

Powering Up Simulation in Environmental Training

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The Value of Play – It Drives Innovation

- Play is a gateway to possibility
- Our brains are wired to pay attention when something surprises us
- Old dogs can learn new tricks



Vertex Resource Group Ltd.

- Environmental services
 - Professional
 - Industrial
- Diversified
- 900 employees
- Growth orientated



Environmental Consulting Challenges

- There is a shortage of skilled labour in the environmental consulting industry
- Training new and existing staff new skills can be challenging
- Reducing operational costs without compromising safety and quality is paramount
 - Faster, better, cheaper



<https://hrdailyadvisor.blr.com>

Solution - Virtual Training

- Training done in a virtual or simulated environment
- Participants virtually practice and experience real world situations, activities, and processes
- Many types of delivery systems and platforms
 - virtual and augmented reality
 - virtual classrooms, virtual environment (interact with data and images)



<https://nkxgen.com/virtual-ilt>

Virtual Training

- Save time
- Reduces costs
- Enhance safety
- Remove accessibility barriers
- Improve employee performance
- Enhance engagement



<http://www.bearsmart.com>



Vertex Training Simulator

Our objectives:

- Create a real-life immersive experience
- Drive value in our day to day operations
- Develop an effective collaborative tool
 - employees, clients, colleagues, and partners
- Make it fun



Choosing the Right Platform

ROBLOX:

- Free and popular (over 200,000,000 monthly users)
- Widely accessible, portable, no high-end equipment
- Fun, safe and endless possibilities



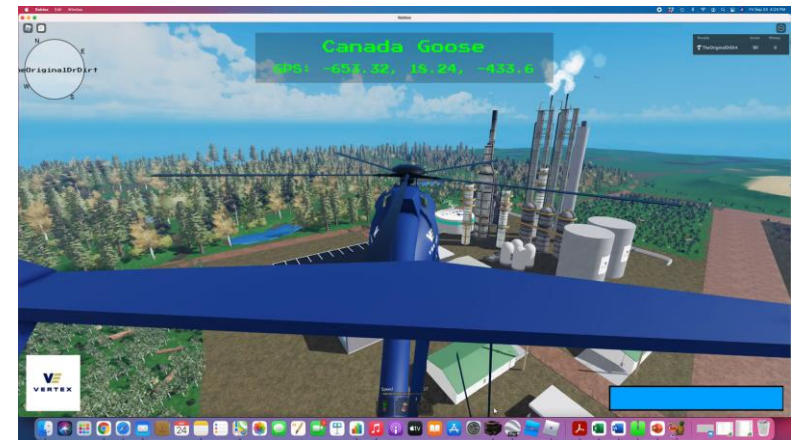
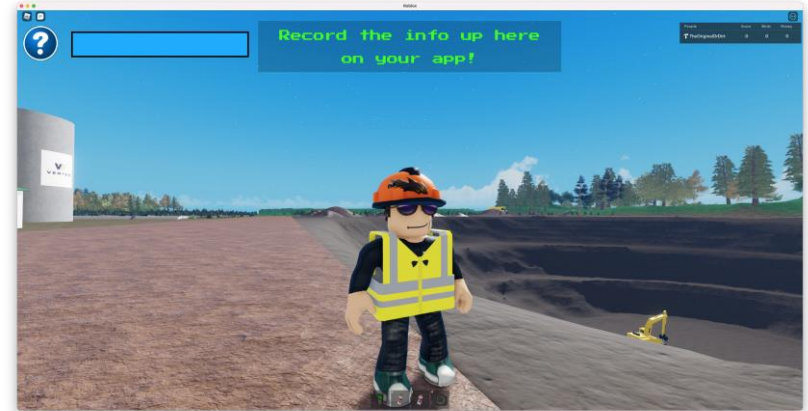
Game Development

- Focus on interactive e-learning
 - expert-led training
- Focus on environments in which we can build upon (oil sands, conventional)
- Drive collaboration
- Reinforce key elements of the job



