August 27, 2024

Exenreco Bell

Bellevue University – WEB321

Instructor: Robert Kumar

Scrum Project Requirements

User Stories & Estimation Techniques

Contents

[Introduction 2](#_Toc175743188)

[Scrum Project Requirements 2](#_Toc175743189)

[Part I - Story Writing Overview 2](#_Toc175743190)

[Stories Based on Persona 1 – Sarah 3](#_Toc175743191)

[Stories Based on Persona 2 – David 4](#_Toc175743192)

[Stories Based on Persona 3 – Karen 5](#_Toc175743193)

[Part II - Story Decomposition/Tasking 6](#_Toc175743194)

[Decomposing Karen’s Tasks 7](#_Toc175743195)

[Decomposing Sarah’s Tasks 8](#_Toc175743196)

[Part III - Sizing/Estimation 9](#_Toc175743197)

[Sizing/Estimation - Karen 11](#_Toc175743198)

[Sizing/Estimation - Sarah 12](#_Toc175743199)

[Sizing/Estimation – Comparison 13](#_Toc175743200)

[Conclusions 14](#_Toc175743201)

# Introduction

## Scrum Project Requirements

Pets-R-Us is a local pet store that offers a variety of pets for adoption.  Pets-R-Us also sells a variety of pet-related products, supplies, services, and accessories.  Pets-R-Us needs help with the company website.  Recently Pets-R-Us expanded into dog grooming, training, and boarding services.  Because of these added business services, Pets-R-Us needs help expanding its current website to market these services.  It would also like to offer customers the ability to make appointments for their dogs online.  Pets-R-Us just completed and sent out a Request for Proposal (RFP) to expand its website.  The RFP included a high priority requirement to design and develop online appointment-making functionality so that customers could log in and schedule their dog(s) to receive these services.

# Part I - Story Writing Overview

Using the personas that were created in Assignment 3.2, complete the following: Write fifteen (15) user stories (five user stories per persona). Use the following story format: "As a role (who), I need functionality (what), so that justification (why)."

Response:

## Stories Based on Persona 1 – Sarah

A Busy Pet Parent

1. As a busy pet parent (Sarah), I must schedule appointments online for dog grooming and training to manage my pet care tasks efficiently.
2. As a busy pet parent (Sarah), I need to order pet food and supplies online to get the products I need for convenience.
3. As a busy pet parent (Sarah), I need access to a community forum for pet advice and sharing experiences to connect with other pet owners and learn from their experiences.
4. As a busy pet parent (Sarah), I need advanced product filtering options, such as by breed or size, to quickly find the products my pets need.
5. As a busy pet parent (Sarah), I need customizable loyalty program rewards to earn and redeem points for products and services that benefit my pets.

## Stories Based on Persona 2 – David

A Tech-Savvy Pet Enthusiast

1. As a tech-savvy pet enthusiast (David), I need advanced product filtering options by breed or size to find the products my pets need quickly.
2. As a tech-savvy pet enthusiast (David), I need customizable loyalty program rewards to earn points and redeem them for products and services that benefit my pets.
3. As a tech-savvy pet enthusiast (David), I need to be able to view product reviews and ratings from other pet owners to make wise purchasing decisions.
4. As a tech-savvy pet enthusiast (David), I need the ability to rate and review products and services to share my experiences with other pet owners and help them make informed decisions.
5. As a tech-savvy pet enthusiast (David), I need easy-to-use product search functionality to quickly find what I'm looking for without getting frustrated.

## Stories Based on Persona 3 – Karen

Retiree Pet Lover

1. As a retired pet lover (Karen), I need to order pet food and supplies online to quickly get my pets' products without going to the store physically.
2. As a retired pet lover (Karen), I need access to a community forum for pet advice and sharing experiences to connect with other pet owners and learn from their experiences.
3. As a retiree pet lover (Karen), I need an easy-to-use product search functionality to quickly find what I'm looking for without getting frustrated.
4. As a retiree pet lover (Karen), I need the ability to view product reviews and ratings from other pet owners to make wise purchasing decisions.
5. As a retiree pet lover (Karen), I need the ability to rate and review products and services to share my experiences with other pet owners and help them make informed decisions.

# Part II - Story Decomposition/Tasking

Overview:

Choose two (2) user stories from part I and break each story down into at least five (5) smaller tasks.  Store your results in a table or matrix format that will be added to part III.  Stories and tasks should be rows within the table/matrix.

Response:

The two individuals’ stories I have chosen to break down are: Karen & Sarah, after consideration of both users stories the tables found in this section can identify some ideal tasks that are needed when looking at the two personas.

