SPRAYVERSE

Spray Painting Simulator

Technical Specifications

Trusted by 120+ Organizations Worldwide!

In collaboration with industry leaders, we have developed SprayVerse—the first standalone virtual spray painting training simulator designed for classrooms, training centers, and exhibitions. This unique solution leverages cutting-edge hardware and to deliver unmatched realism, exceptional user experience, and high engagement. As a standalone VR application, SprayVerse operates independently of costly high-performance PCs, making it the most affordable and accessible VR spray-painting training solution available.

Traditional training methods face major challenges: high consumable costs, health risks, limited repetition, environmental compliance requirements, and inconsistent instructor evaluation. SprayVerse addresses all of these issues through immersive simulation and objective data-driven assessment.

SprayVerse simulates professional spray-painting behavior including gun distance, angle, speed, overlap, trigger control, and material flow.

Two primary technologies are supported:

- HVLP (High Volume Low Pressure) for automotive and furniture finishing

- Air Asissted/Airless spraying for construction and industrial coating

Each technology includes dedicated spray models, evaluation logic, and industry-appropriate parameters.

SprayVerse All-in-One Simulator

COMPACT HARDCASE

Italian-made, this durable hard case is shockproof, dustproof, and waterproof, featuring a custom foam inlay for secure storage.

OCULUS QUEST

The latest generation of the Meta Oculus Quest VR headset, delivering advanced performance and immersive virtual experiences.
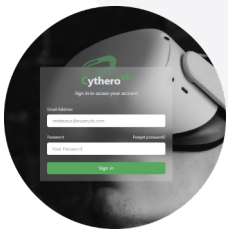
REAL SPRAY GUN

Real spray gun integrated into the system, delivering authentic ergonomics, weight, and handling.

LINK CABLE

Enables casting software to share the user's point of view on an external display for enhanced collaboration and demonstration.

CLOUD ANALYTICS

An advanced cloud-based web platform for comprehensive analytics and reporting.
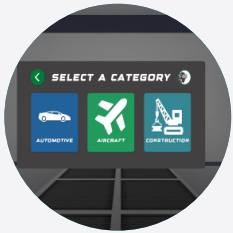
CUSTOM BRANDING

Customize the VR environment with your corporate identity, including graphics, logos, and banners.

TRAINING AND LEARNING MODES

The SprayVerse standalone VR app offers three operation modes: Spray Painting Training (HVLP and Airless), Interactive Lessons, and Analytics Preview.

MULTIPLE INDUSTRIES

SprayVerse features four main industry categories: Automotive, Aircraft, Construction and Furniture. Each category includes a variety of parts for training and practice.

INTERACTIVE LEARNING LESSONS

SprayVerse includes built-in interactive lessons designed to teach the fundamentals of spray painting. These lessons cover: Spray Painting Techniques (including how to set up the spray gun and how to paint), Paint Mixing and Paint Blending Tutorial.
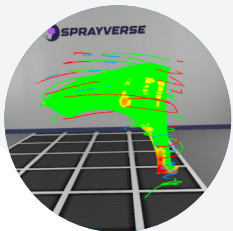
COVERAGE HEATMAPS AND TRACKING

SprayVerse delivers real-time feedback using heatmaps, audio, and visual cues. The active heatmap displays coat coverage for each layer, highlighting over-painted and under-painted areas. Visual feedback ensures users maintain the correct distance throughout the training process.
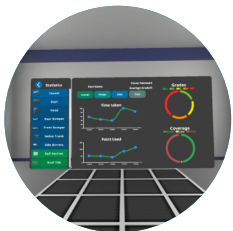
BUILT-IN GRADING SYSTEM AND ANALYTICS

SprayVerse includes an advanced grading and scoring system that evaluates user performance in real time. Metrics such as coat coverage, paint usage, and time spent are tracked and analyzed. The system also records the spray gun movements during each training session, allowing for detailed post-session analysis.

Main Modules
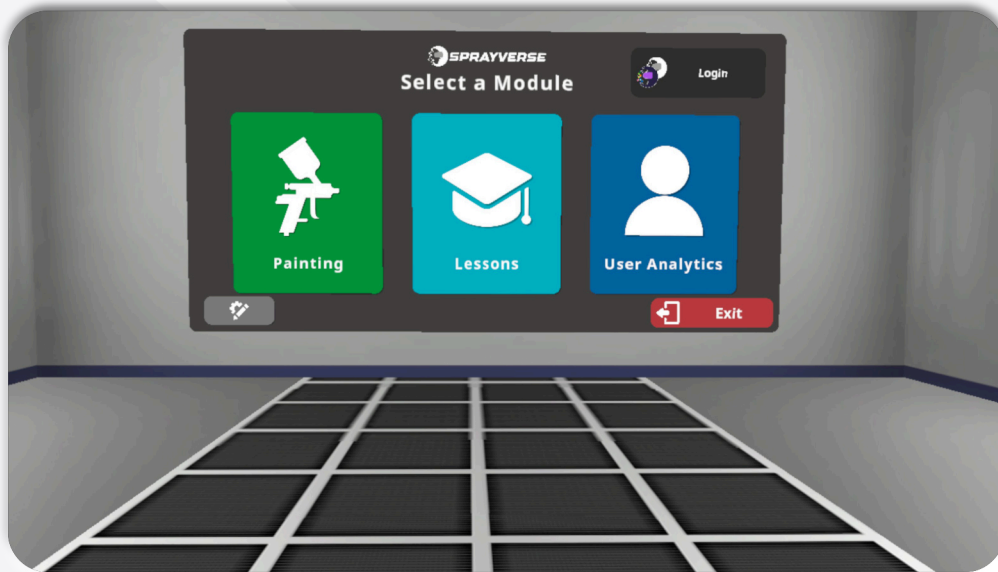
SprayVerse offers three professional-grade modules to enhance the learning experience:

