Project Draw Delivery

"What if driving was not about control, but intention?"

Game Design Document

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Summary

1. High Concept

What if driving was not about control, but intention?

Draw Delivery is a **systemic driving experience** where the player does not control the vehicle directly, but instead **defines its behavior through drawing**.

HOW IT WORKS

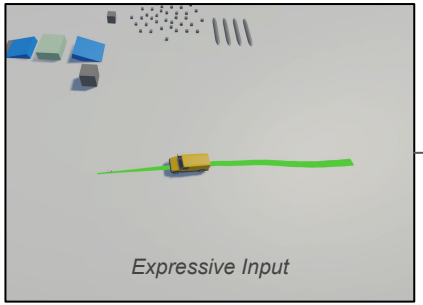
- The player draws a path in the environment
- The system interprets the player's intent
- The vehicle executes the trajectory using physical simulation

DESIGN INTENT

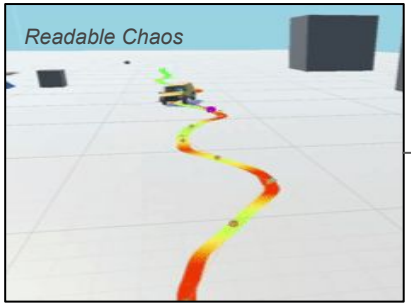
The experience is built on the **tension between player intention and system interpretation**

This creates:
- Emergent gameplay situations
- Unpredictable yet readable outcomes
- A shift from execution skill to decision-making

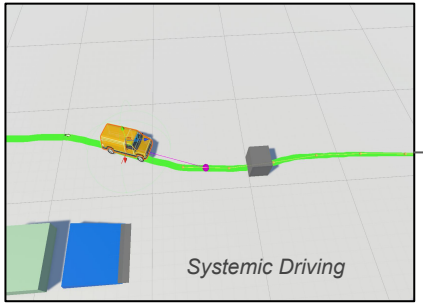
2. Design Pillars



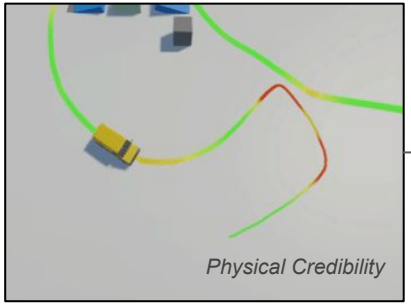
Expressive Input
The player defines intention through drawing rather than executing precise controls.
Input focuses on creativity over accuracy.



Readable Chaos
Player input can be imperfect, but the system ensures outcomes remain understandable and playable.
Failure comes from decisions, not from noise.



Systemic Driving
Vehicle behavior emerges from layered systems instead of predefined animations or scripts.
Each decision is dynamically computed.



Physical Credibility
All movement is grounded in believable physics, ensuring consistency between player expectation and vehicle behavior.

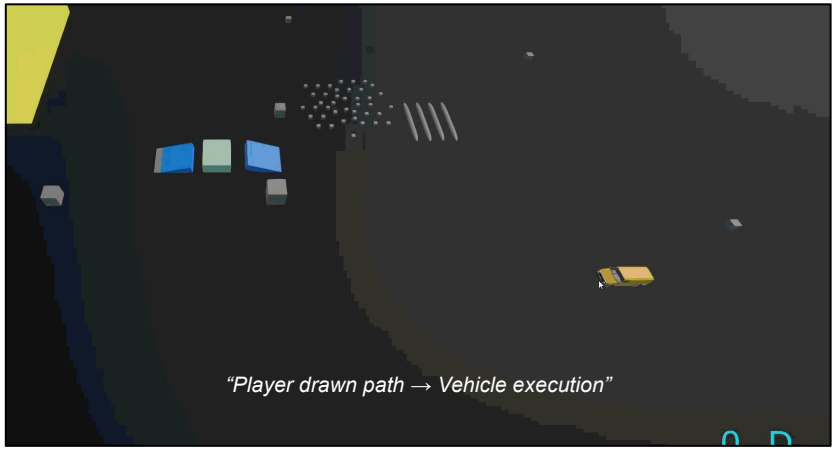
3. Core Gameplay Loop

Core Gameplay Loop

Draw → Interpret → Execute → Observe

- The **player draws** a trajectory in the environment
- The **system analyzes** intent, curvature, and risk
- The **vehicle executes** the path using **AI-driven behavior**
- The outcome creates **feedback** for the next decision

