Consumer Video Product for the Monster Jam Ride Truck

LPPD
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VIRTUOSO VISUALS

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INTRO/PROBLEM STATEMENT

To provide an automatically recorded and edited souvenir video product of customers on the Monster Jam ride truck, providing revenue for Feld Entertainment.
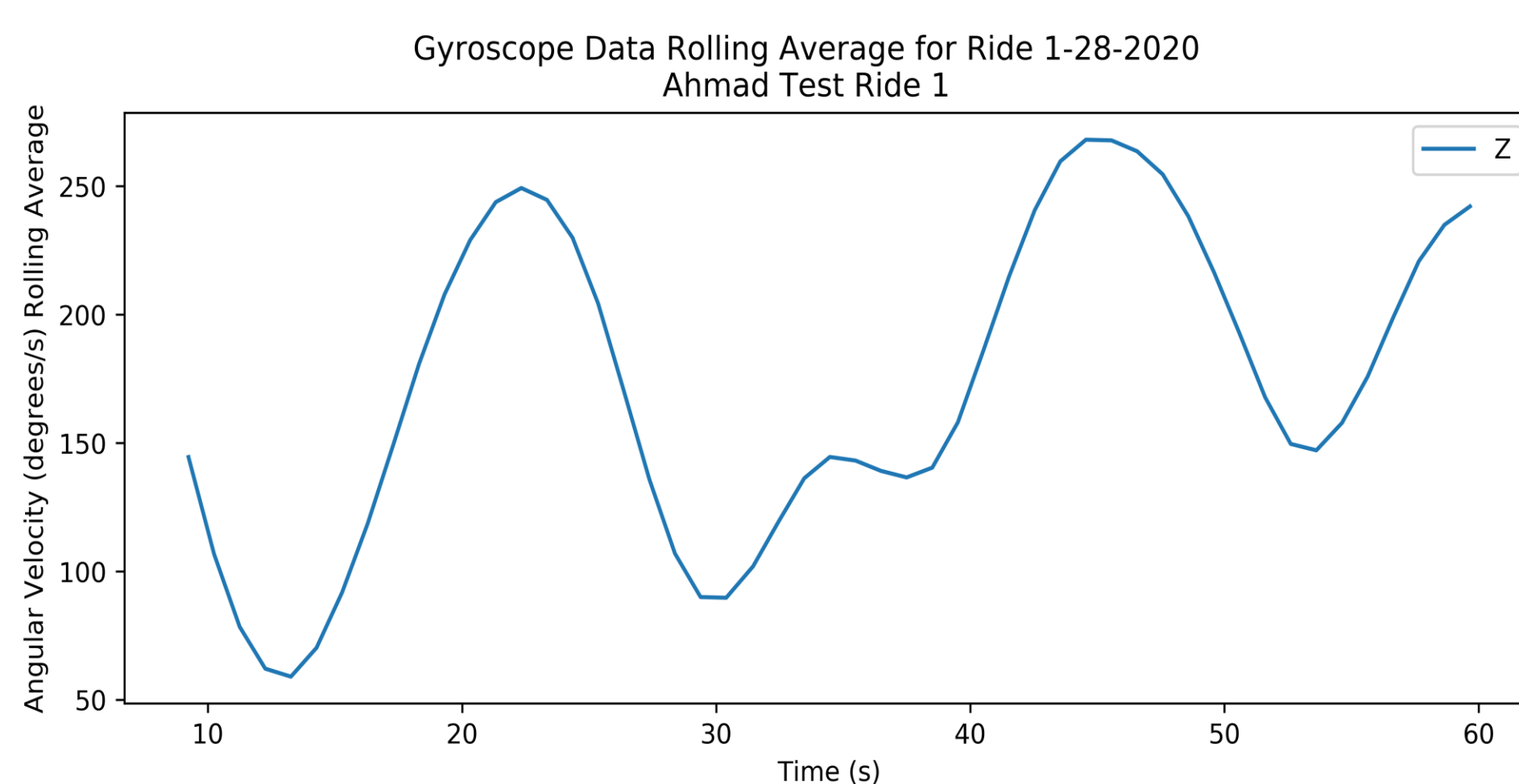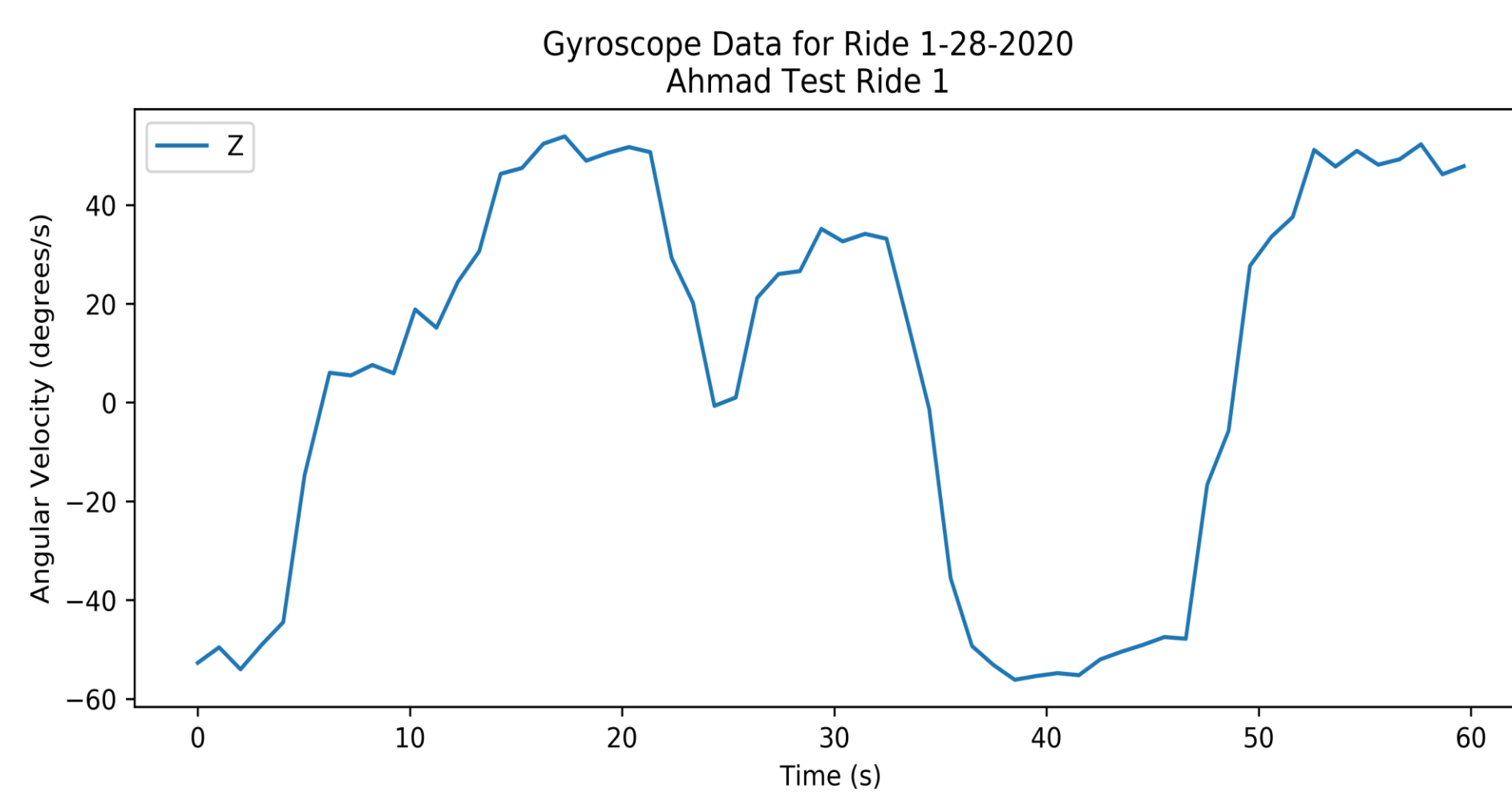
METHODS