- Painting
- Lessons
- User Analytics

In the Training module, users can select one of four painting categories

- Automotive,
- Aircraft,
- Construction,
- Furniture

to practice on their chosen parts using the appropriate painting techniques, such as HVLP or Air Assisted Airless/Airless painting.

The Lessons module offers in-depth instruction on spray painting fundamentals, including:

- Spray Gun Setup
- Painting Tutorial
- Paint Mixing and
- Paint Blending Tutorial

The User Analytics module enables users to review and analyse recorded spray painting sessions, facilitating detailed performance evaluation and skill improvement.

Paintable Parts and Categories

Discover all paintable parts in SprayVerse, featuring HVLP techniques for Automotive and Aircraft, and the Air Assisted Airless/Airless method for Construction and Furniture.
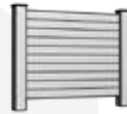
Automotive	Aircraft	Construction	Furniture
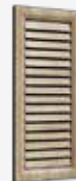
Full Car and Small Plane

SprayVerse also includes: a full car and a small plane.
These features enhance the training experience by providing users with the opportunity to practice on larger and more complex surfaces, catering to advanced automotive and aviation-specific tasks.
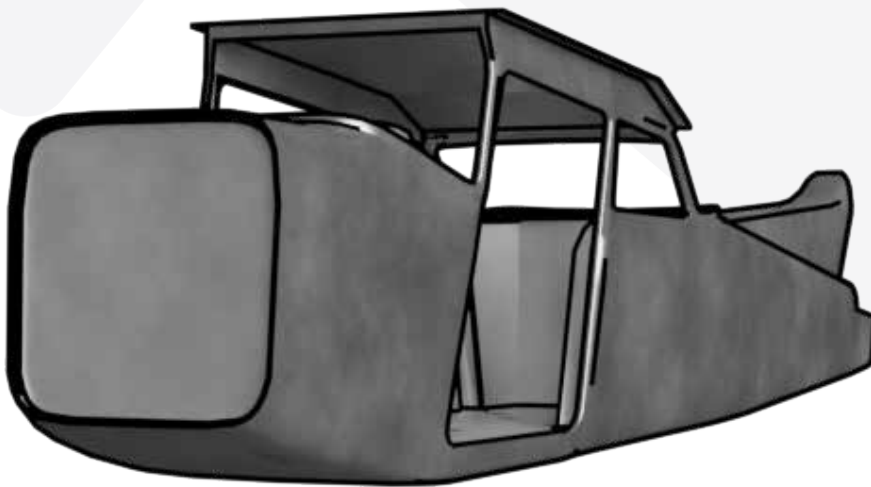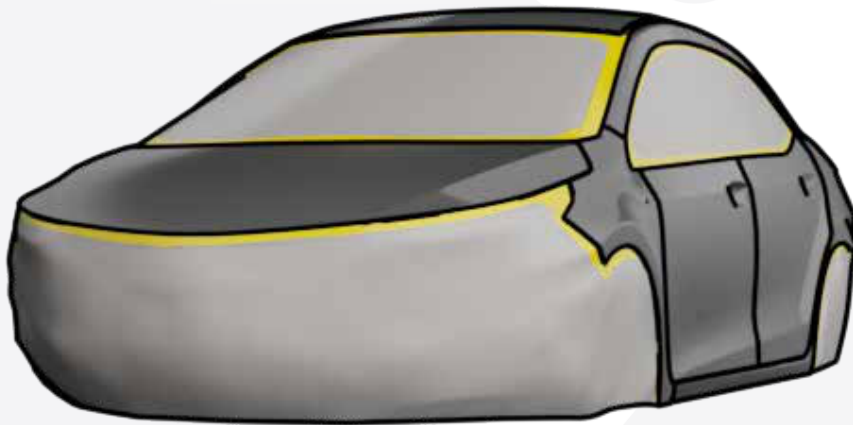
Available Lessons
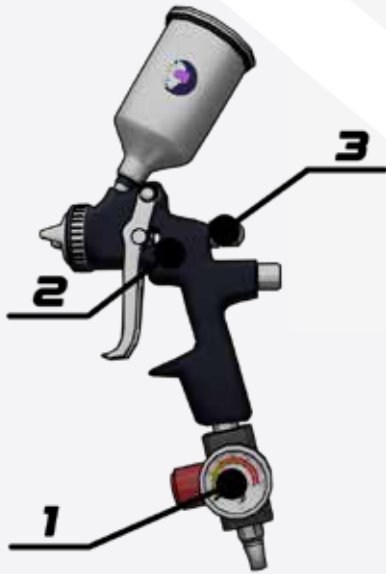
Spray Gun Settings explains the function of each knob on the spray gun.
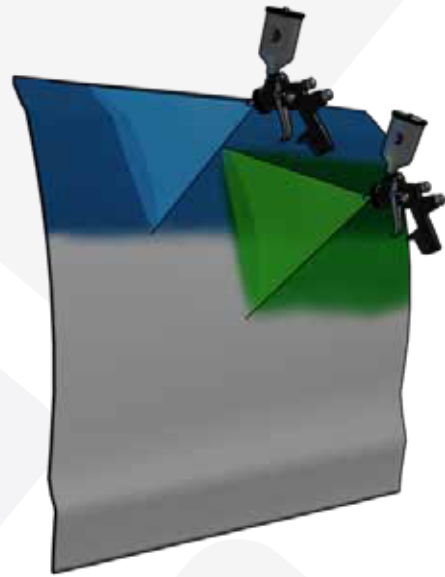
Painting Tutorial guides you through proper spray painting techniques.

