

Report On

Virtual showroom

Submitted in partial fulfillment of the requirements of the Course project in
Semester VII of fourth year Artificial Intelligence and Data Science

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CERTIFICATE

This is to certify that the project entitled “Virtual showroom” is a bonafide work of “Dhruv mewada(Roll No.11), Viraj Mhaske(Roll No.12),Chetan Nevase (Roll No. 17)” submitted to the University of Mumbai in partial fulfillment of the requirement for the Course project in Semester VII of fourth year Artificial Intelligence and Data Science engineering.

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Chapter 1: Abstract

The Tesla Virtual Showroom is a pioneering VR project revolutionizing the automotive retail experience. This immersive platform transports users into a meticulously crafted digital representation of a Tesla showroom, effectively bridging the gap between the physical and virtual worlds.

At its core, the project aims to provide an interactive and informative space for potential buyers to explore Tesla's cutting-edge vehicle lineup. Through state-of-the-art VR technology, users can examine every aspect of Tesla models, from the sleek design of the Model S to the utilitarian elegance of the Model X. This level of detail grants users an unprecedented sense of realism, empowering them to make well-informed decisions from the comfort of their own environment.

A standout feature is the dynamic configurator, allowing users to customize their dream Tesla to their exact specifications. This interactive tool provides an intuitive experience, akin to being physically present in a Tesla showroom. Additionally, users can engage with Tesla's Autopilot and Full Self-Driving technologies through interactive demonstrations, offering a firsthand glimpse into the future of automotive travel.

Chapter 2: Introduction

2.1 Introduction

The “Tesla Showroom VR Project” represents a groundbreaking leap in the way we engage with automotive technology. As the automotive industry hurtles towards an electrified future, the mode of interaction between customers and vehicles is evolving in tandem. This project endeavors to bridge the gap between the physical and the virtual, offering an unprecedented immersive experience within the realm of electric mobility.

2.2 Problem Statement

Traditional automotive showrooms, while vital for showcasing the tangible aspects of a vehicle, face intrinsic limitations. Geographical constraints often impede potential buyers from visiting showrooms, leading to missed opportunities for engagement. Furthermore, the conventional showroom model struggles to accommodate the expansive array of features and customizations that modern vehicles offer. The COVID-19 pandemic, with its imperative for contactless interactions, has underscored the need for innovative alternatives in the retail space. The Tesla Showroom VR Project merges in response to these challenges, offering a solution that transcends geographical boundaries and expands the horizons of what a showroom can be.

2.3 Objectives

The core objective of the Tesla Showroom VR Project is to reimagine the car-buying experience. Through the integration of state-of-the-art virtual reality technology, we seek to create a dynamic, multi-dimensional environment that mirrors the elegance and innovation synonymous with the Tesla brand. This virtual platform will afford users an unparalleled opportunity to explore Tesla's range of vehicles, from the sleek lines of the Model S to the utilitarian elegance of the Model X, all within a

virtual space that faithfully replicates the physical showroom experience. In addition to providing an engaging space for exploration, the project aims to democratize access to Tesla's visionary vehicles.

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Chapter 3: Proposed System

3.1 Introduction

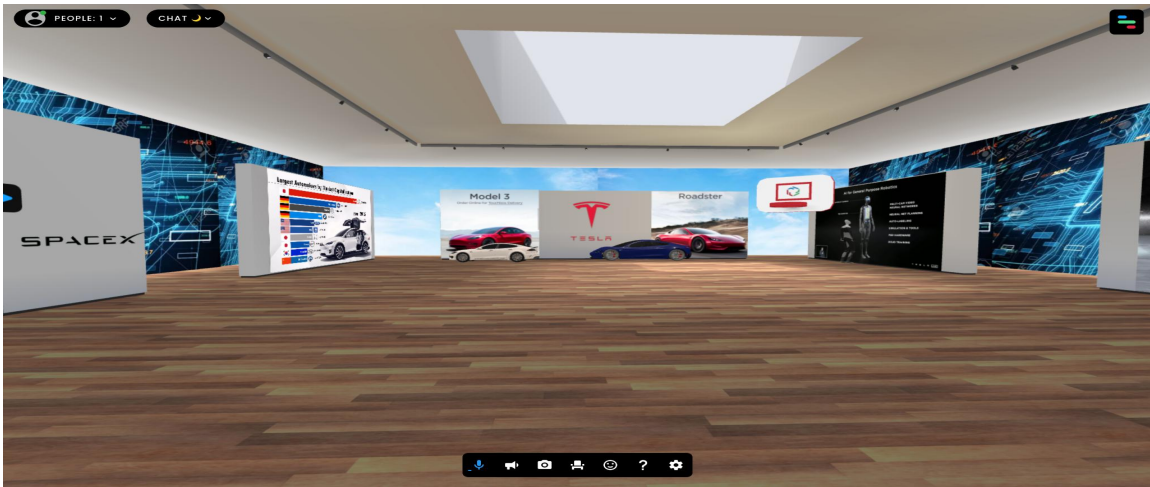
In an era defined by technological innovation, the Tesla Virtual Showroom emerges as a pioneering leap in redefining the automotive retail landscape. This groundbreaking project harnesses the power of virtual reality (VR) to create an immersive and informative environment that transcends the boundaries of traditional showrooms. By donning a high-quality VR headset, users are transported into a meticulously designed digital realm that faithfully replicates a Tesla showroom.

The aim of this project is to revolutionize how individuals experience and interact with Tesla vehicles, offering an unparalleled level of realism and interactivity. Every detail, from the contours of the Model S to the intricacies of the Model X, is faithfully recreated, empowering potential buyers to explore and evaluate Tesla's innovative lineup in extraordinary detail.

3.2 Details of Hardware and Software

- Framer VR API
- 3D Modeling and Rendering
- High-Resolution Display

3.3 Results



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3.4 Conclusion

The Tesla Showroom VR Project embodies a visionary step forward in the automotive industry, redefining the way customers engage with electric vehicles. Through the integration of cutting-edge virtual reality technology, this project has successfully demonstrated the potential to transcend physical constraints, revolutionizing the car-buying experience.

The virtual showroom concept presented herein addresses critical challenges faced by traditional automotive retail. By eliminating geographical barriers, potential buyers can now explore and interact with Tesla vehicles from any location, democratizing access to the brand's innovative offerings. This newfound accessibility is of paramount importance in a globalized world, where diverse customer bases span continents and time zones.

Furthermore, the immersive nature of the virtual experience empowers users to delve deeper into the nuances of Tesla's technological advancements. From electric propulsion to autonomous driving capabilities, users can gain a comprehensive understanding of the innovations driving the future of transportation.

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