1. This solution was selected based on analysis of industry standards which satisfied our requirements and contained the desired specifications.
2. Camera footage and sensor data were collected during site visits in order to create an algorithm for automated editing.
3. Tests were designed and administered to benchmark the technical performance measures of the project.

ANALYSIS/RESULTS

Software Acceptance Test Results

Edit Speed	<3 s
Transmission Speed	<5s
Concurrent Video Feeds	>2
Video available time	1 min

Software Sensor Data Results

Gyroscope Data for Ride 1-28-2020
Ahmad Test Ride 1

Gyroscope Data Rolling Average for Ride 1-28-2020
Ahmad Test Ride 1

A video recording system that **automatically records** and **edits** a **thrilling** Monster Truck ride experience **video.**
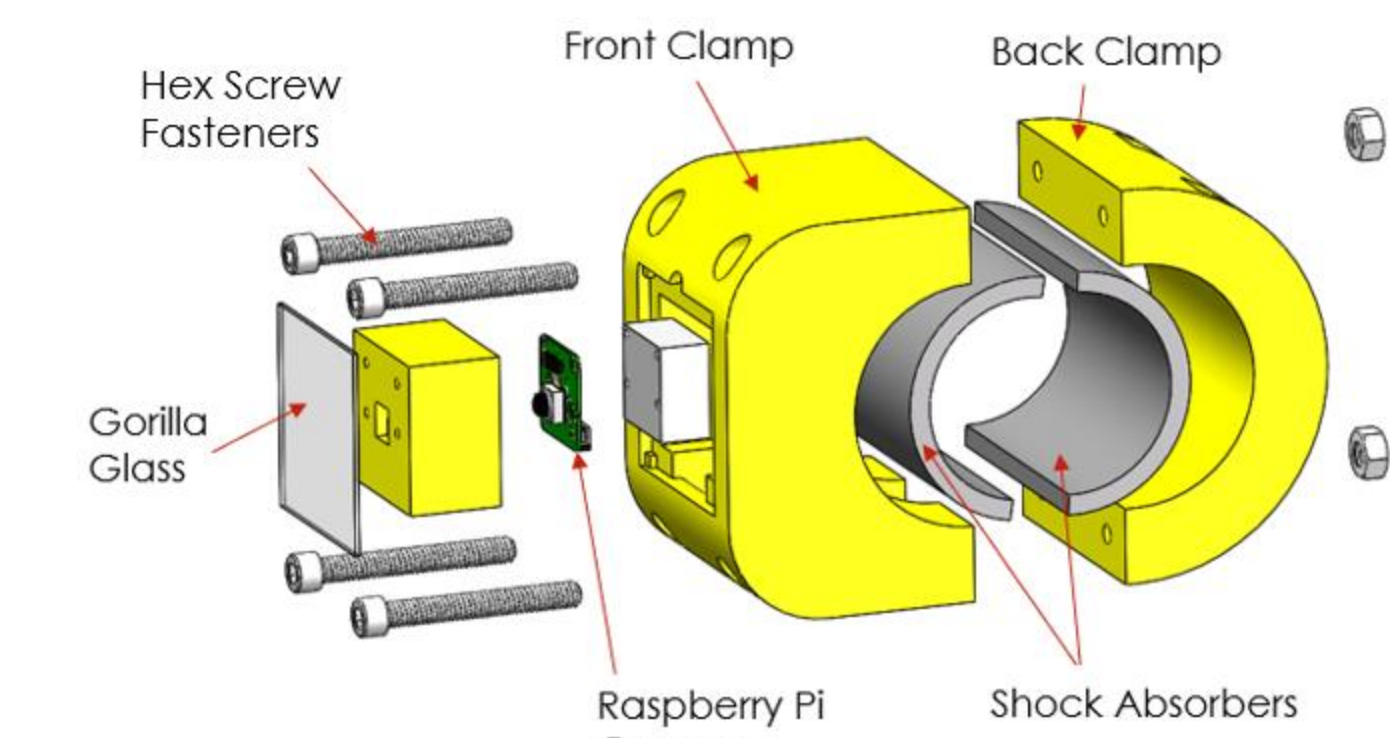