Paint Mixing teaches you to read cup measurements and pour the correct amount of paint.

Paint Blending shows how to seamlessly blend repaired areas with existing paint.
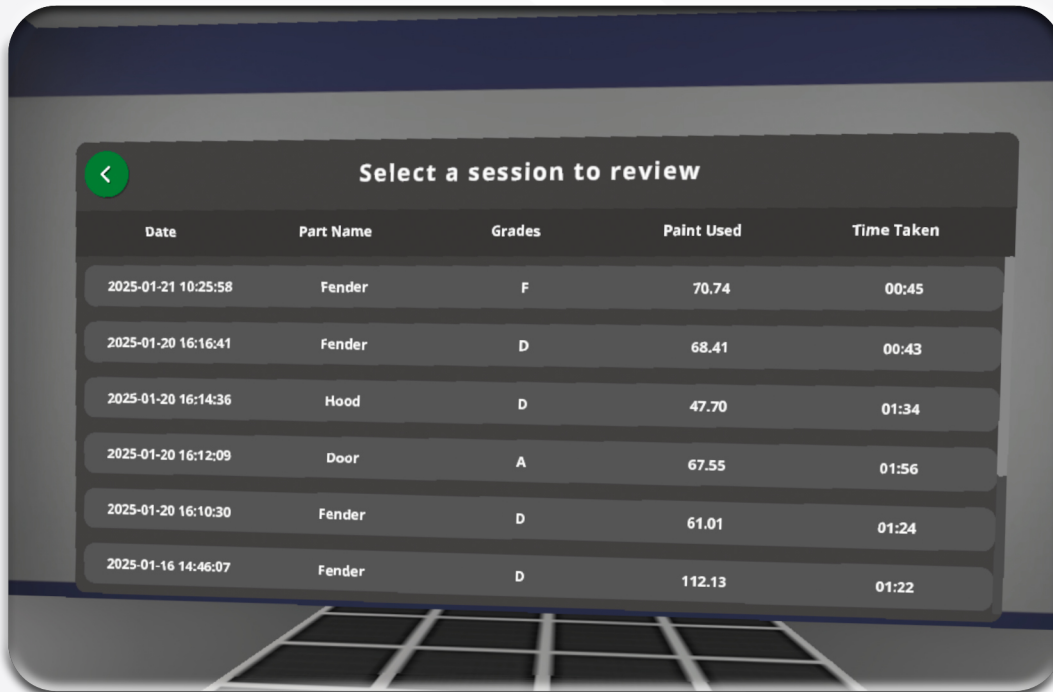
Grading and Analytics

