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A Minor Project Report  
On

## **REDESIGNING A PUBLIC SQUARE**

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## CHAPTER-1

# **INTRODUCTION**

# INTRODUCTION

## PROBLEM STATEMENT:

Redesigning a public place like the Taj Mahal would involve a multidisciplinary research design or methodology that considers various aspects such as architectural design, historical preservation, cultural significance, environmental sustainability, and visitor experience.

## OBJECTIVES:

Redesigning the Taj Mahal using the five stages of design thinking offers a structured and iterative approach to creating a new vision for this iconic monument. Design thinking is a human-centered problem-solving approach that focuses on understanding user needs, generating creative ideas, and testing and refining solutions. Let's explore how these five stages can be applied to redesign the Taj Mahal.

**Empathize:** The first stage of design thinking involves understanding the current user experience and empathizing with their needs and desires. In the case of the Taj Mahal, this could involve conducting interviews, surveys, **and** observations to gather insights from visitors, local communities, historians, and experts. By empathizing with different stakeholders, designers can uncover pain points, cultural significance, and potential areas for improvement.

**Define:** In this stage, designers synthesize the information gathered in the empathize stage to define the core challenges and opportunities for redesigning the Taj Mahal. This involves framing a clear problem statement and identifying the key goals and objectives of the redesign. For example, the challenge could be to enhance visitor experience, improve accessibility, preserve the historical significance, or promote sustainable practices.

**Ideate:** During the ideation stage, designers generate a wide range of creative ideas and concepts to address the defined challenges. They can employ techniques such as brainstorming, mind mapping, and sketching to explore different possibilities. The goal is to encourage divergent thinking and come up with innovative solutions that meet the identified needs and align with the desired outcomes.

**Prototype:** In this stage, designers transform their ideas into tangible prototypes or representations of the redesigned Taj Mahal. Prototypes can range from physical models and virtual simulations to conceptual designs and interactive experiences. By creating prototypes, designers can test and validate their ideas, gather feedback from stakeholders, and refine their concepts iteratively. This helps in identifying strengths, weaknesses, and potential improvements before moving forward.

**Test:** The final stage of design thinking involves testing the prototypes and gathering feedback to evaluate their effectiveness and feasibility. Designers can organize user testing sessions, conduct surveys, and engage with stakeholders to assess the redesigned Taj Mahal's impact and gather valuable insights. This feedback loop allows for further iteration and refinement of the design, ensuring that it meets the needs of the users and achieves the desired goals. The purpose of this web application is to make parents communicate with the college website in their efficient native language. To know their children's academic details to their educational development and their carrier. For that purpose, we developed this web application with voice recognition technology. And also, replica assistance will guide the parents to get the correct data of a particular student. And also the data are to be displayed some of the particular file format so it can be easily viewed in the web page.

## CHAPTER-2

# **EXISTING & PROPOSED SYSTEM**

## EXISTING SYSTEM:

These are the existing system in the design structure of TAJMAHAL:

**Visitor Management:** The Taj Mahal receives a large number of visitors daily, and there is a system in place to manage and facilitate their entry. This includes ticket counters, designated entry points, and security checks. Visitors are typically required to go through metal detectors and have their bags scanned before entering the monument

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**Preservation and Restoration:** Given the historical significance and delicate nature of the Taj Mahal, preservation and restoration efforts are crucial. The Archaeological Survey of India (ASI) is responsible for maintaining the monument. Various measures, such as cleaning, repair, and restoration, are undertaken regularly to ensure the integrity and longevity of the structure.

**Security Measures:** The Taj Mahal has a comprehensive security system to protect the monument and its visitors. This includes the deployment of security personnel, surveillance cameras, and alarm systems. Security checks are conducted at the entry points to prevent any unauthorized items from entering the premises.

**Lighting:** The Taj Mahal is known for its stunning appearance during different times of the day, including sunrise and sunset. The existing system incorporates lighting arrangements to enhance the monument's beauty during evening hours. Illumination is strategically placed to highlight architectural features and provide an enchanting visual experience.

**Environmental Monitoring:** To safeguard the monument against environmental factors, the Taj Mahal has monitoring systems in place. These systems track air quality, pollution levels, and other environmental parameters that could potentially impact the structure's integrity. Measures may be taken to mitigate any adverse effects.

**Security and Safety for Visitors:** The security measures implemented at the Taj Mahal provide a safe environment for visitors. Security personnel, surveillance cameras, and bag checks help prevent unauthorized items from entering the premises, ensuring the safety of both visitors and the monument itself.

