

# Peer-2-Peer Marketplace: Model-View-Template Architectural Design

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Asuncion

**Quarter:** Autumn 2021



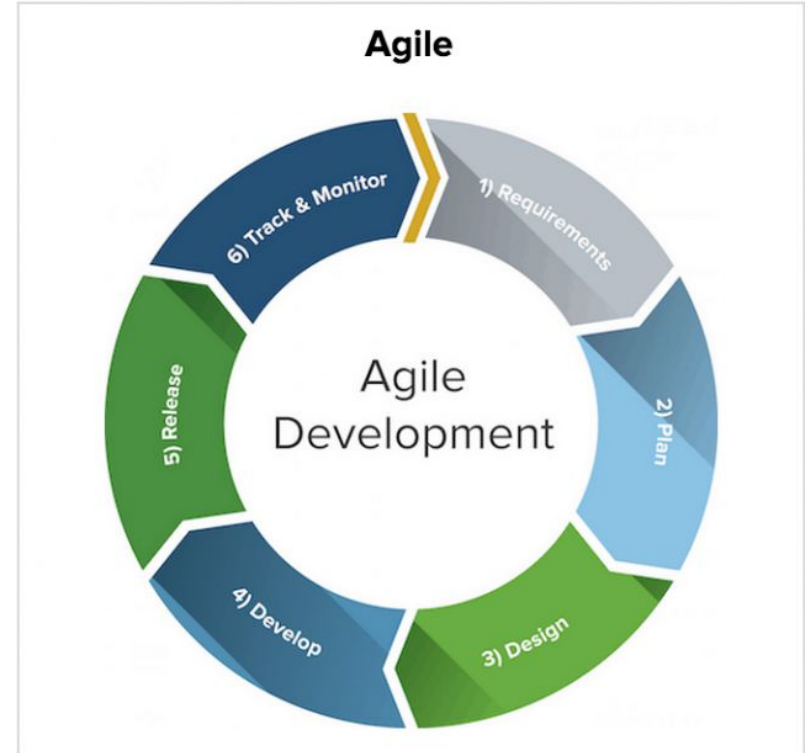
# Intro -What is a Peer-2-Peer Marketplace?

- A Peer-2-Peer Marketplace is an online platform where individual sellers can use a decentralized method to sell products to a target audience
- The advantage of using a P2P marketplace enables the seller to minimize marketing costs and enter a new avenue for customer relations.
- the concept of allowing pet owners to sell/buy used animal items isn't widely marketed. This is why I will be engaging a domain specifically for animals products



# Project Phases

- **Initiation:**
  - Project Definition/Planning Poker
  - Initial Planning Workload & Time
- **Design:**
  - Diagramming
  - Formative Research
  - Risk Management
- **Development:**
  - Initial Architectural Iteration
  - Agile Way of Working
- **Project Release:**
  - Finalize Documentation
  - Project Deployment