SprayVerse features an advanced grading and scoring system that evaluates user performance in real time based on coat coverage, paint usage, and time efficiency. To enhance the training experience, the system tracks and records the spray gun's movement during each session, providing valuable data for detailed analysis and improvement. Real-time feedback is delivered through interactive heatmaps, which visually represent the coat coverage for each layer and highlight areas that are over-painted or under-painted. This feedback helps users maintain the correct spray distance throughout the training process. Additionally, the recorded spray gun movements are displayed as tracking lines, offering a comprehensive review of the user's technique for further refinement.
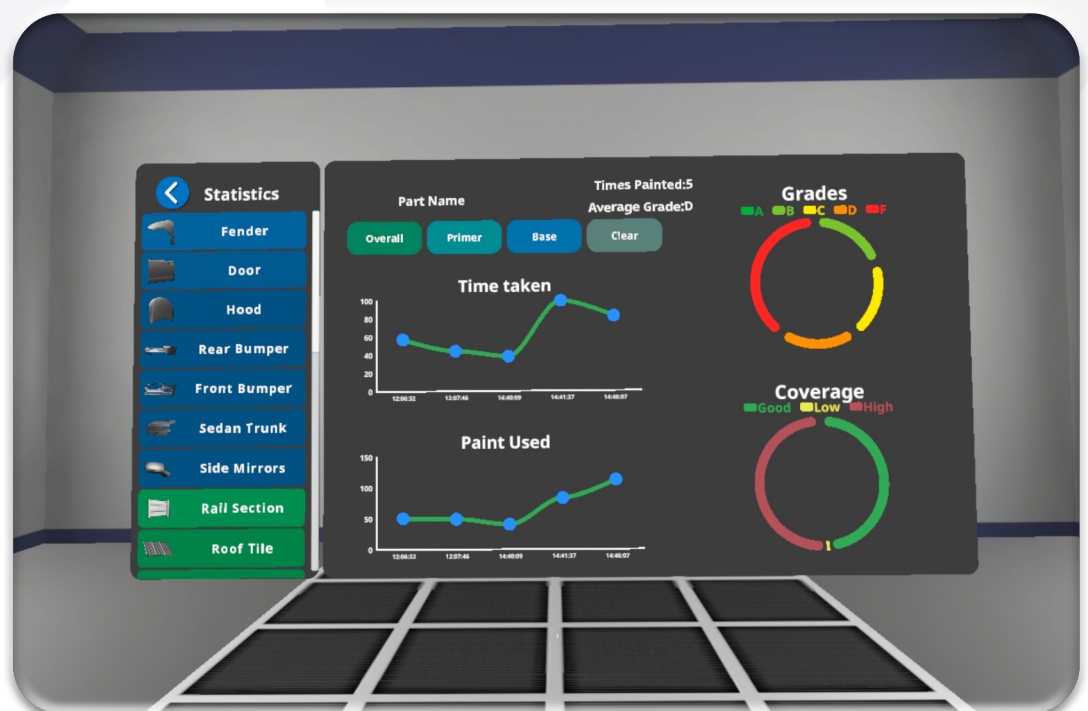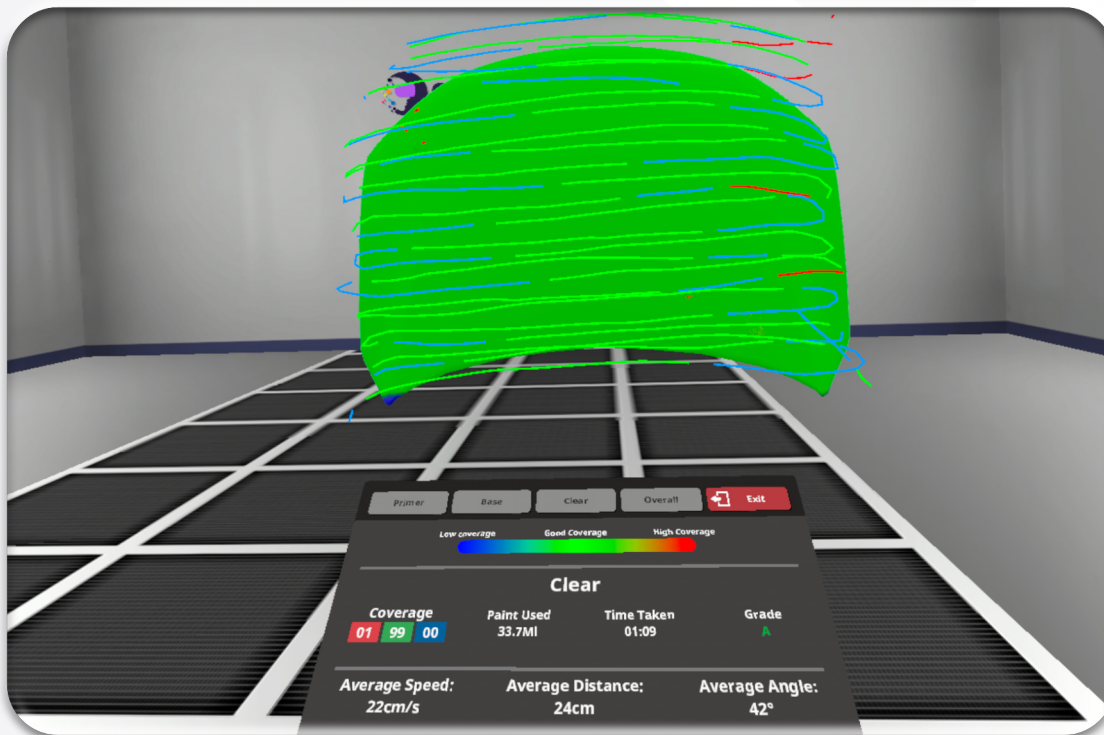
Session Browser

In the session browser, players can access all their previous sessions. Selecting a session will load its recording, allowing users to replay and analyze their performance to identify and review any mistakes.

Select a session to review

Date	Part Name	Grades	Paint Used	Time Taken
2025-01-21 10:25:58	Fender	F	70.74	00:45
2025-01-20 16:16:41	Fender	D	68.41	00:43
2025-01-20 16:14:36	Hood	D	47.70	01:34
2025-01-20 16:12:09	Door	A	67.55	01:56
2025-01-20 16:10:30	Fender	D	61.01	01:24
2025-01-16 14:46:07	Fender	D	112.13	01:22

Primer Breakdown

Grade	B
Time taken	00:45
Paint Used	23.73Mil
Coverage	95%
Light:	0%
Medium:	84.44%
High:	15.56%

