

DEVELOPMENT OF UR: A MOBILE-BASED 3D EVENT PLACE
WITH CUSTOMIZATION AND VISUALIZATION USING UNITY

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INTRODUCTION

Researchers developed a system that provides multiple immersive 3D event spaces to different user groups. Users can create event layouts using drag-and-drop features, add 3D objects, zoom in and out the layout, and save their work as an image. The system has been built for deployment on mobile phones with Android 6 (Marshmallow) and API level 23 at least. The objective was to increase the efficiency and effectiveness of event design by matching the 3D visualization technology to its peculiarities. 3D visualization can enhance the experience received during an event by providing clients with a preview of the event. This technology enables more customization of events, which meets client preferences and leads to higher levels of satisfaction and engagement on the final day. The study is very significant for the technology industry. The system was limited to being tested and validated by select event designers, which restricted the generalizability of the results. The findings also provide event designers with advanced tools for better service provision and client contentment. This research paper may also give rise to fresh tools, software, or specialist applications designed for customized visualizations in a technological setting, which can be developed by technology companies because of this research paper. This allowed customers to see their preferred design before the real event. The software and software and user experience aspects of the technology were studied, but it did not look at hardware. This often results in a disconnect between the client's vision and the final setup, leading to dissatisfaction and last-minute adjustments.

METHOD

The UR Application allows you to create event layouts using drag-and-drop features. The dashboard updates efficiently when the admin edits and saves event descriptions, immediately reflecting changes without lag. Users can sign up for an account by entering their email address, personal information, and password or go for the quicker option of Google account authentication. The app is designed to be user-friendly and easy to navigate. The project is called "Development of UR: A Mobile-Based 3D Event Place" The UR Mobile App's block diagram shows the flow of Company users and Admin users of the app. Users can edit event place descriptions with the touch of a button, save the text, and see these changes instantly reflected across the mobile application. The system was developed in this phase using requirements and prototypes from the previous phase. The users will actively participate in this project by contributing feedback and ideas on how to enhance the system's performance. The application loads quickly and runs smoothly on various devices. Researchers developed the "UR: A Mobile-Based 3D Event Place Visualization" app using Unity. The app allows users to customize the layout by dragging and dropping objects, visualizing 3D event layouts on mobile devices. Users can provide ratings, stars, likes, comments, and feedback for each event place. The dashboard comes as a feature that provides an organized display of various information on each event. The project's progression begins with the identification of existing studies related to the construction of systems.

RESULTS

Scale 3 (Highly Acceptable) received the majority of responses. None of the respondents selected scale 1 (Not Acceptable), scale 2 (Acceptable) or scale 3 (highly Acceptables) None of respondents selected Scale 1 (not Acceptable). None of them selected scale 2 or 3 (highly acceptable) Performance Efficiency (2.2) received most responses, with 15 out of 15 respondents selecting it. Usability (3.3) question received the most responses. The evaluation results from the 30 respondents are equal to 22.3 mean points. The Login or Account Creation displayed in Figure 5 shows the registration form for account creation. The Event's Place 3D Manual Upload is designed to allow users to upload and manage 3D models or virtual representations of event spaces. This project would focus on the following modules for admin users: Login or account creation, Dashboard, and Event's place 3D manual Upload. The booking section is accessed by clicking on the preferred event location. The study developed a Mobile-Based 3D Event Place Visualization and Customization platform. Users can virtually view and customize event layouts using 3D objects before the actual event. The booking module allows users to find and reserve event spaces. The project was developed using the Flutter framework for the frontend and Fireend and for the back end for the project. The application will not have an inventory or budgeting system, as it will only be visually appealing and easily digestible in a digestible format. The website features interfaces for Login, Homepage, and See Event Place. Administrators have the capability to set the dimensions of event spaces to suit specific requirements. Users can provide ratings (stars, likes, comments) for the event location. The home page displays the most recent ratings for a particular event location and includes the project description, structure, capabilities and limitations, and test results and evaluation. The mobile application permits users to inquire about the app. The website is available for download from the Google Play Store.

DISCUSSION

Detailed event layouts can be made by users with the ability to add and manipulate 3D objects. Users are able to see their designs from a top-down view so that they are well-planned before the execution date. Features of the system include vast customization options for event layouts, user registration and account creation, feedback and review systems, and security. This study not only proves the feasibility and benefits of such a system but also lays the way for future advances in the event planning field.