

<A Virtual Department Tour>

(Project Proposal)

Project Code

<Project code assigned by the Project Office>

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1. Introduction

Virtual tour websites serve as a powerful tool to bridge the gap between physical spaces and remote audiences. The Department of Computer Science, recognized for its innovation and academic excellence, offers an ideal context for such a project. By enabling students, faculty, and visitors to virtually explore departmental facilities, the proposed platform aims to enhance accessibility and engagement. Employing advanced techniques, this project will depict key spaces such as laboratories, offices, and classrooms with high visual fidelity. Through a combination of interactive virtual visualizations, intuitive web design, and reliable hosting solutions, the platform aspires to reach a global audience, foster engagement, and effectively showcase the department's resources.

2. Background and Justification

Virtual tours have become indispensable for academic institutions to enhance their global reach and engagement. Prestigious universities such as Stanford and Harvard have implemented virtual tour platforms that integrate interactive maps, multimedia content, and high-resolution visuals to connect remote audiences with their campuses [1], [2]. These tools play a crucial role in increasing institutional visibility and involvement.

Despite this trend, the Computer Science Department currently lacks a dedicated virtual tour platform to highlight its facilities and accomplishments. This gap limits the department's ability to effectively connect with prospective students, faculty, and visitors. Addressing this need, the proposed project aims to create an engaging virtual tour website featuring interactive navigation, multimedia elements, and detailed virtual tour. With a user-friendly interface and comprehensive content, the platform will cater to a diverse audience and enhance the department's online presence. By adopting this solution, the department can attract greater interest, foster interaction, and promote its academic offerings.

3. Project Methodology

The primary objective of this project is to develop a virtual tour website to showcase the Computer Science Department's facilities. This platform will integrate high-quality virtual tour, interactive navigation, and multimedia components using technologies like 3D Vista. Key stages in the development process include:

a. Requirement Analysis

- Define project goals and identify the target audience, including students, faculty, and visitors.
- Determine key areas to feature, such as laboratories, offices, and collaborative spaces.

b. Design and Planning

- Develop a layout and wireframe for the website, ensuring ease of navigation.
- Outline the creation process for virtual tour using 3D Vista, including interactive hotspots.
- Select a suitable hosting solution for the virtual tour.

c. Virtual Model Creation

- Create interactive virtual tour of departmental facilities using 3D Vista.
- Integrate panoramic views, along with text, video, and image hotspots.

d. Website Development

- Develop the website interface using HTML, CSS, and JavaScript.
- Implement features such as user logins and interaction tracking.
- Embed the virtual tour within the website.

e. Integration with online Storage

- Upload virtual tour and assets to an online storage platform.
- Configure access permissions and generate links for seamless integration.

f. Testing and Optimization

- Test the platform across multiple devices and browsers to ensure compatibility.
- Optimize performance by compressing files and implementing caching.
- Gather user feedback to enhance usability.

g. Deployment and Maintenance

- Deploy the website using a hosting service or direct online storage.
- Monitor user interactions and promptly address issues.
- Update content and virtual view to reflect changes in the department.

5. Project Scope

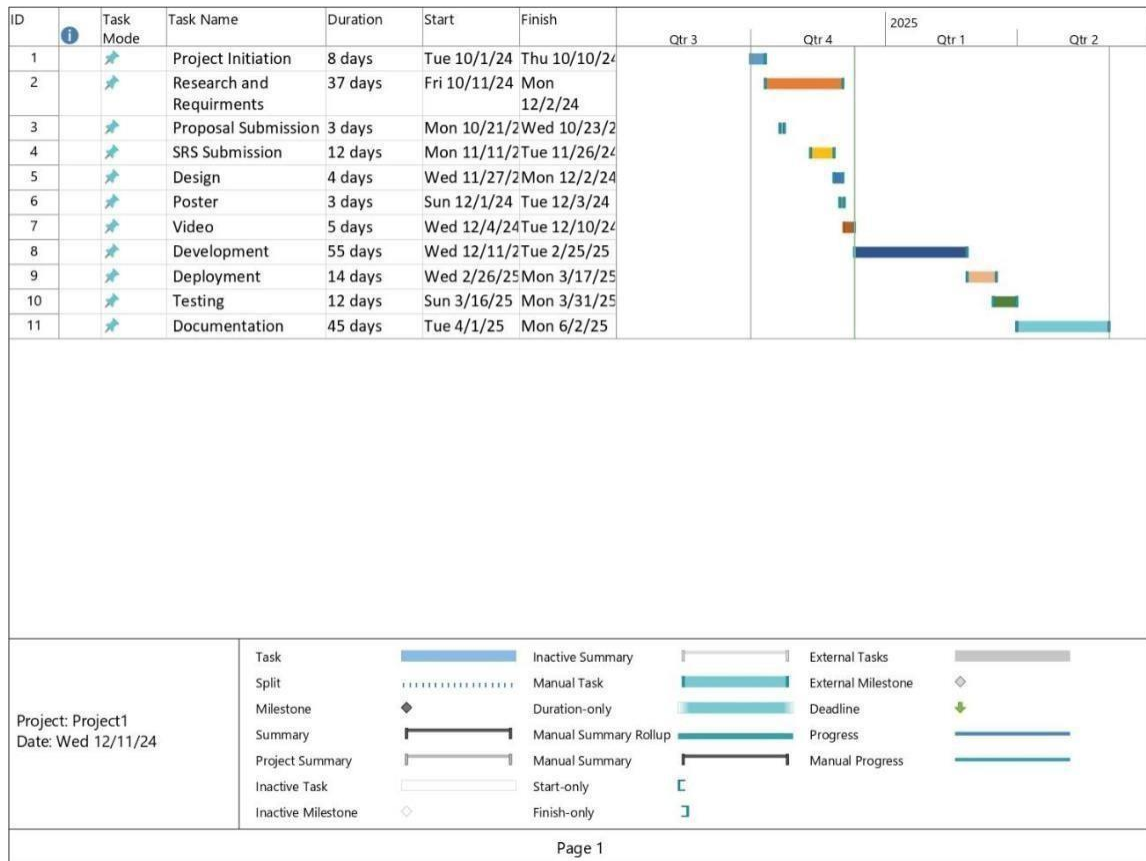
In-Scope Features:

- Develop a virtual tour of the Computer Science Department using 3D Vista.
- Enable interactive navigation and multimedia hotspots.
- Ensure responsive web design for cross-device compatibility.
- Host virtual assets on online storage for reliable access.
- Incorporate basic analytics to track user interactions.

Out-of-Scope Features:

- Real-time guided tours or live interactions.
- Augmented reality (AR) or AI-driven chatbots.
- Multi-department or campus-wide integration.
- E-commerce or payment functionalities.

6. Project Plan



7. Reference

- [1] Stanford University, "Virtual Tours," [Online]. Available: <https://visit.stanford.edu/tours/virtual/>. [Accessed: Oct. 23, 2024].
- [2] Harvard University, "Virtual Campus Experience," [Online]. Available: <https://college.harvard.edu/admissions/explore-harvard/virtual-tour>. [Accessed: Oct. 23, 2024].