The loop encourages iteration through observation and adaptation



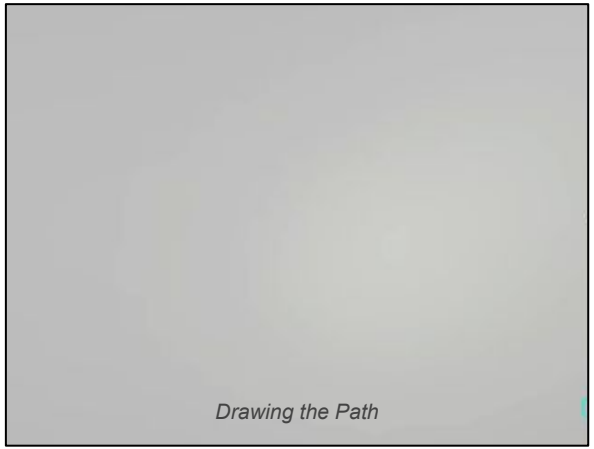
4. Player Input & Draw System

Player Input Sytem

The player does not control the vehicle directly

- Input is based on **drawing** a **path** in the environment
- The player defines **intention** rather than executing precise controls
- Interaction is continuous and **spatial**

Precision is optional, intention is what matters



Drawing the Path

5. AI Driving & Anticipation System

Trace Processing

Raw player input cannot be used directly

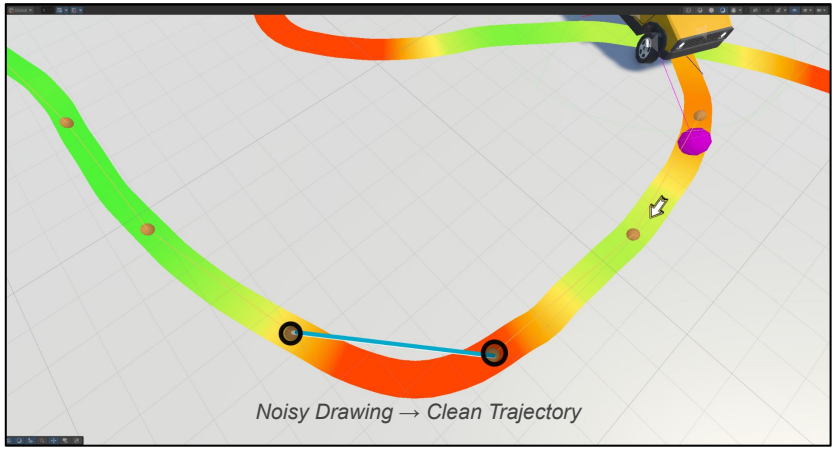
- The drawn **path** is often **noisy** and imprecise
- Direct execution would lead to unstable **behavior**

From raw input to usable trajectory

The system translates drawing into behavior.

- **Clean** the signal
- **Simplify** the data
- Extract **meaningful** information