Spray Gun Adjustments

The settings panel allows users to customize and precisely adjust their spray gun settings before or during a spraying session. Users can modify key parameters such as airflow, spray fan size, and material flow to achieve the optimal spray pattern for their task. For airless painting, the Tip Selection feature enables users to choose different spray tips and adjust pressure settings to suit the specific requirements of their project. Additional features include the ability to rotate the air cap for directional adjustments and a heatmap toggle to visualize spray coverage in real-time. Each modification can be tested on the Test Sheet next to the settings panel, allowing users to fine-tune their setup and ensure precision before beginning their work.
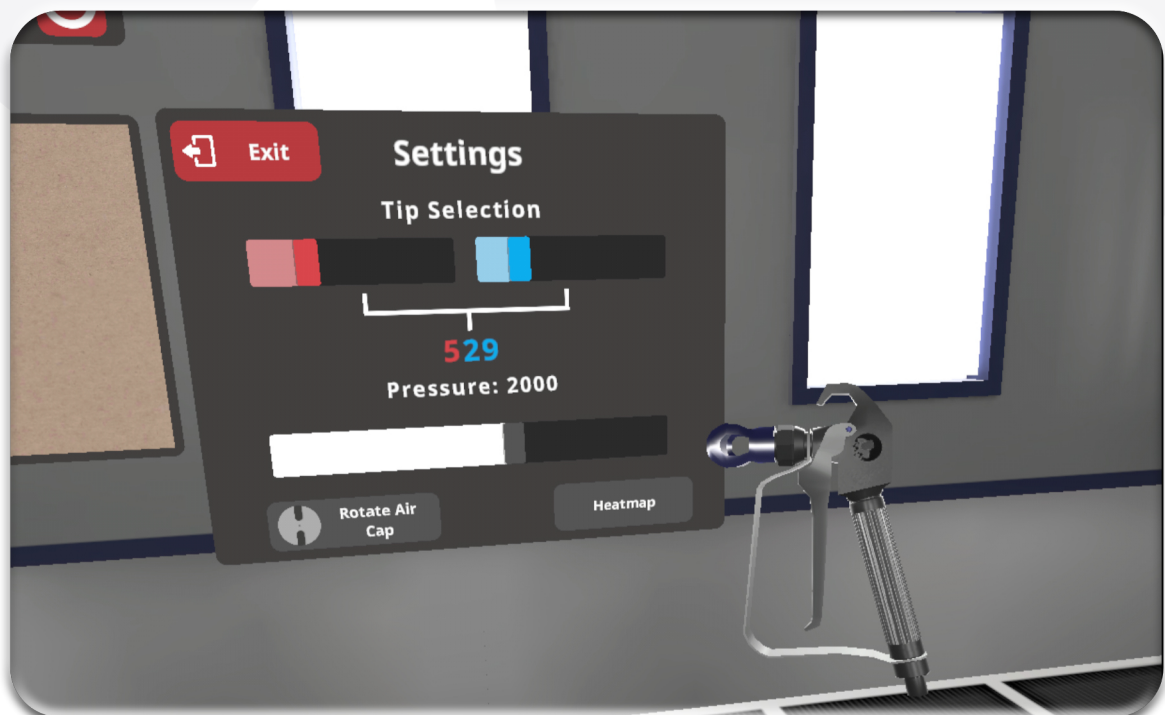
Settings
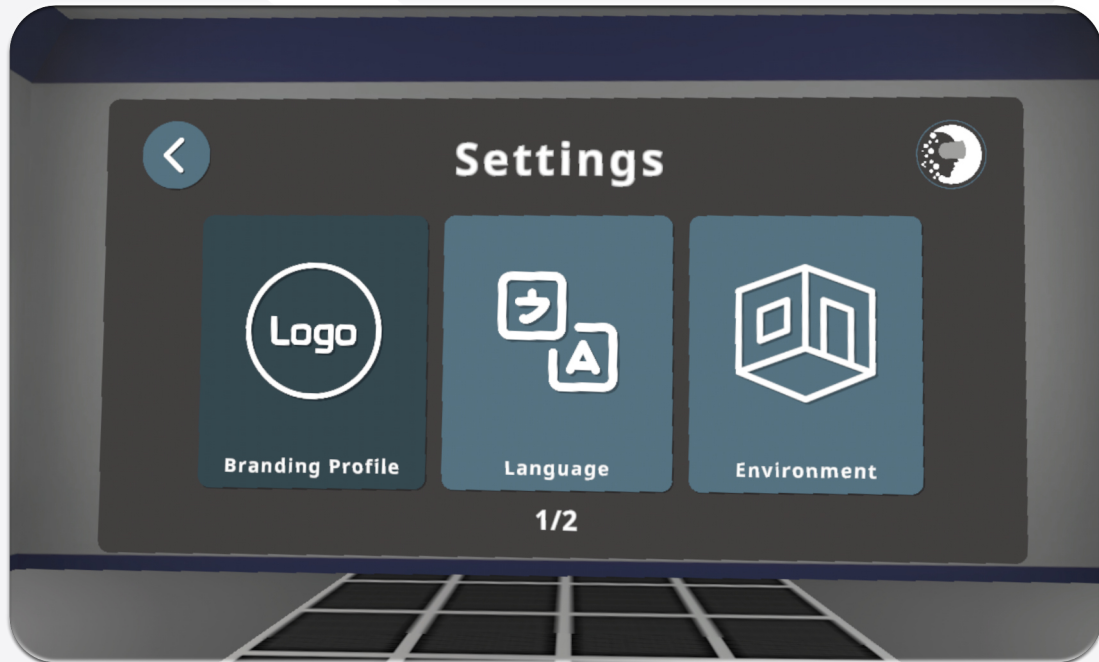
The SprayVerse Settings Panel offers users a range of customization options to enhance their training experience, featuring three main sections: Branding, Language, and Environment.