Bird Sweep

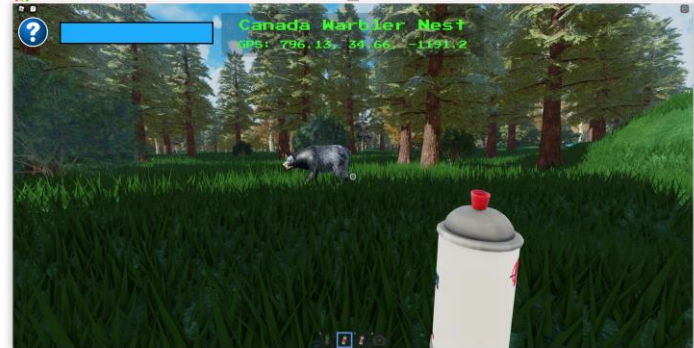
- Oil sands mining theme
- 10 birds species including their nests and calls
- Variety of habitats
- Instructor led and self-paced



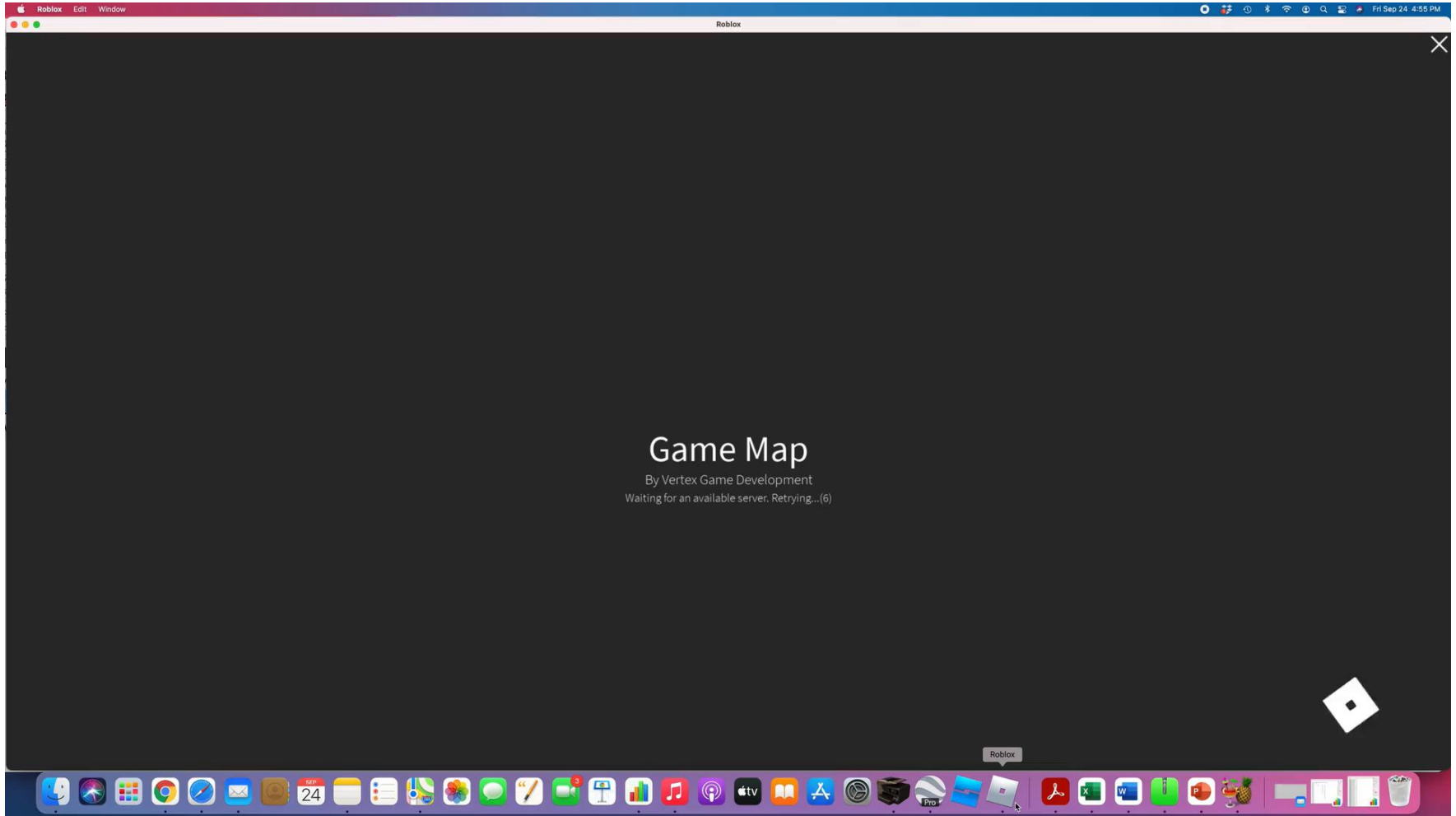
Bird Sweep

Reinforce key elements of the job:

- Mine driving
- Safety
- Field preparation
- Bird identification
- Data collection/app
- Wildlife awareness
- Teamwork



Bird Sweep



DSA

- Conventional oil and gas theme
- Cultivated and forested end land use
- 4 reclaimed wellsites
- 1 active wellsite
- Instructor led



DSA

Reinforce key elements of the job:

- Field preparation
- Driving and safety
- Technical components
- Data collection/app
- Communication



DSA

Roblox Edit Window Wed Sep 29 3:25 PM

Roblox

TheOriginalDrDirt

INTRODUCTION

WELCOME TO VERTEX DSA, VERTEX RESOURCE GROUP'S VIRTUAL TRAINING ENVIRONMENT ON HOW TO DO DETAILED SITE ASSESSMENTS!

THIS HELP GUIDE WILL TELL YOU EVERYTHING YOU NEED TO KNOW.