Monster Truck Ride   Home   History
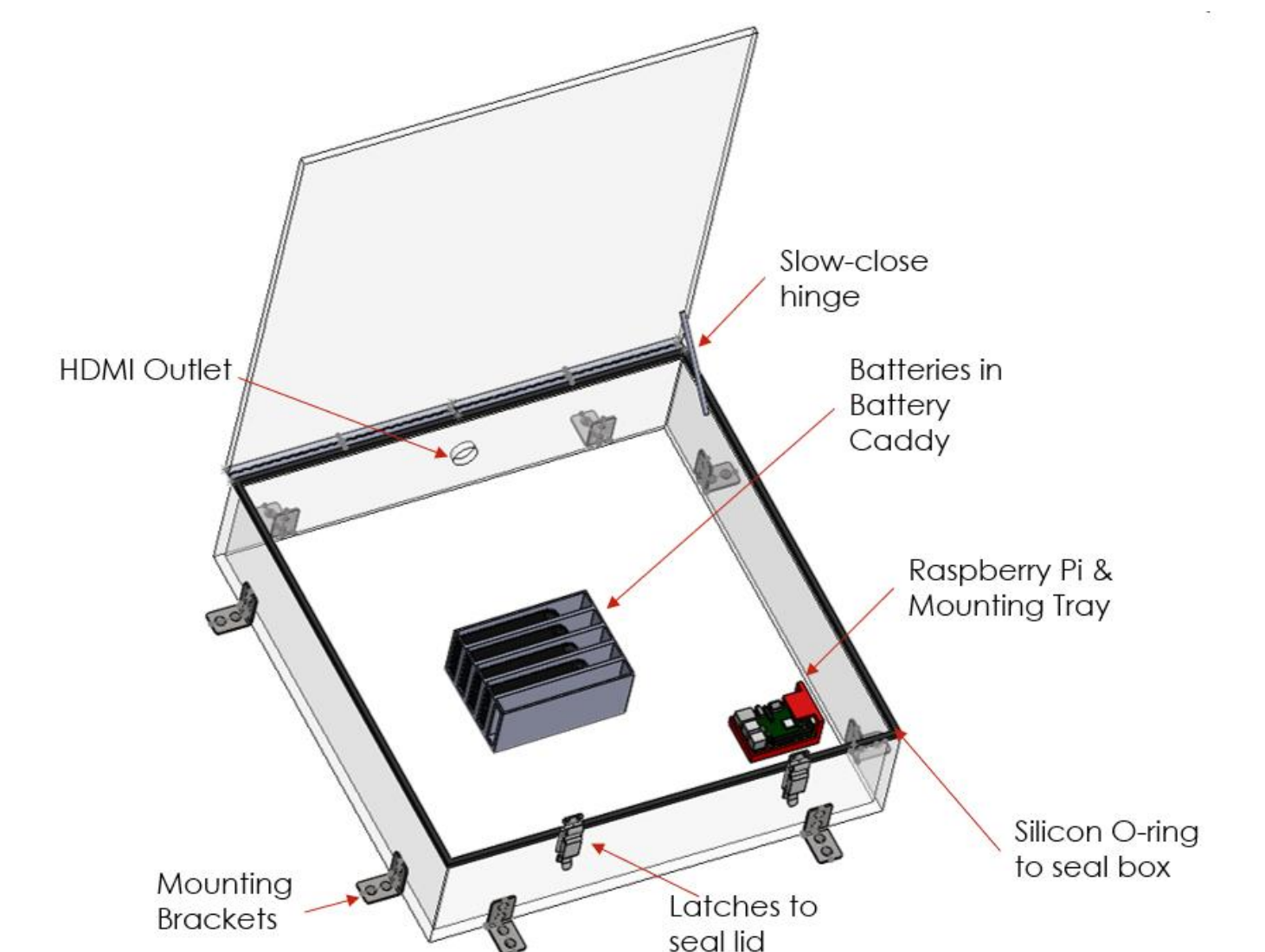Please select your seat number: 1
0:20 / 1:04