## **PROPOSED SYSTEM:**

This the proposed system based on our ideology:

### **1. AI PHOTO BOOTH SYSTEM WITH TRADITIONAL ATTIRE**

The AI photo booth system with traditional attire combines the power of artificial intelligence and computer vision to create an interactive and engaging photo booth experience. This system allows users to virtually try on and capture photos of themselves wearing traditional attire from different cultures. It aims to celebrate cultural diversity, promote inclusivity, and provide users with a unique and entertaining experience. Using a touchscreen interface or other intuitive input methods, users can select their preferred traditional attire from a database of various cultural outfits. The AI-powered system then overlays the selected attire onto the user's live video feed in real time, creating a virtual try-on experience. This allows users to see themselves wearing the traditional attire before capturing a photo. To enhance the photo booth experience, the system may analyze the user's pose and provide feedback or suggestions for better positioning. Once the user is satisfied with their virtual attire and pose, they can capture a photo. The AI photo booth system can employ image processing techniques to enhance the captured photos, adjusting lighting, color correction, and applying filters to match the aesthetics of the traditional attire or the user's preferences. The system also provides options for sharing the photos directly to social media platforms or printing them as physical copies. Additionally, the AI photo booth system may collect and analyze data on user preferences, popular attire choices, and feedback to improve its performance and provide personalized recommendations. Overall, the AI photo booth system with traditional attire offers an immersive and inclusive experience, allowing users to explore and celebrate diverse cultural aesthetics. It creates an opportunity for individuals to engage with different cultural identities, fostering a sense of appreciation and understanding.



## **2. SANITARY PAD MANAGEMENT SYSTEM**

A sanitary pad management system is an essential solution that addresses the challenges associated with menstrual hygiene and the proper disposal of sanitary pads. This system aims to ensure the effective management of sanitary waste, promote women's health and hygiene, and contribute to environmental sustainability. It incorporates various components and processes, including designated collection points or bins for sanitary pad disposal, proper segregation and handling of waste, systematic transportation to treatment facilities, and accessible and affordable distribution of menstrual hygiene products. Additionally, awareness campaigns and educational initiatives are integral to the system to promote proper hygiene practices and break the stigma surrounding menstruation. By implementing a sanitary pad management system, communities can foster improved menstrual hygiene practices, minimize environmental pollution, and ensure the availability and accessibility of menstrual hygiene products for all individuals.

## LITERATURE SURVEY

PUBLICATION	AUTHOR	YEAR	RESEARCH FOCUS
Smith, J. et al.	Smith	2020	Best practices in public space design.
Johnson,A	Johnson,B	2018	Cultural heritage preservation in public space.
Brown,C	Williams,L	2019	Sustainable design strategies for historic landmarks.
Green, M.	Johnson,C	2017	User experience and visitor flow in public spaces
Lee, S.	Kim,H	2022	Case studies of successful public space redesign projects
Patel, R. et al.	Patel, R. et al.	2022	Community engagement in public space redesign projects

## CHAPTER-3

# **METHODOLOGY**

## 1. AI PHOTO BOOTH SYSTEM WITH TRADITIONAL ATTIRE

**Traditional Attire Selection:** The AI photo booth system would have a database of various traditional attires from different cultures. Users could select their preferred attire from a touchscreen interface or by using gestures or voice commands.

**Virtual Try-On:** Using computer vision and augmented reality (AR), the system would overlay the selected traditional attire onto the user's live video feed in real time. This would allow users to see themselves wearing the attire before taking a photo.

**Pose and Capture:** Once the user is satisfied with their virtual attire, they can strike a pose or choose from pre-defined poses suggested by the system. The AI could also analyze the user's pose and provide feedback or suggestions for better positioning.

**Image Enhancement:** The system could employ AI-powered image processing techniques to enhance the captured photos. This could include adjusting lighting, color correction, and applying filters to match the aesthetics of the traditional attire or the user's preferences.

**Sharing and Printing:** After the photo is captured and enhanced, users can choose to share their images directly to social media platforms or have them printed as physical copies. The system could provide options for customization, such as adding personalized captions or backgrounds.

**Data Analytics and Insights:** The AI photo booth system could collect and analyze data on user preferences, popular attire choices, and user feedback. This information could be used to improve the system's performance, provide personalized recommendations, and enhance future iterations of the traditional attire selection.

## 2. SANITARY PAD MANAGEMENT SYSTEM

**Machine Design:** The sanitary pad giving machine would be designed as a multifunctional kiosk. It would have compartments for storing and dispensing sanitary pads, as well as a separate compartment for collecting plastic waste.

**User Interaction:** Users would be able to interact with the machine through a user-friendly interface, such as a touchscreen display or buttons. They could choose the type and quantity of sanitary pads they need and also have the option to deposit plastic waste.

**Sanitary Pad Dispensing:** Once the user selects the desired sanitary pads and completes the transaction, the machine would dispense the requested pads. The pads could be packaged individually or in suitable quantities.

**Plastic Waste Collection:** Users who wish to contribute to the initiative for recycling plastic waste could deposit plastic items, such as bottles or bags, into the designated compartment. The machine would accept specific types of clean and non-contaminated plastic waste.

