Output Snapshot for WT assignments

Assignment-1

CHARUSAT

Name: Yash Vaghani
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BIO

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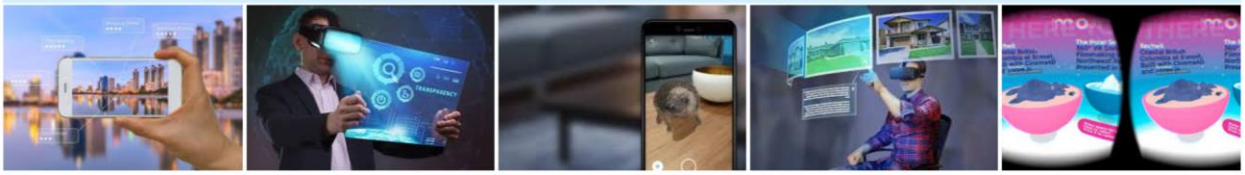
Branch Name: Computer Engineering
Current Semester:4
University Name: Charotar University of Science and Technology

Chandubhai S Patel Institute of Technology

Assignment-2

VIRTUAL REALITY(VR)



What is Virtual Reality?

Virtual reality (VR) is a simulated experience that can be similar to or completely different from the real world. Applications of virtual reality can include entertainment (i.e. gaming) and educational purposes (i.e. medical or military training). Other, distinct types of VR style technology include augmented reality and mixed reality.

Currently standard virtual reality systems use either virtual reality headsets or multi-projected environments to generate realistic images, sounds and other sensations that simulate a user's physical presence in a virtual environment. A person using virtual reality equipment is able to look around the artificial world, move around in it, and interact with virtual features or items. The effect is commonly created by VR headsets consisting of a head-mounted display with a small screen in front of the eyes, but can also be created through specially designed rooms with multiple large screens. Virtual reality typically incorporates auditory and video feedback, but may also allow other types of sensory and force feedback through haptic technology.

Applications

Virtual reality is most commonly used in entertainment applications such as video gaming and 3D cinema. Consumer virtual reality headsets were first released by video game companies in the early-mid 1990s. Beginning in the 2010s, next-generation commercial tethered headsets were released by Oculus (Rift), HTC (Vive) and Sony (PlayStation VR), setting off a new wave of application development.3D cinema has been used for sporting events, pornography, fine art, music videos and short films. Since 2015, roller coasters and theme parks have incorporated virtual reality to match visual effects with haptic feedback.

In social sciences and psychology, virtual reality offers a cost-effective tool to study and replicate interactions in a controlled environment.It can be used as a form of therapeutic intervention. For instance, there is the case of the virtual reality exposure therapy (VRET), a form of exposure therapy for treating anxiety disorders such as post traumatic stress disorder (PTSD) and phobias.

In medicine, simulated VR surgical environments were first developed in the 1990s.Under the supervision of experts, VR can provide effective and repeatable training at a low cost, allowing trainees to recognize and amend errors as they occur.Virtual reality has been used in physical rehabilitation since the 2000s. Despite numerous studies conducted, good quality evidence of its efficacy compared to other rehabilitation methods without sophisticated and expensive equipment is lacking for the treatment of Parkinson's disease.A 2018 review on the effectiveness of mirror therapy by virtual reality and robotics for any type of pathology concluded in a similar way.Another study was conducted that showed the potential for VR to promote mimicry and revealed the difference between neurotypical and autism spectrum disorder individuals in their response to a two-dimensional avatar.

VR can simulate real workspaces for workplace occupational safety and health purposes, educational purposes, and training purposes. It can be used to provide learners with a virtual environment where they can develop their skills without the real-world consequences of failing. It has been used and studied in primary education,military,astronaut training,flight simulators,miner training,architectural design,[citation needed] driver training and bridge inspection.Immersive VR engineering systems enable engineers to see virtual prototypes prior to the availability of any physical prototypes.Supplementing training with virtual training environments has been claimed to offer avenues of realism in military[76] and healthcare training while minimizing cost.It also has been claimed to reduce military training costs by minimizing the amounts of ammunition expended during training periods.