Goal: preserve player intent while ensuring **stability** and **readability**



Noisy Drawing → Clean Trajectory

6. Speed, Braking, & Danger Model

Vehicle System

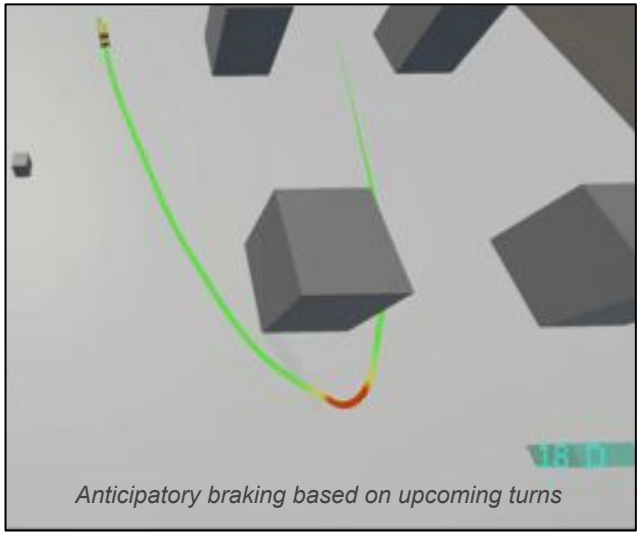
The vehicle is driven by a physics-based controller

- Acceleration and braking are **force-driven**
- Steering is **progressive** and speed-dependent
- Gear system **regulates** speed and torque

Control Architecture

- **Supports** external inputs (AI or player-driven systems)
- **Decouples** input from vehicle **behavior**
- Enables **systemic control** and **replay**

The vehicle behaves consistently across all gameplay situations



Anticipatory braking based on upcoming turns

7. Obstacle Avoidance & Rejoin Logic

AI Driving System

The vehicle interprets the drawn path through continuous analysis

- The path is **evaluated** in **real-time**
- Steering and speed are **dynamically adjusted**
- **Decisions** are based on **future trajectory**

System Behavior

- **Multi-point** path **analysis** (near / mid / far)
- **Adaptive** steering based on **curvature**
- Speed **control** based on **path** complexity
- Dynamic **obstacle avoidance** based on environment analysis

Driving behavior emerges from layered systems, not predefined logic

8. Game Modes

GAMEPLAY STRUCTURE

The system is used across multiple gameplay scenarios

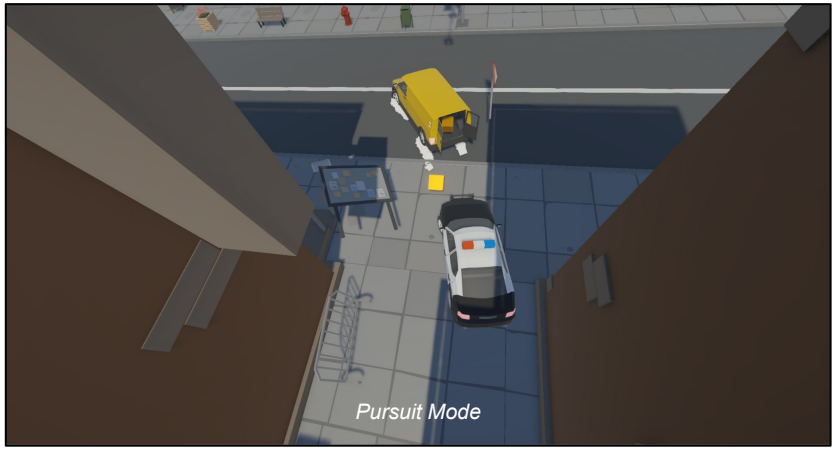
Delivery Mode

- The player **draws** a route to transport packages
- Success depends on path **quality** and **execution**
- **Risk** increases with speed and **complexity**

Pursuit Mode

- An **AI target** follows a **predefined route**
- The objective is to **intercept** before escape

Each mode explores different aspects of the core system



9. Feedback & Game Feel

Feedback ensures the player understands and anticipates system behavior

Visual Feedback

- **Path visualization** communicates player intent
- Speed **indicators** reflect current risk level
- **Environment** readability supports decision-making