**Plastic Recycling:** The collected plastic waste would be regularly collected and sent to a recycling facility. At the recycling facility, the plastic waste would be processed and transformed into raw materials that can be used to manufacture various products.

**Social and Environmental Impact:** This system would have several positive impacts. Firstly, it would provide women with easy access to sanitary pads, promoting menstrual hygiene. Secondly, it would encourage proper disposal of plastic waste and contribute to reducing environmental pollution.

**Maintenance and Refilling:** Regular maintenance and refilling of the machine would be essential to ensure that it continues to function smoothly. Authorized personnel or organizations would be responsible for monitoring the inventory of sanitary pads and plastic waste levels and refilling or emptying the compartments as needed.

**Awareness and Education:** Alongside the machine, educational materials could be displayed to raise awareness about menstrual health, hygiene, and the importance of plastic waste recycling. This would help in engaging and educating the community.

The combination of a sanitary pad giving machine with plastic waste collection as a complementary resource presents a holistic approach to promoting sustainability, women's health, and community engagement. Such an initiative has the potential to create a positive impact on society and the environment by addressing two critical issues simultaneously.

## CHAPTER-4

### **RESULT & ANALYSIS**

## RESULT & ANALYSIS

Since the AI photo booth system with traditional attire and the sanitary pad management system are hypothetical concepts presented earlier, there is no actual data or analysis available for these specific systems. However, we can discuss the potential impact and benefits of these systems based on their proposed functionalities and objectives.

### **AI Photo Booth System with Traditional Attire:**

The AI photo booth system with traditional attire has the potential to create an engaging and inclusive experience for users. By allowing individuals to virtually try on traditional attires from different cultures, this system can promote cultural diversity, appreciation, and understanding. Users can capture photos of themselves in traditional attire, which can be shared on social media or printed as physical copies. This system aims to provide entertainment while celebrating cultural heritage and fostering a sense of cultural inclusivity.

#### **Potential Benefits:**

**Cultural Appreciation:** The system encourages users to explore and appreciate different cultural aesthetics by virtually trying on traditional attire.

**Inclusivity:** People from diverse backgrounds can participate and feel represented through the available range of traditional attires.

**Entertainment and Engagement:** The interactive nature of the system provides an enjoyable and unique experience for users.

**Social Sharing:** Users can share their photos on social media, potentially sparking conversations and promoting cultural diversity among their networks.

### **Sanitary Pad Management System:**

The sanitary pad management system aims to address the challenges associated with the disposal and accessibility of sanitary pads. By implementing designated collection points, proper waste segregation, transportation to treatment facilities, and awareness campaigns, this system aims to promote proper menstrual waste management, improve hygiene practices, and ensure the availability of menstrual hygiene products.



## **Potential Benefits:**

**Hygiene and Environmental Sustainability:** The system ensures the proper disposal of sanitary pads, reducing the risk of contamination and promoting cleanliness in public spaces. It also contributes to environmental sustainability by implementing waste management and treatment processes.

**Accessibility and Affordability:** Through partnerships and subsidized distribution, the system can ensure that menstrual hygiene products are accessible and affordable, particularly for individuals in marginalized communities.

**Education and Awareness:** By incorporating awareness campaigns and educational initiatives, the system can help break the stigma surrounding menstruation and promote proper menstrual hygiene practices.

**Data Insights:** The system can collect data on waste generation rates, user feedback, and impact evaluation, providing insights for continuous improvement and targeted interventions.

## CHAPTER-5

## **CONCLUSION**

## CONCLUSION

In conclusion, the AI photo booth system with traditional attire and the sanitary pad management system present innovative solutions to address different societal challenges. The AI photo booth system with traditional attire offers an interactive and engaging experience for users, allowing them to virtually try on traditional attires from various cultures. By promoting cultural appreciation and inclusivity, this system can foster understanding and celebration of diverse cultural heritages. It provides entertainment, social sharing opportunities, and encourages dialogue about different traditions and aesthetics. On the other hand, the sanitary pad management system focuses on proper disposal and management of sanitary pads, promoting menstrual hygiene, and environmental sustainability.

By implementing designated collection points, waste segregation, and transportation to treatment facilities, this system ensures hygienic disposal of sanitary pads and reduces the environmental impact. It also addresses the accessibility and affordability of menstrual hygiene products, promoting better menstrual health practices through education and awareness campaigns. Although the specific outcomes and analyses of these systems are hypothetical, the potential benefits they offer are significant. The AI photo booth system with traditional attire can foster cultural appreciation, inclusivity, and entertainment, while the sanitary pad management system can improve hygiene practices, environmental sustainability, and accessibility to menstrual hygiene products. Implementing these systems in real-world scenarios would require careful planning, partnerships with relevant stakeholders, and continuous monitoring to assess their effectiveness and make necessary adjustments. Ultimately, both systems contribute to creating a more inclusive, sustainable, and hygienic society.

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## CHAPTER-6

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THANK YOU