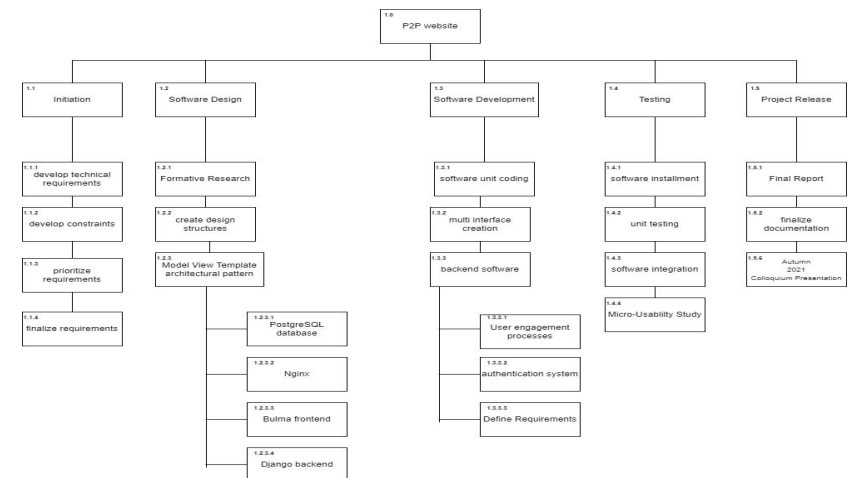
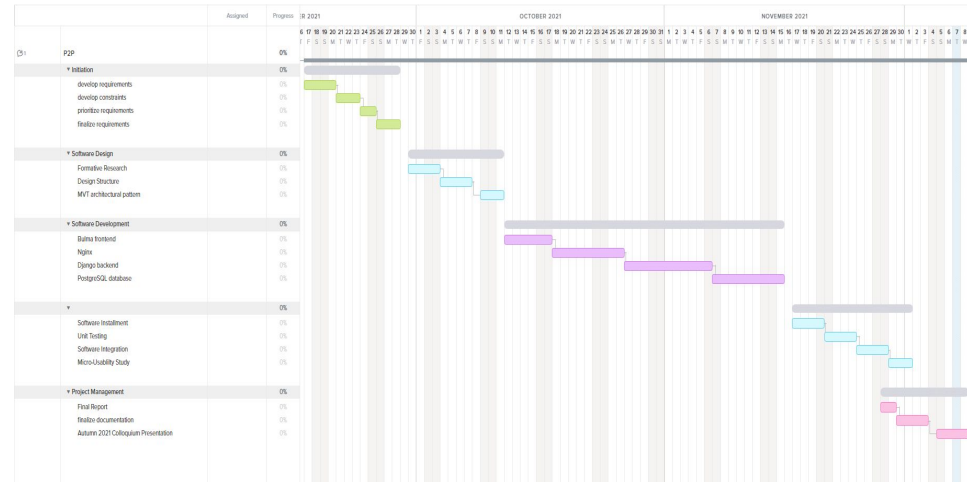
# Planning

## ● Goals:

- Build web application that supports, maintains, and allows for users to engage with a marketplace
- Maintain the schedule set to establish the release of the project
- Use Model View Template to Deliver Project

## ● Scope:

- Determine time estimate for details of the project
- Design the users and system interaction
- 2 Sprints divided into:
  - Seller, Items, Administration
  - Buyer, Carts, Orders



# Context of Use & Persona

- **Context of Use:**

- Users looking to sell/buy clothing, toy products, etc. for domestic animals
- Users who would typically sell/buy used items at a markdown online
- Sellers who want to merchandise items online

**Jessica Andrew**  
35, Seattle

**PERSONALITY**

- Enthusiastic
- Encouraging
- Independent
- Knowledgeable
- Helpful

**BIO**

Jessica has been a local boutique owner in Seattle for the past 10 years. She focuses mostly on knitted hats and arrangements of coats, but has started to focus on dog and cat clothing as well. She has recently started posting her clothing products she created and does wear on Depop, and her sales has rocketed in the past year. Being a pet owner herself she loves to focus on giving her pets the best life possible and is seeking ways to better their environments and other animals alike.

On her off time, Jessica enjoys going to local shops and finding unique and hard to find items that you can't find on the internet.

**Motivations**

Personal Business ——— Growth ———  
Socializing ——— Pet ———

**Goals**

- Growing and expanding boutique towards animal focused clothing
- Self-improvement, especially outside of work
- Spend more time with pets

**Frustrations**

- Cost of living is high, and trying to tend to animals can be difficult
- Cultivating animal loving communities is hard w/o direct
- Obtaining animal products takes a lot of effort

**Behavior**

Tech Savviness ———  
Business Skills ———  
Sociable ———  
Ambition ———  
Visually Driven ———