The first fine art virtual world was created in the 1970s.As the technology developed, more artistic programs were produced throughout the 1990s, including feature films. When commercially available technology became more widespread, VR festivals began to emerge in the mid-2010s. The first uses of VR in museum settings began in the 1990s, seeing a significant increase in the mid-2010s. Additionally, museums have begun making some of their content virtual reality accessible.

Virtual reality's growing market presents an opportunity and an alternative channel for digital marketing.It is also seen as a new platform for e-commerce, particularly in the bid to challenge traditional "brick and mortar" retailers. However, a 2018 study revealed that the majority of goods are still purchased in physical stores.

In the case of education, the uses of virtual reality have demonstrated being capable of promoting higher order thinking, promoting the interest and commitment of students, the acquisition of knowledge, promoting mental habits and understanding that are generally useful within an academic context.

Etymology

"Virtual" has had the meaning of "being something in essence or effect, though not actually or in fact" since the mid-1400s.The term "virtual" has been used in the computer sense of "not physically existing but made to appear by software" since 1959.

In 1938, French avant-garde playwright Antonin Artaud described the illusory nature of characters and objects in the theatre as "la réalité virtuelle" in a collection of essays, Le Théâtre et son double. The English translation of this book, published in 1958 as The Theater and its Double, It is the earliest published use of the term "virtual reality". The term "artificial reality", coined by Myron Krueger, has been in use since the 1970s. The term "virtual reality" was first used in a science fiction context in The Judas Mandala, a 1982 novel by Damien Broderick.

Technology

Software

The Virtual Reality Modelling Language (VRML), first introduced in 1994, was intended for the development of "virtual worlds" without dependency on headsets.The Web3D consortium was subsequently founded in 1997 for the development of industry standards for web-based 3D graphics. The consortium subsequently developed X3D from the VRML framework as an archival, open-source standard for web-based distribution of VR content.WebVR is an experimental JavaScript application programming interface (API) that provides support for various virtual reality devices, such as the HTC Vive, Oculus Rift, Google Cardboard or OSVR, in a web browser.

Hardware

Modern virtual reality headset displays are based on technology developed for smartphones including: gyroscopes and motion sensors for tracking head, hand, and body positions; small HD screens for stereoscopic displays; and small, lightweight and fast computer processors. These components led to relative affordability for independent VR developers, and lead to the 2012 Oculus Rift Kickstarter offering the first independently developed VR headset.

Concerns and Challenges

Health and safety

There are many health and safety considerations of virtual reality. A number of unwanted symptoms have been caused by prolonged use of virtual reality,and these may have slowed proliferation of the technology. Most virtual reality systems come with consumer warnings, including: seizures; developmental issues in children; trip-and-fall and collision warnings; discomfort; repetitive stress injury; and interference with medical devices.Some users may experience twitches, seizures or blackouts while using VR headsets, even if they do not have a history of epilepsy and have never had blackouts or seizures before. One in 4,000 people, or .025%, may experience these symptoms. Since these symptoms are more common among people under the age of 20, children are advised against using VR headsets. Other problems may occur in physical interactions with one's environment. While wearing VR headsets, people quickly lose awareness of their real-world surroundings and may injure themselves by tripping over, or colliding with real-world objects.

VR headsets may regularly cause eye fatigue, as does all screened technology, because people tend to blink less when watching screens, causing their eyes to become more dried out.There have been some concerns about VR headsets contributing to myopia, but although VR headsets sit close to the eyes, they may not necessarily contribute to nearsightedness if the focal length of the image being displayed is sufficiently far away.

Virtual reality sickness (also known as cybersickness) occurs when a person's exposure to a virtual environment causes symptoms that are similar to motion sickness symptoms.Women are significantly more affected than men by headset-induced symptoms, at rates of around 77% and 33% respectively.The most common symptoms are general discomfort, headache, stomach awareness, nausea, vomiting, pallor, sweating, fatigue, drowsiness, disorientation, and apathy.For example, Nintendo's Virtual Boy received much criticism for its negative physical effects, including "dizziness, nausea, and headaches".These motion sickness symptoms are caused by a disconnect between what is being seen and what the rest of the body perceives. When the vestibular system, the body's internal balancing system, does not experience the motion that it expects from visual input through the eyes, the user may experience VR sickness. This can also happen if the VR system does not have a high enough frame rate, or if there is a lag between the body's movement and the onscreen visual reaction to it.Because approximately 25–40% of people experience some kind of VR sickness when using VR machines, companies are actively looking for ways to reduce VR sickness.