Camera Mount

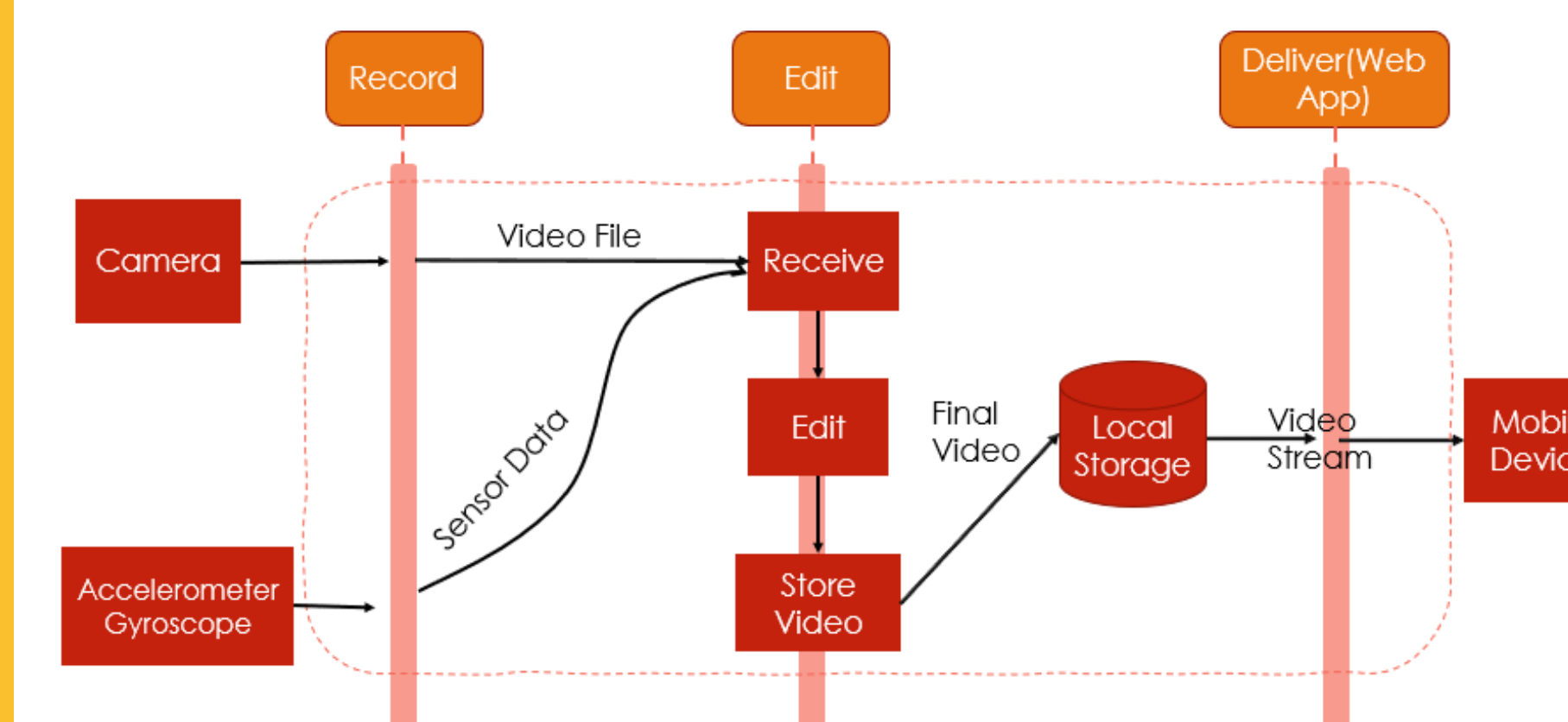Designed to be weather resistant and tamper proof; mounted in front of each rider in the ride truck.

Hex Screw Fasteners, Front Clamp, Back Clamp, Gorilla Glass, Raspberry Pi Camera, Shock Absorbers

Truck Box

Designed to be weather/FOD/heat resistant; houses sensors, processors and batteries.

Slow-close hinge, Batteries in Battery Caddy, HDMI Outlet, Raspberry Pi & Mounting Tray, Silicon O-ring to seal box, Mounting Brackets, Latches to seal lid

SW Sequence Diagram

Interaction of record, edit and deliver applications.

Business Case

Net Income	$20,025
Cash Flow from Operations	$20,025
Payback Period	16 months
Net Present Value (NPV)	$12,000
Interest Rate of Return (IRR)	1% quarterly, 4% annual

FELD ENTERTAINMENT

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