton, Jessica Z.
SHR-S-07	Ability to communicate with clients and or owner (different from report, to be used in case of needing to address issues quickly)	Jeff Benton, Jessica Z.
SHR-U-01	Ability to see availability of services in upcoming weeks	Robbie Stronza, George Walker
SHR-U-02	Ability to choose dog walker (if enabled by owner)	Robbie Stronza, George Walker
SHR-U-03	Ability to book a single time slot	Robbie Stronza, George Walker
SHR-U-04	Ability to book a time slot on a weekly subscription basis	Robbie Stronza, George Walker
SHR-U-05	Ability to fill in profiles, including details of their dogs	Robbie Stronza, George Walker
SHR-U-06	Ability to pay for services in secure manner	Robbie Stronza, George Walker
SHR-U-07	Ability to see reports from dog walkers	Robbie Stronza, George Walker
SHR-U-08	Ability to respond, comment or review the experience of specific walk	Robbie Stronza, George Walker
SHR-U-09	Ability to leave review of overall business (if enabled by admin/owner)	Robbie Stronza, George Walker

Table 4 Stakeholder Requirements

5   System Features

ID	Feature	Stakeholder Requirement ID
SF-A-01	High security encryption	SHR-A-01
SF-A-02	Sub-systems based on user type	SHR-A-02
SF-A-03	Scheduling services	SHR-A-03
SF-A-04	User control/permissions	SHR-A-04
SF-A-05	Profile Editing	SHR-A-05
SF-A-06	Business Reporting and pdf export	SHR-A-06
SF-A-07	Scheduling request approval	SHR-A-07
SF-A-08	Overriding scheduling ability	SHR-A-08
SF-A-09	Access to all report site-wide	SHR-A-09
SF-A-10	API webhook setup and toggling	SHR-A-10
SF-S-01	Overview of booked schedule	SHR-S-01
SF-S-02	Setting scheduling	SHR-S-02
SF-S-03	Setting workload	SHR-S-03
SF-S-04	Overview of hours worked	SHR-S-04
SF-S-05	Writing reports to owner	SHR-S-05
SF-S-06	Writing reports to clients	SHR-S-06
SF-S-07	Quick-format communications with clients	SHR-S-07
SF-U-01	Overview of available time slots	SHR-U-01
SF-U-02	Setting desired dog-walker	SHR-U-02
SF-U-03	Setting single time slot for services	SHR-U-03
SF-U-04	Setting subscriptioned time slot for services	SHR-U-04
SF-U-05	Setting profile info	SHR-U-05
SF-U-06	Payment gateway	SHR-U-06
SF-U-07	Overview of reports from dogwalkers	SHR-U-07
SF-U-08	Feedback on specific service instance	SHR-U-08
SF-U-09	Feedback of overall business	SHR-U-09

Table 5 System Features

6   Assumptions

- It is assumed that the system will split into three sub-systems based on user types upon login.

- It is assumed that the sub-systems will be sub-domains of the main website.

- It is assumed that the system has no access to, and no bearing on the main domain www.motleyzoo.ca, and no access of any kind to its source code. The only effect on that domain the system can have is through the admin panel being able to enable/toggle on and off APIs which may be offered to the webmaster of the main domain for promotional and review publishing purposes.

- It is assumed that the system has no bearing on how the above-mentioned API will be implemented on the main domain. This is a matter to be settled between the principal owner (Angelica) and her site's webmaster.

7   Constraints

- Payment gateway may be switched out from Stripe to any other payment gateway if desired by principal stakeholder at a later stage

- External API (SF-10) may not be used, and may be omitted from this project at the time of development based on main site webmaster's co-operation, owners change of mind, or time constraints (this is considered a low-priority functionality by the owner)

- The scope of this project at this time covers only the dog walking service as per the owners wishes. This may change later as business-related matters on those services get ironed out more.

- Software development dependencies (Node packages) may change based on development teams wishes as the development commences and throughout several sprints of development stage of project.