

# Pet Grooming VR Project

Sponsored by:



# Our Team



**Aeole (AJ)**



**Elizabeth**



**Cheng Pong**



**Ivan**



**Ming Ying**



**Xin Yi**

# Table of Contents

**01**

**Main Business  
Problem**

**02**

**Our Target  
Audience**

**03**

**Main  
Objectives**

**04**



**VR Training  
Experience**

**05**

**Unity Tools  
and Assets**

**06**

**What's  
Next?**



# Our Sponsor



## Pet Grooming Services

Believe in redefining pet care by placing utmost importance on the pets' grooming experiences. Services include bathing, spa and grooming.

## The Pets Workshop Academy

Committed to nurturing talent, providing a comprehensive curriculum, and equipping the students with the skills they need to excel.



**01.**

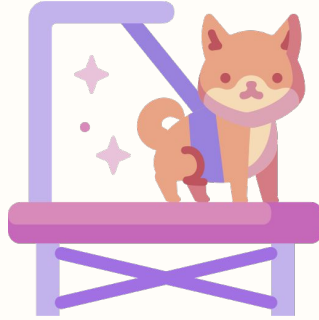
# **Main Business Problems**

# Main Business Problems



## Accessibility of Training

Hands-on training can usually only be done physically, limiting where, how often or how long one can train.



## Unique Scenarios

Most difficult scenarios faced by groomers happen unexpectedly on the job.



## Material Costs

Materials used in training can be costly over time and over several groomers.

# Accessibility of Training



A physical training space can only **host a certain amount of trainees.**

Experienced **trainers need to be present** to monitor trainees.

Physical spaces are limited and **cannot be accessed 24/7.**

# Unique Scenarios

Difficult clients like **uncooperative pets cannot be simulated** during training.

Practicing on **foam cannot emulate real pet behaviors.**

Groomers **can't afford to make mistakes in a real-life session** and hurt client's pets.

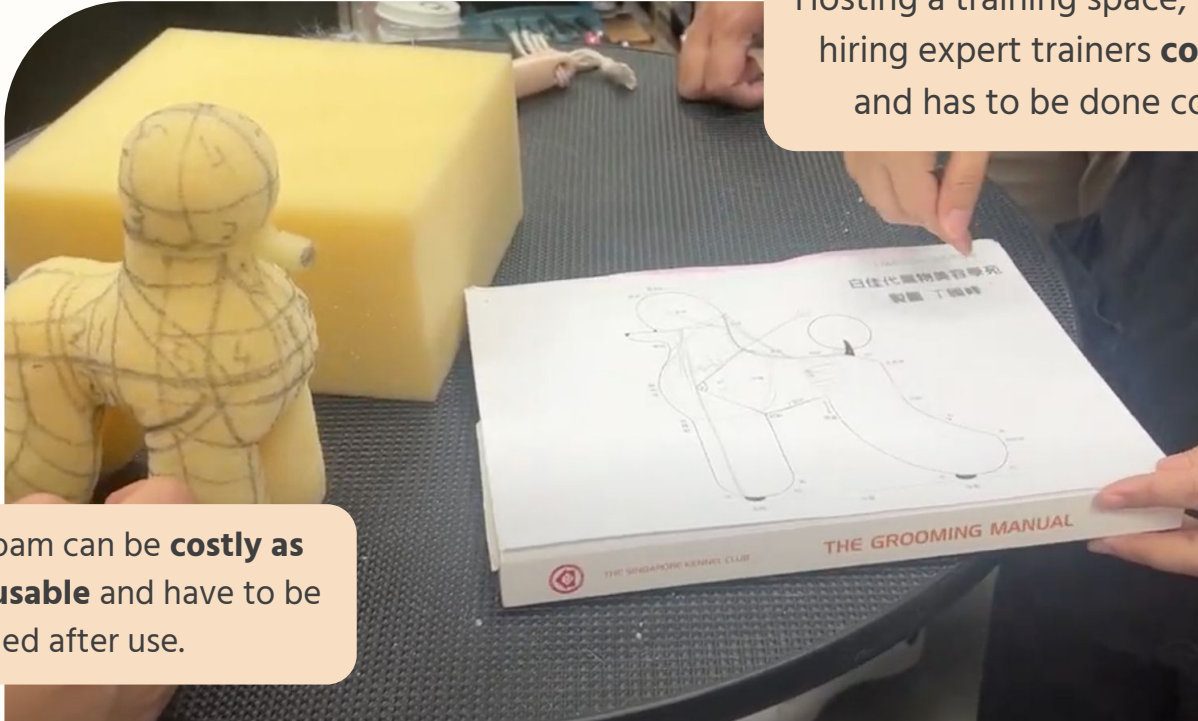




# Material Costs

Hosting a training space, buying tools, hiring expert trainers **costs money**, and has to be done constantly.