Privacy

The persistent tracking required by all VR systems makes the technology particularly useful for, and vulnerable to, mass surveillance. The expansion of VR will increase the potential and reduce the costs for information gathering of personal actions, movements and responses.

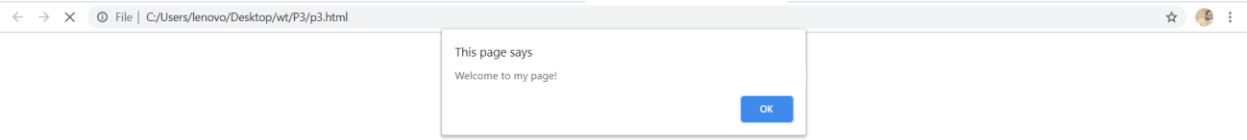
Ask the Question : Question

Submit your E-mail: E-mail

Feedback: Share your feedback here....

submit reset

Assignment-3



AliceBlue Theme White Theme

CHARUSAT

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ID. No.: 18CE132

BIO

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University Name: Charotar University of Science and Technology

Chandubhai S Patel Institute of Technology

Assignment-4

REGISTRATION FORM FOR ADMISSION

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Admission Form:

Name:

City: RAJKOT

E-mail Address:

Mobile No.:

SELECT YOUR COURSE: BTECH

Submit Reset

REGISTRATION FORM FOR ADMISSION

Admission Form:

Name: YASH

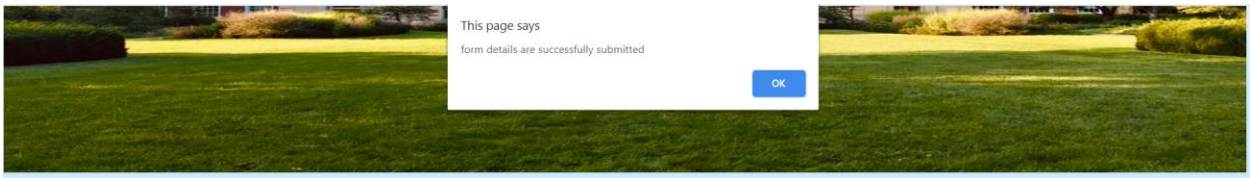
City: RAJKOT

E-mail Address: 18ce132@charusat.edu.in

Mobile No.: 9870031253

SELECT YOUR COURSE: BTECH

Submit Reset



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Admission Form:

Name: YASH

City: RAJKOT

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Mobile No.: 9870031253

SELECT YOUR COURSE: BTECH

Submit Reset

Assignment-5

Registration Form for National Workshop on Web Technology

Registration Form for National Workshop on Web Technology

Registration Form:

First Name: Middle Name: Last Name:

Your Role: STUDENT FACULTY PROFESSIONAL COMPANY REPRESENTIVE

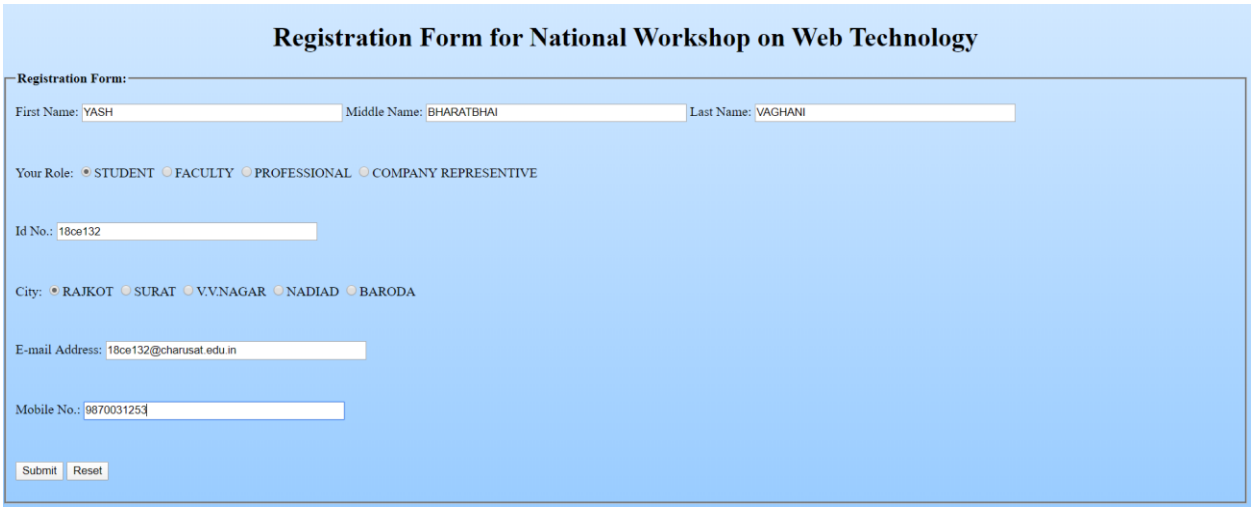
Id No.:

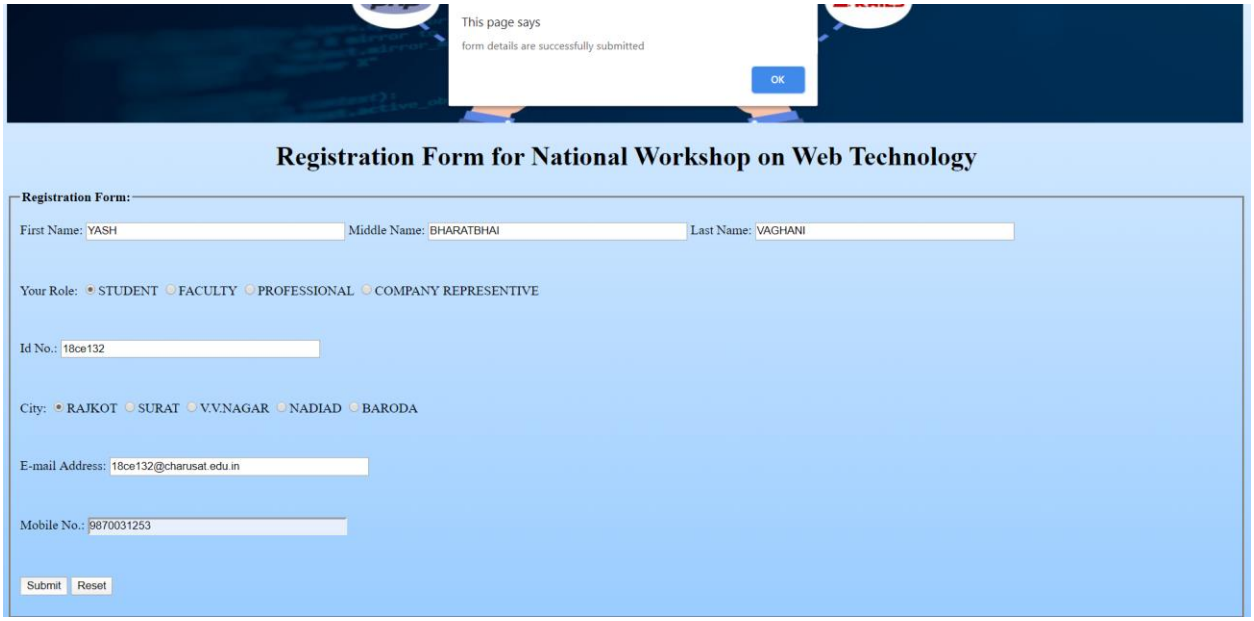
City: RAJKOT SURAT V.V.NAGAR NADIAD BARODA

E-mail Address:

Mobile No.:

Submit Reset



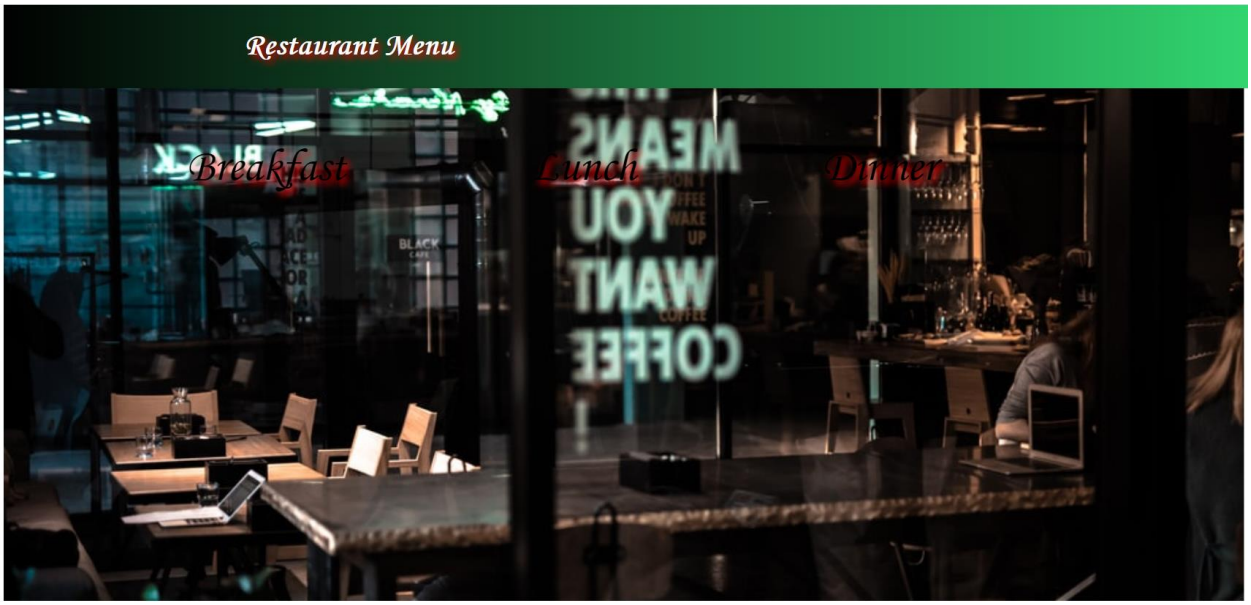


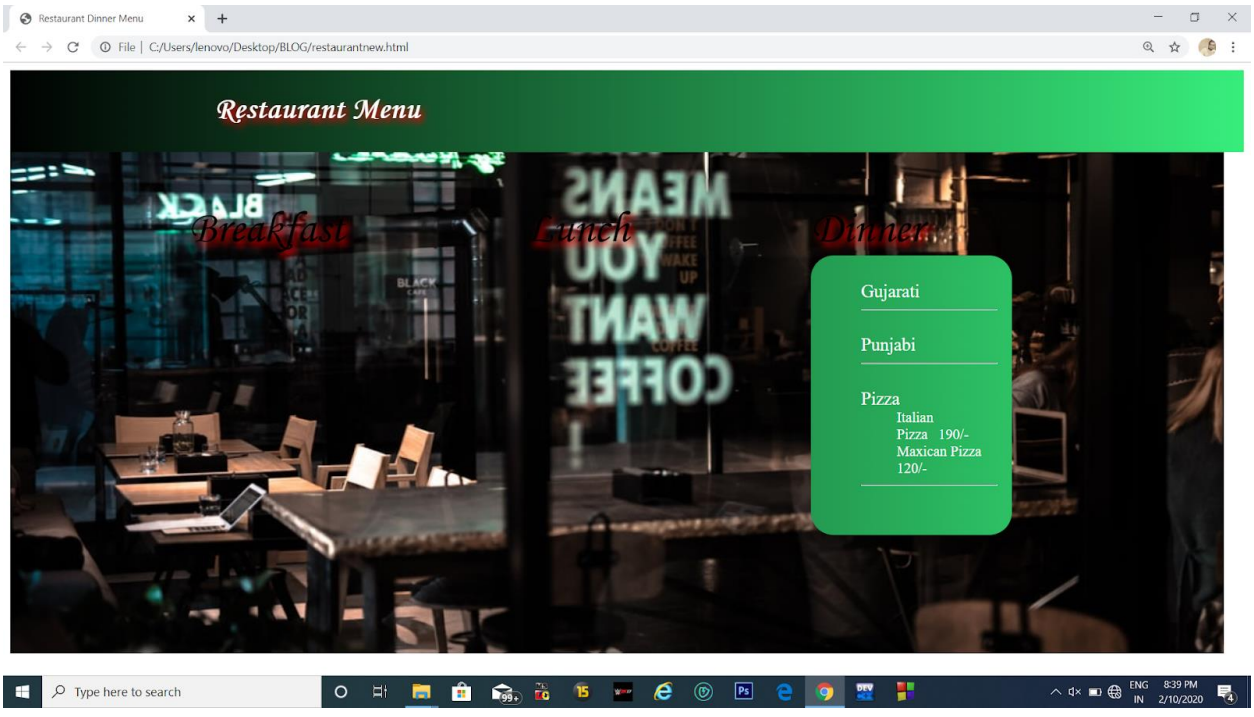
+ Options

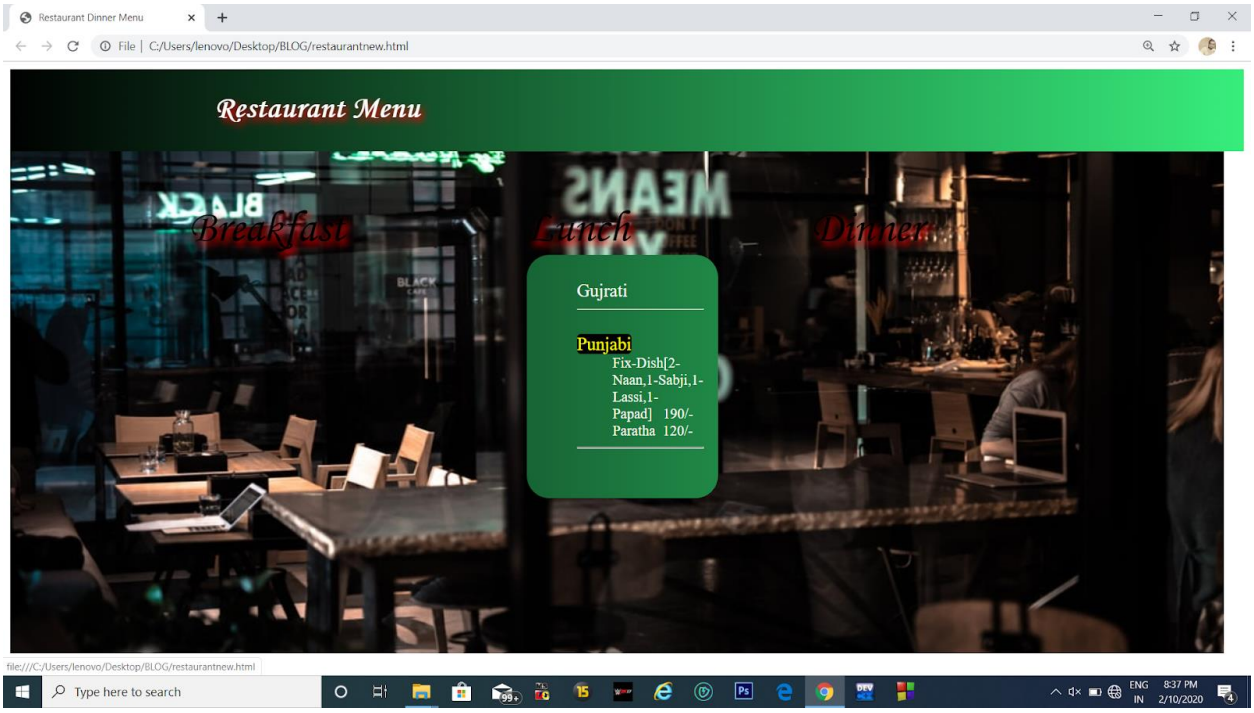
	FName	Mname	Lname	Role	ID	City	Email	Mob
Edit Copy Delete	YASH	BHARATBHAI	VAGHANI	STU.	18ce132	RAJKOT	18ce132@charusat.edu	9870031253

Check all *With selected:* Edit Copy Delete Export

Assignment-6







Mini-Project