**Influences**

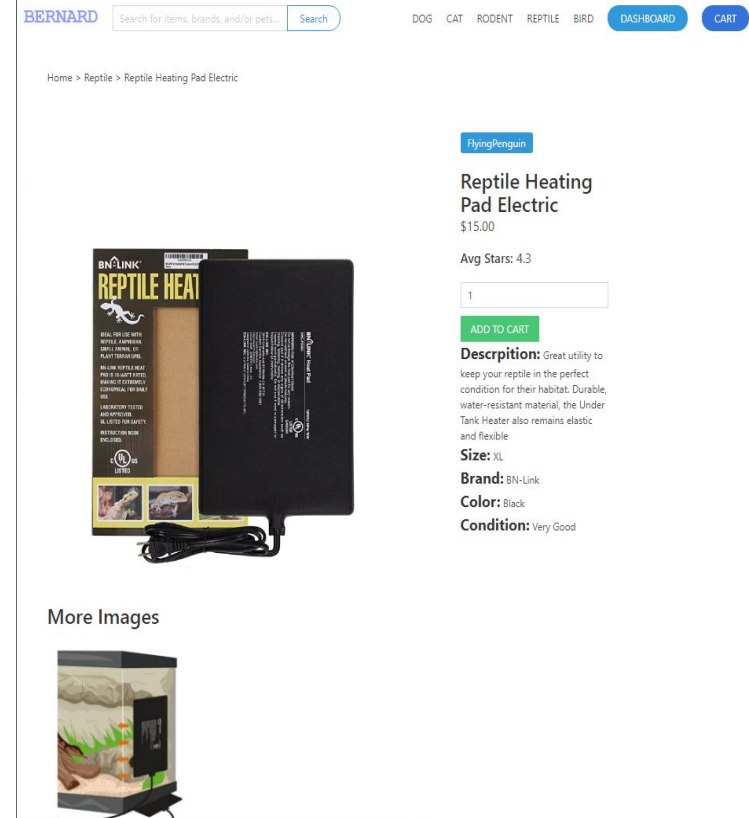
• Pinterest • Current Events  
• TikTok • Animals  
• Animal Youtube • National Geo.