## Decomposing Karen’s Tasks

Table of Karen’s tasks simplified:

|  |  |  |
| --- | --- | --- |
| **#** | **User Story / Task** | **Task Description** |
| N/A | **User-story:** As a retiree pet lover (Karen), I need to order pet food and supplies online to quickly get my pets' products without going to the store physically. | - |
| 1 | Interface | Design an interface for:   * Scheduling appointments * Shopping and Product Discovery * Blogging (Forum) |
| 2 | Backen API Development | Develop backend APIs to manage:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program |
| 3 | Frontend Integration | Integrate frontend interface to:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program |
| 4 | End-to-End Testing | Test integration for:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) |
| 5 | Development | Deploy features to production environment:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) |

## Decomposing Sarah’s Tasks

Table of Sarah’s tasks simplified:

|  |  |  |
| --- | --- | --- |
| **#** | **User Story / Task** | **Task Description** |
| N/A | **User-story:** As a busy pet parent (Sarah), I need to schedule appointments online for dog grooming and training to manage my pet care tasks efficiently | - |
| 1 | Interface | Design an interface for:   * Scheduling appointments * Shopping and Product Discovery * Blogging (Forum) |
| 2 | Backen API Development | Develop backend APIs to manage:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program |
| 3 | Frontend Integration | Integrate frontend interface to:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program |
| 4 | End-to-End Testing | Test integration for:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) |
| 5 | Development | Deploy features to production environment:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) |

# Part III - Sizing/Estimation

Overview

For each task and at the story level, estimate the number of hours and the number of story points.

* Building upon the table containing stories and tasks from part II, create a column for Work Hours.  Estimate the number of Work Hours for each task and summarize at the story level.
* Building upon the table containing stories and tasks from part II, create a column for Points.  Estimate the number of Points for each task and summarize at the story level.
  + As a baseline reference when sizing work to estimate points, assume the size and complexity of creating a hand-drawn sketch of the appointment scheduling screen is 3 points.
  + If a task is larger than 10 points, it is too large or complex and must be broken down into smaller components.
  + If a story is larger than 40 points, it is too large or complex and must split into smaller components.
* Using your estimation work so far as a reference point, will you be able to complete these two stories within one 2-week sprint? Why or why not?

Response

## Sizing/Estimation - Karen

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **User Story / Task** | **Task Description** | **Work Hours** | **Points (Fibonacci Sequence)** |
| N/A | **User-story:** As a retiree pet lover (Karen), I need to order pet food and supplies online to quickly get my pets' products without going to the store physically. | | 40 | 16 |
| 1 | Interface | Design an interface for:   * Scheduling appointments * Shopping and Product Discovery * Blogging (Forum) | 6 | 3 |
| 2 | Backen API Development | Develop backend APIs to manage:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program | 10 | 4 |
| 3 | Frontend Integration | Integrate frontend interface to:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program | 10 | 4 |
| 4 | End-to-End Testing | Test integration for:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) | 4 | 1 |
| 5 | Development | Deploy features to production environment:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) | 10 | 4 |

## Sizing/Estimation - Sarah

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **User Story / Task** | **Task Description** | **Work Hours** | **Points (Fibonacci Sequence)** |
| N/A | **User-story:** As a retiree pet lover (Karen), I need to order pet food and supplies online to quickly get my pets' products without going to the store physically. | | 38 | 15 |
| 1 | Interface | Design an interface for:   * Scheduling appointments * Shopping and Product Discovery * Blogging (Forum) | 6 | 3 |
| 2 | Backen API Development | Develop backend APIs to manage:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program | 8 | 3 |
| 3 | Frontend Integration | Integrate frontend interface to:   * Scheduling appointments * Shopping & Product Discovery * Allow users to write post and get response (Forum) * Loyalty Program | 10 | 4 |
| 4 | End-to-End Testing | Test integration for:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) | 4 | 1 |
| 5 | Development | Deploy features to production environment:   * Frontend experience * Scheduling appointments * Shopping and product discovery * Bloging features (forum) | 10 | 4 |

## Sizing/Estimation – Comparison

Response

As you can see in both sizing estimation for Karen and Sarah, both users have requested similar features which reflects a difference in points and work hours. This is so since the idea of both personas are very similar to each other with one requiring more features for a particular task than the other, thus the difference in the point system and work hours is as such.

For one, while both users have requested an online shopping experience both have varying ideas of how they would rather that experience to be. Karen’s tasks require a lot more work hours and points because of the shopping features she has specified such as: product reviews and product filtering.

Furthermore, to answer the question will you be able to complete these two stories within one 2-week sprint? Yes, both Karen’s and Sarah’s stories can be completed within the span of two 2-weeks; this is so since, both users have quite similar stories with the major difference being a difference of features in a feature.

Finally, from both tables it can be assumed that both users have a similar mindset of what type of site they are looking for, which points us in the direction we need to go. For one: a shopping, forum, and scheduling page will be highly appreciated by Pets-R-US users.

# Conclusions

In conclusion, this Scrum project aims to enhance Pets- R-Us' website by adding online appointment-making functionality for dog grooming, training, and boarding services. The project involves designing interfaces, developing backend APIs, integrating frontend components, and conducting end-to-end testing. By breaking down user stories into smaller tasks and estimating the complexity of each task using Fibonacci sequence, the team can better plan and execute the project within a 2-week sprint.