The Branding section allows users to select one of their saved branding profiles to rebrand the training environment, making it ideal for companies or institutions looking to showcase their identity within the simulation.

The Language section supports a diverse range of languages, including English, Korean, Spanish, Polish, Turkish, Greek, and French, ensuring an accessible and user-friendly experience for individuals across different regions.

The Environment section enables users to tailor the virtual setting by choosing between a spray booth for standard training or an aircraft hangar for larger-scale, aviation-specific tasks. These flexible options make SprayVerse a versatile and adaptive platform for training across various industries.

Enterprise Mode and Cloud Analytics
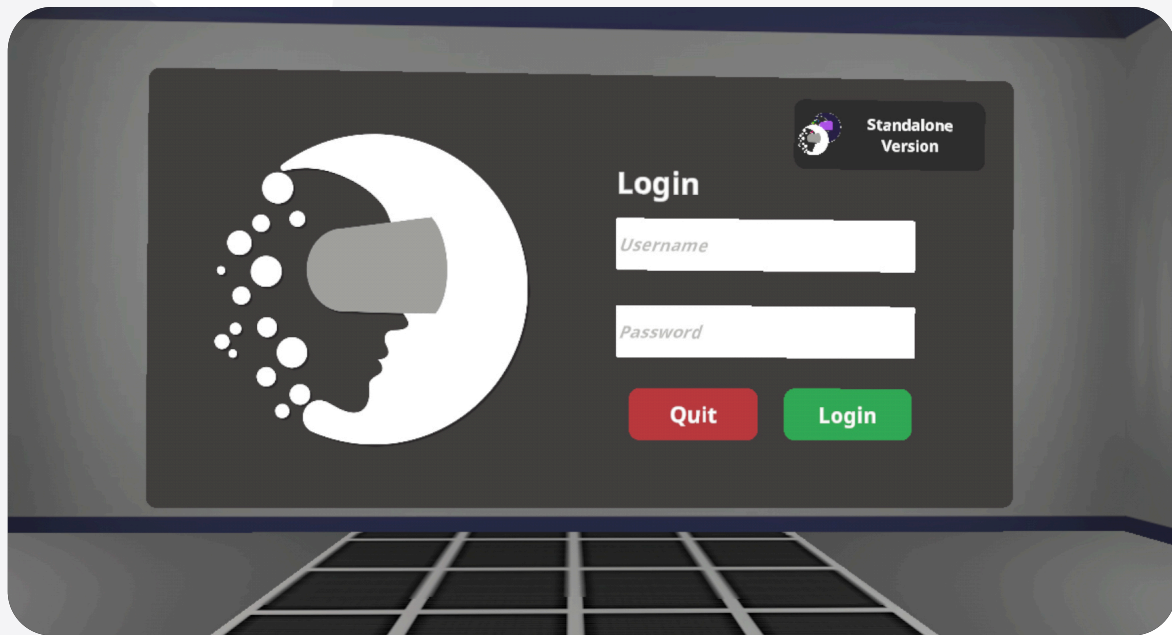
The Enterprise Version enables logging in and creating multiple user accounts within your organization, with tools to track individual user progress. It includes a web-based administration panel for managing users, organization settings, and active VR devices.
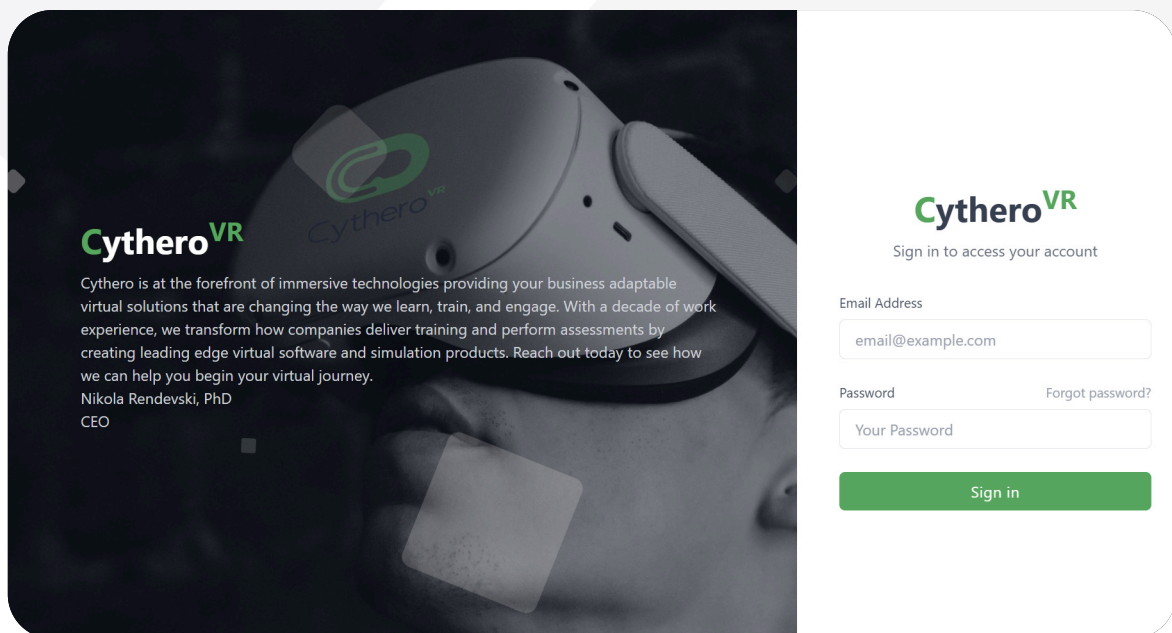
The web-based administration panel is designed to manage users, configure organization settings, track trainee progress, oversee active VR devices, and generate detailed reports.