Practicing on foam can be **costly** as **they are not reusable** and have to be discarded after use.





**02.**

# **Our Target Audience**

# Main Audience



## Pet Groomers Newbies and Experienced

Groomers of all skill levels can **practice and improve** their skills and enhance their learning experiences.



## Curious Pet Owners

Customers can learn about the basic grooming process and **feel more comfortable entrusting their pets** to groomers.

**03.**

# **Main Objectives**



# Main Objectives

*To create an immersive and effective pet grooming VR experience...*

## Training

Groomers can **refine and rehearse various techniques** while gaining experience in handling challenging customers.

## Safety

**Pets won't experience accidental harm** during grooming, and groomers can be **safe from tool-related injuries**.

## Sustainability

Reduces **physical material used for training** such as foams and grooming tools.

## Reduce workload and training costs

Trainers have more flexibility on when and where they can train, as there is **no need for a physical space and tools to practice** in VR.



# Why VR Development?



## Self-paced

Users can go on their own pace.

Infinite number of retries.

Location and time agnostic.

## Scalability

Easy to accommodate more users given more headsets.



## Sustainability

High upfront cost, but possibly more sustainable in the long term.

## Safety

No physical repercussions on pets.

04.

# VR Training Experience



# Main Features



## Training Environment

A 3D layout recreation of the **The Pets Workshop** branch in Tampines.



## Free Play Mode

Simulator mode offers **unrestricted freedom** for users to explore and experiment as they please.



## Gamified Experience

Users can go through the basic grooming process in a **task-based gameplay** environment.



## Tool Mechanics

Pet **grooming techniques with tools** can be practiced using the VR controllers.



# Main Features



## Customer Interactions

Groomers are given opportunities to **engage with clients with conversation prompts**, helping develop their customer service skills.



## Post-Session Photo Booth

At the end of the grooming session, users can **take a polaroid photo of the client's pet**, showing off their hard work and skills, **simulating the actual post-grooming activities** performed at The Pets Workshop.



**05.**

# **VR Project Resources**

**Unity Assets, Technical  
Tools and References**

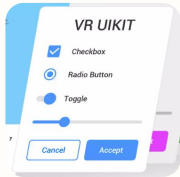


# Unity Assets



## Schnauzer 3D Model

Our grooming companion, complete with various **animations authentically replicating dog behavior**.



## Material Design UI Kit

A library of **common UI components** such as menus, carousels, etc. made especially for VR projects.



## Stylized Hair Tool

This tool was used to create **realistic, interactable fur** for our dog model, which is then used when implementing the cutting hair task.



## Mixamo NPC Model

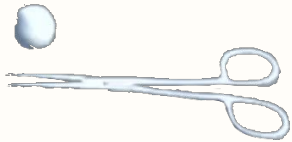
Human models with built-in animations to **mimic real customer behaviours and interactions**.

# Unity Assets



**Scissors  
3D Model**

Used for cutting pet's hair, it is a tool that is triggered by a button press to cut hair off the dog model.



**Forceps  
3D Model**

Used for ear cleaning, it is a tool that interacts with a cotton ball to be used to clean ear gunk in the dog model's ears.



**Nail Clippers  
3D Model**

Used for clipping pets' nails, it is a tool triggered by a button press to clip the nails on the dog model.



**Ear Powder  
3D Model**

Used for ear hair plucking, it is a tool the user must use on the dog's ears **before** proceeding to pluck the dog's ear hairs.

# Unity Assets



## Camera 3D Model

Used in the post-grooming photobooth section, it is a tool for the user to take a photo of their finished work on the dog model.