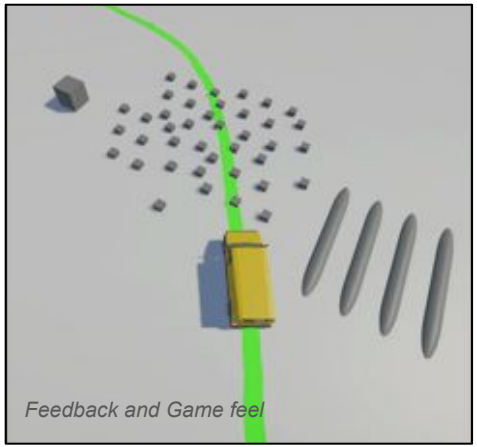
Physical Feedback

- Vehicle reacts to **impacts** and **collisions**
- Dynamic elements (e.g. doors, movement) reinforce **realism**
- **Motion conveys** speed, weight, and loss of control

System Feedback

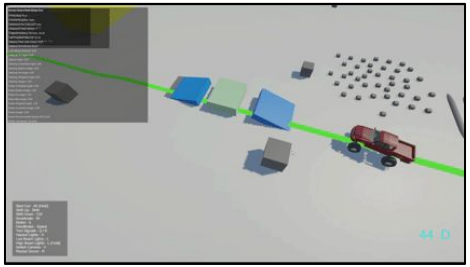
- The **vehicle behavior** reflects path difficulty
- **Speed** and **steering** communicate **system decisions**
- **Outcomes** are readable and consistent

The player learns by observing the system's response



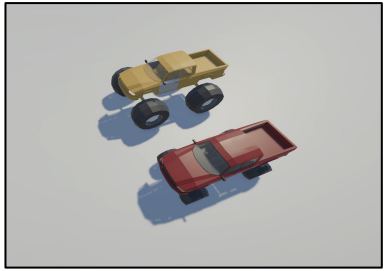
Feedback and Game feel

10. Vehicle Variety & Gameplay Impact

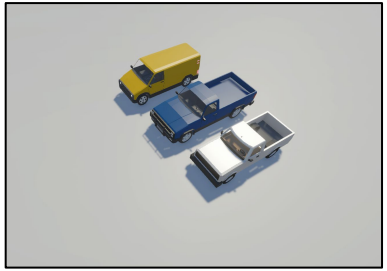


VEHICLE FAMILIES

• **Regular Cars**
Balanced handling, low speed, accessible
→ Suitable for precise routes and controlled driving



• **Monster Trucks**
• High power and strong off-road capabilities
• Can ignore obstacles and rough terrain→ Unstable in sharp turns and prone to rollovers



• **Van / Pick-ups**
• Very maneuverable, but not very powerful
• Rear doors can open under heavy shocks→ Cargo can be lost if the vehicle is driven too aggressively

• **Sports Cars**
High speed, low tolerance to error
→ Efficient but risky on complex paths

“There is no perfect vehicle, only trade-offs”

11. TARGET & POSITIONING

Draw Delivery is designed as a mobile-first systemic experience

TARGET AUDIENCE

- **Casual** to mid-core players
- Players who enjoy **creative** and **systemic gameplay**
- Players looking for short, **repeatable** sessions

PLATFORM

- Designed for **mobile devices**
- **Touch input** enhances the **drawing interaction**
- Optimized for quick and **intuitive play** sessions

PLAYER APPEAL

- Accessible input with deep systemic outcomes
- Satisfying “draw and observe” gameplay loop
- Emergent situations from simple player actions

Easy to learn, with depth driven by system mastery

12. Long-Term

The project is designed to expand through content and systemic depth

CONTENT EXPANSION

• Multiple maps with varied environments
• Increasingly complex level design
• New gameplay situations and dynamic events

GAMEPLAY VARIETY

• Multiple modes built on the same core system
• Scenario-driven missions
• Different gameplay contexts (delivery, pursuit, escape, race)

VEHICLE PROGRESSION

• Unlockable vehicle families
• Performance upgrades
• Full visual customization (colors, wheels, parts)

REPLAYABILITY

Same level, different ways to play.

- Level layout stays the same
- Vehicles unlock different routes and strategies
- Shortcuts, obstacles, and off-road paths depend on capabilities

Each level offers multiple playstyles:

- Safe routes vs high-risk shortcuts
- Player choice drives strategy