SprayVerse Dashboard Report

OVERALL | WEEK | MONTH | YTD | EXPORT

Primer Coat Price:		Base Coat Price:		Clear Coat Price:		Total:	
Material Used:	38.97L	Material Used:	23.78L	Material Used:	29.38L	Material Used:	92.13L
Price per Liter:	€35.00	Price per Liter:	€45.00	Price per Liter:	€45.00		
Savings:	€1364.09	Savings:	€1069.96	Savings:	€1322.28	Savings:	€3756.33

User activity over time on SprayVerse

● Time Spent (min)

User	Total Time Spent	Avg/Target Mat. Used (ml)	Avg/Target Coverage (%)	Avg. Grade
John	0 hrs 1 mins	74.55 / 600	28.00 / 90	C
Daniel	0 hrs 1 mins	91.16 / 600	71.00 / 90	B
Matt	0 hrs 3 mins	86.10 / 600	19.67 / 90	C
Max	0 hrs 3 mins	121.38 / 600	22.50 / 90	C
David	0 hrs 5 mins	51.96 / 600	51.86 / 90	B
Koby	15 hrs 24 mins	141.47 / 600	19.16 / 90	C

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Each SprayVerse All-in-One package includes a complimentary 3-year subscription to the cloud-based web portal, granting users access to an advanced suite of analytics and reporting tools. This portal offers detailed insights into material usage, cost savings, and performance metrics for every training session. Key features include a Material Cost Analysis, which breaks down the usage and pricing of primer, base coat, and clear coat materials while highlighting cost savings for each. Users can track their Total Material Load, analyze cost efficiency, and monitor their overall savings over time.

The portal also features a User Activity Chart, providing a graphical representation of performance trends and spray gun usage throughout sessions, enabling users to identify areas of improvement. Additionally, the Performance Metrics Table summarizes critical data, such as total time spent in training, waste material load, paint focus consistency, and average grading.

With customizable time filters such as "Weekly," "Monthly," "Yearly," and "Custom," users can tailor their reports to suit specific needs. This comprehensive analytics platform empowers users to make data-driven decisions, improve training outcomes, and maximize efficiency, making it an essential extension of the SprayVerse experience.

Trainee Performance Report

Konstantin's report (1 Jun 2025 to 9 Jan 2026)

General Information

User :	Konstantin
Times Played:	26
Most Painted Part:	Door
Total Training Time:	35 min.

EXPORT

Grades Brakdown

- Grade A
- Grade B
- Grade C
- Grade D
- Grade F

Latest Session

Part:	Fender
Grade:	C
Coverage:	70.1%
Paint Used	24.3 ml.
Time Taken	0.3 min.

Coverage Graph (Last 10 sessions)

Coverage (%)

Session	Low	Good	High
16-Door	5	24	71
17-House Door	4	48	15
18-Fender	3	24	40
19-Door	2	12	52
20-Door	4	21	42
21-Fender	17	32	51
22-Fender	40	20	41
23-Training Platform	32	4	30
24-Beam	6	16	79
25-Fender	14	52	34

● Low Coverage   ● Good Coverage   ● High Coverage
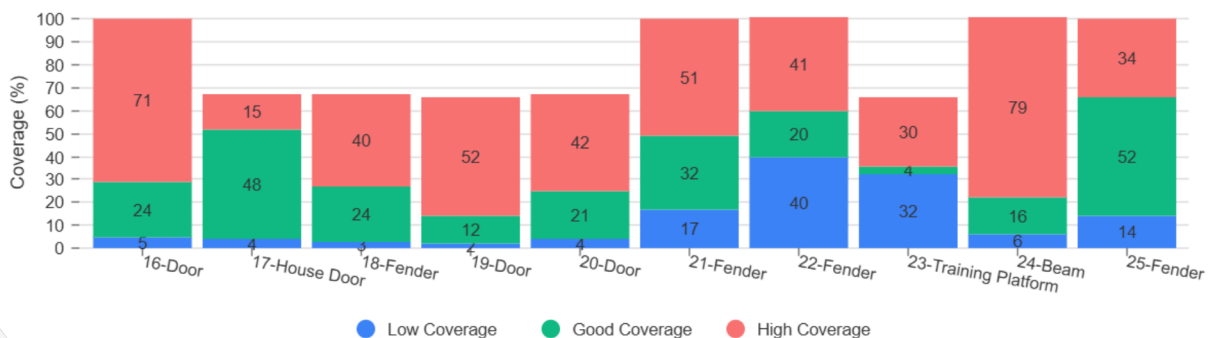
The Trainee Performance Report offers a summary of a user's progress over a selected period, providing insights into their performance, activity, and improvements. It includes an overview of general information, a breakdown of performance grades, a summary of the latest session, and a coverage graph showcasing trends across recent sessions. This report serves as a visual and analytical tool to evaluate user engagement, skill development, and areas for improvement.