# Unity Assets

## Environment, Buildings and Furnitures



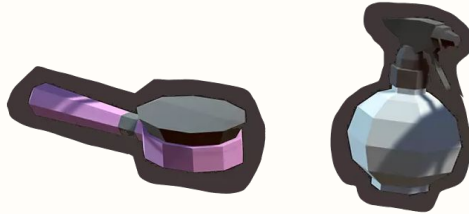
In order to **replicate the real-life layout of The Pets Workshop** branch in Tampines, various asset libraries are used, majority of which is from Synty's low polygon environment sets.

Other assets were provided by SMU-X or sourced individually from the Unity Asset Store or 3D model repositories like Sketchfab, Mixamo, etc.

# Unity Assets



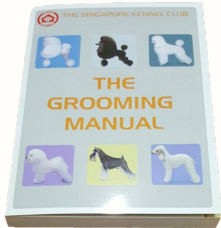
## Workshop Props and Tools



In order to **replicate the real-life layout of The Pets Workshop** branch in Tampines, various asset libraries are used, majority of which is from Synty's low polygon environment sets.

Other assets were provided by SMU-X or sourced individually from the Unity Asset Store or 3D model repositories like Sketchfab, Mixamo, etc.

# References



## SKC Grooming Manual

Served as our **comprehensive guide**, outlining grooming procedures, essential tools, and considerations for planning out our VR project's grooming process.



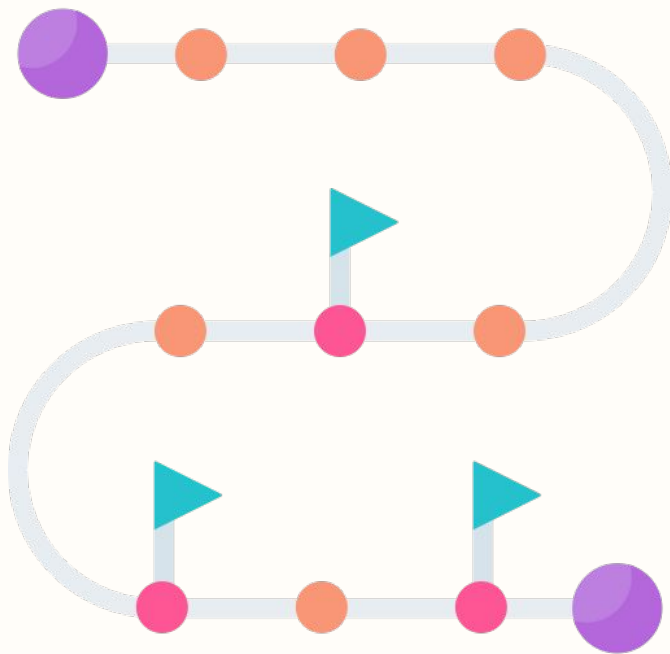
## Photo and Video References

Provided by The Pets Workshop, our team used **image references to replicate the 3D environment**, as well as the equipment present for each grooming task.



06.

# Future Plans



# Future Plans



## Randomized Pet Breeds

Clients' **pets type and breeds** will be **randomized** on each playthrough, providing a unique experience.



## More Complex Grooming Tasks

With the addition of new breeds and personalities, there would be more requirements such as **different cut styles for different breeds**.



## Difficulty Settings

**Different pet breeds, sizes and personalities** will be added in order to simulate more difficult clients.



## Score Tracking

The experience will keep **track if the user has done the tasks correctly**, which will be reflected after finishing all the tasks.

# Future Plans



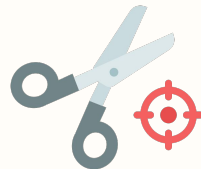
## Realistic Pet Reactions

Pets will **react according to what the user do**. For example, accidentally cutting the dog's skin can make them jump away from the user.



## Realistic Graphic Effects

In the case of nail cutting, if the user cuts the blood vessels on the nails, blood should flow out to **make the simulation more realistic**.



## Hitbox Accuracy

**Increase trimming area** on grooming tools to improve accuracy of the experience.



## Custom 3D Models

The nail clipper tool is originally a wire cutter model repurposed for our project. In the future, we hope to update it with a **more accurate custom model**.



# Thank you!

CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**