**Frequently used apps**

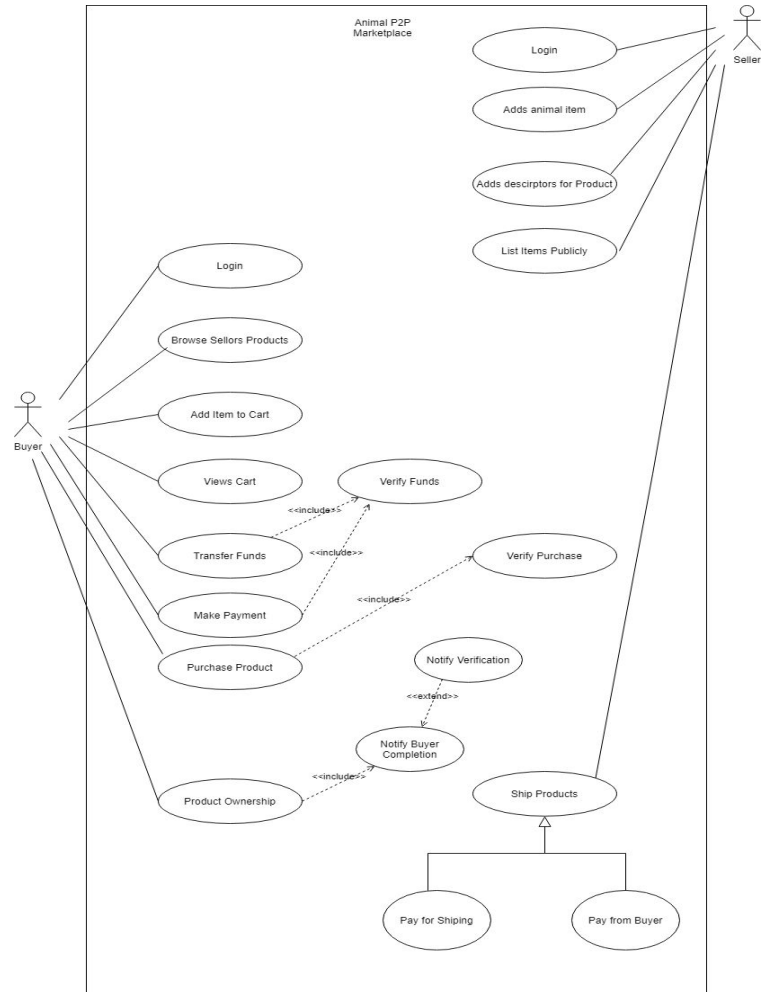
Instagram Depop Pinterest

# Site Features

- **Key Design Features:**
  - Site Navigation
  - Seller can Administer Items Details
  - Dashboard management for Seller Items & Item orders
  - Review System
  - Cart Functionality
- **Technology:**
  - Django site Admin Interface
  - Point of Sales integration with Stripe
  - Slugify
  - Form Based Interface



# Demo



# Reflections

- **Highlights:**

- Fulfilled Deliverable requirements
- Practice Agile SDLC methodology
- Website development using Django

BERNARD

- **Improvements:**

- Apply Business Models for revenue generation and competitive strategies
- Expand Application boundaries to allow direct buyer/seller interactions on site
- Port the web application into a mobile application



Thank you



# P2P Marketplace: Model-View-Template(MVT) Architectural Design

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## Overview

- **Peer-2-Peer Marketplace:**
  - online platform where individual sellers can sell used/crafted animal products to a target audience with a desired need.
- **Model-View-Template:**
  - **Model** supports the application data
  - **View** contains the accessing of data
  - **Template** defines the structure of the model and view.

## Objectives

- Build web application that supports, maintains, and allows for users to engage with a marketplace
- Use design principles to implement a functional website
- Handle Buyer and Seller interactions

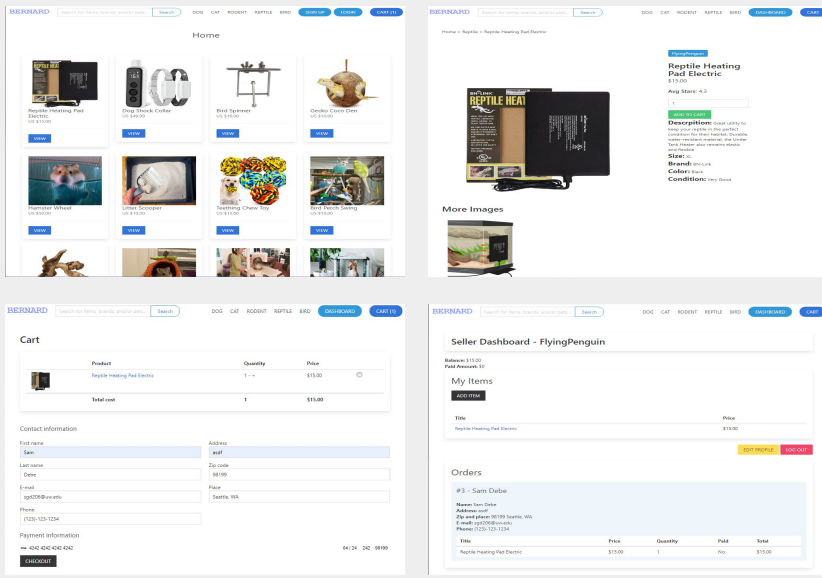
## Technologies



## Solutions

- Functionality for Seller, Items, Orders, & Cart
- Seller Dashboard shows all of the seller's **posted items** and new **items ordered**

## Results



## Relevant Courses

- CSS 342/343 - Data Struct. & Algo.
- CSS 370 - Analysis & Design
- CSS 480 - Principles Of Human-Computer Interaction
- CSS 475 - Database Systems
- CSS 461 - Software Prog. Management

## Conclusion

- Preliminary Planning is very useful for estimating allotted time & requirements
- Practicing good design helps ease of development progress
- Gained more knowledge in full stack development

## Future Work

- Apply Business Models for revenue generation and competitive strategies
- Expand Application boundaries to allow direct buyer/seller interactions on site
- Port web app into a mobile app