1 GETTING STARTED 2 LEARNING THE TOOLS 3 CONTROLS 4

VERTEX

Beta Testing



Outcomes

- 100% of users found it extremely useful
- Enhances collaboration and engagement
- Sparks creativity
- Reinforces safety, logistical, and technical components of the job



Feedback

A team building machine

At least 60% of field activities can be taught right at my house

Very Cool

My cat is LOVING this game

It's amazing and reminds us of the importance of field safety, safety first

Great to visualize the sites beforehand. Forgetting equipment --- Better to do that in a simulator than on the real day!

My kids love doing DSAs!

It's too fun

A big time and money saver



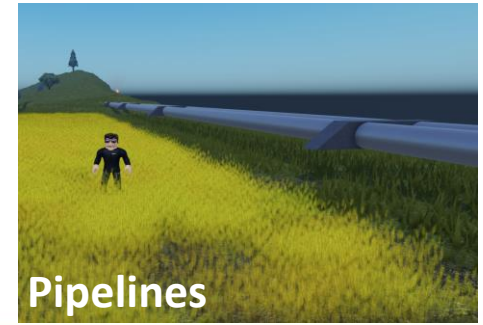
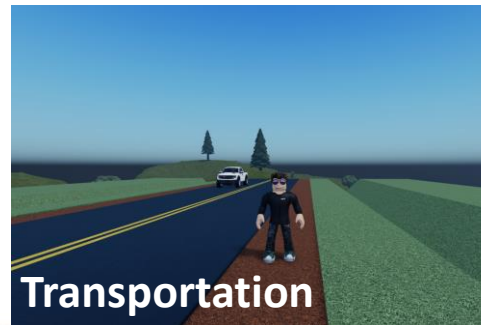
Challenges

- Coding and scripting within confines of ROBLOX
- Platform banned technical words
 - Kill deer, A1, F7, weed, etc...
- Its almost too fun