Training Sessions

Konstantin painted **Door** (2025-10-03 15:59:44)

Coverage Graph

- ● Low Coverage ● Good Coverage ● High Coverage

Engagement Graph

- ● Primer ● Base ● Clear

Primer Coat Info
Time Spent (min): 0.32
Material Used (ml): 22.37
Grade: F
Low Coverage (%): 0.44
Good Coverage (%): 52.57
High Coverage (%): 46.99

Base Coat Info
Time Spent (min): 0.27
Material Used (ml): 21.78
Grade: B
Low Coverage (%): 0.00
Good Coverage (%): 76.27
High Coverage (%): 23.73

Clear Coat Info
Time Spent (min): 0.20
Material Used (ml): 16.33
Grade: A
Low Coverage (%): 6.90
Good Coverage (%): 86.90
High Coverage (%): 6.20

Overall Info:
Time Spent (min): 0.78
Grade: C
Good Coverage (%): 71.92
Material Used (ml): 60.48
Low Coverage (%): 2.44
High Coverage (%): 25.64

EXPORT TO PDF

User	Part	Date	Paint Used (ml)	Total Time Spent (min)	Grade
~Total	~	~	**3216.62**	**9.87**	**C**
Konstantin	Door	Fri, 03 Oct 2025 15:00:36 GMT	60.48	0.783	C
Konstantin	Fender	Mon, 06 Oct 2025 11:31:00 GMT	36.84	0.5	C
Konstantin	Fender	Mon, 06 Oct 2025 11:32:37 GMT	42.7	0.583	C
Konstantin	Training Platform	Thu, 23 Oct 2025 09:21:09 GMT	2474.38	4.567	B
Konstantin	Beam	Thu, 23 Oct 2025 09:30:02 GMT	577.97	3.117	B
Konstantin	Fender	Wed, 29 Oct 2025 15:18:21 GMT	24.25	0.317	C

The Training Session Report provides a comprehensive record of all sessions completed by the user, featuring a detailed list and insights for each session.

The session list includes key data such as the part worked on, session date, paint used, total time spent, and the grade achieved, offering a clear summary of overall performance.

Each session can be expanded to reveal detailed analytics, including a Coverage Graph and an Engagement Graph, which evaluate the quality of paint application and user interaction.

Additionally, session-specific stats such as primer coat information, time spent per layer, material used, and coverage percentages are displayed, along with an overall assessment that summarizes time spent, grades, and coverage quality.

This detailed breakdown allows users to track progress, identify patterns, and optimize their techniques for improved outcomes.

Part Report

The Part Report in SprayVerse provides a comprehensive analysis of the performance metrics for a selected part, combining graphical insights with key statistics for a clear and concise overview. It features a grade breakdown chart to evaluate session performance, a coverage breakdown to assess paint quality, and line graphs illustrating the time taken and paint used across sessions. These visualizations, along with data summaries like average grades and resource usage, enable users to track progress, identify areas for improvement, and refine their painting techniques for greater precision and efficiency.
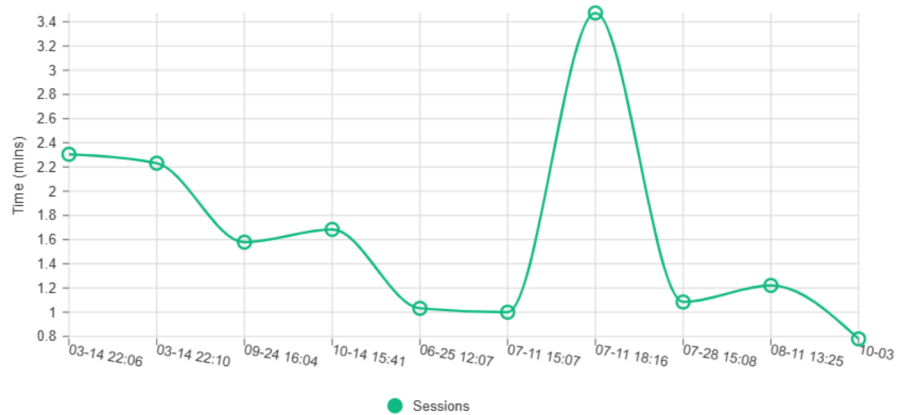
Grades Brakdown

- Grade A
- Grade B
- Grade C
- Grade D
- Grade F

OVERALL Primer Base Clear

Times Played:	105
Average Grade:	D

Time Taken

Time (mins) vs Sessions

x-axis: 03-14 22:06, 03-14 22:10, 09-24 16:04, 10-14 15:41, 06-25 12:07, 07-11 15:07, 07-11 18:16, 07-28 15:08, 08-11 13:25, 10-03

● Sessions

Coverage Breakdown

- High
- Good
- Low
- No Coverage

High:	11
Good:	29
Low:	44

Paint Used

Paint (ml) vs Sessions

x-axis: 03-14 22:06, 03-14 22:10, 09-24 16:04, 10-14 15:41, 06-25 12:07, 07-11 15:07, 07-11 18:16, 07-28 15:08, 08-11 13:25, 10-03

● Sessions

SPRAYVERSE

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