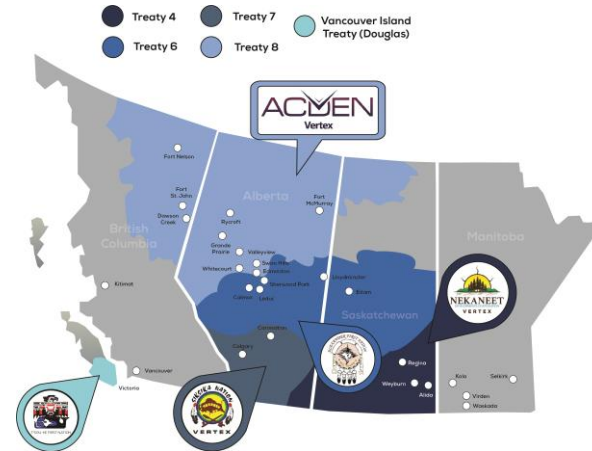
Vertex Future Developments

- Expand environmental scopes
- Diversify industries

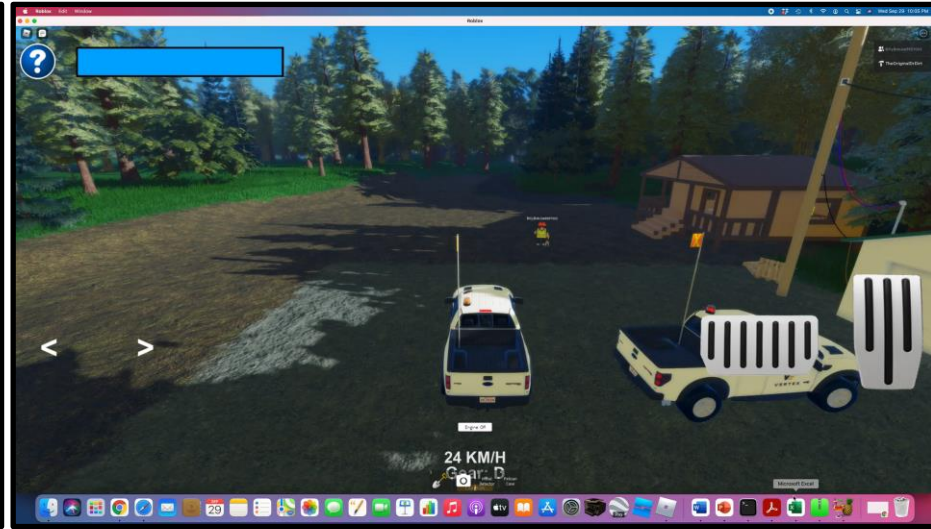
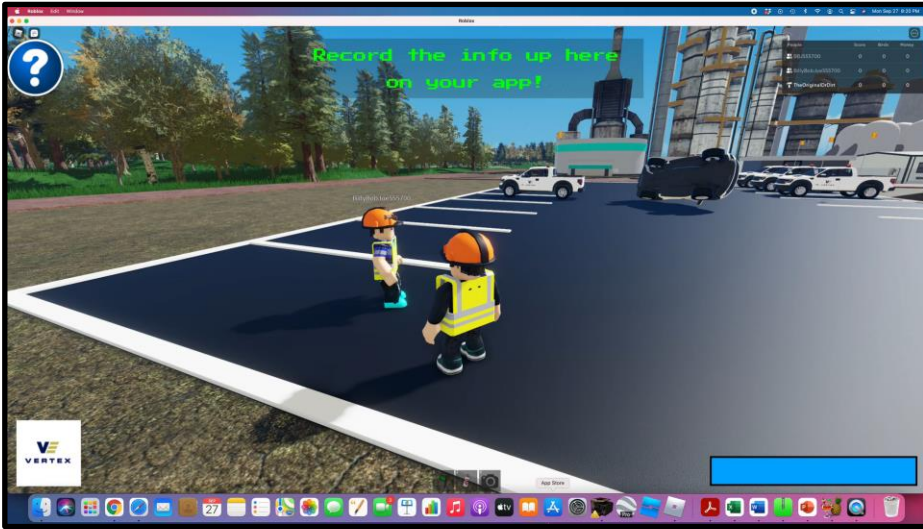


Vertex Future Developments

- Continue to Beta test, enhance learning experience
- Help achieve Vertex ESG goals
- Provide platform that supports training/cultural awareness with indigenous partners, youth, post-secondary institutions, etc...



Cut Scenes!



Thank You

