

VENUE BOOKING AND MANAGEMENT WEBSITE WITH INTELLIGENT RECOMMENDATIONS



Group Details

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Declaration.

This proposal is our original work and has not been presented for a degree in any other University

Date: 19/02/2024

This proposal has been submitted for examination with my approval as University Supervisor.

Name: Mr. Patrick Naivasha

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Date: 19/02/2024

Abstract.

This project addresses the persistent challenge of discovering and booking affordable yet unique event venues in the Mt. Kenya Region. Despite numerous locations spanning hotels, gardens, and independent venues, the process remains tedious and inefficient for most event planners in the region. Additionally, venue owners face limitations reaching broader audiences beyond locals and struggle to fill capacity regularly. There is an evident gap in the market for a platform that effectively bridges venue administrators and event hosts by unlocking access.

This platform is envisioned as a uniquely tailored online platform that fills this gap by unveiling Mt. Kenya Region's venues to event hosts across locally and across the globe. Core features will include comprehensive listings of venues and their information like: capacity, budget, and amenities to match diverse events and preferences. The users will be able to view listed venues and book one for their personal event. The venue owners can easily add and edit current venue details, view registered users' data and view feedback sent to the platform. By centralizing and organizing currently fragmented information on spaces suiting varied occasions and budgets, this platform enables simplified discovery and convenient end-to-end booking.

The platform will be built using an Agile approach for design flexibility as new trends and stakeholder needs emerge. This methodology, centered around iterative development with continuous user testing and feedback cycles, allows for the evolving platform to align with target users' priorities. The scope considers the diversity of Mt. Kenya Region's event landscape, displaying venues fitting intimate gatherings to cooperate conferences and weddings. The vision is an intuitive platform enhancing convenience and access to Mt. Kenya Region's vibrant, multi-layered, yet underexposed event venues.

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Definition of Terms.

Mt. Kenya Region Venues - This is the name of the website. It covers the physical scope of our project and what it offers to its valued users.

Agile Methodology - An iterative and adaptable approach to project management and software development that emphasizes flexibility, collaboration, and continuous improvement.

MICE Tourism - Meetings, Incentives, Conferences, and Exhibitions.

Mt. Kenya Region – the counties surrounding Mt. Kenya: Meru, Nyeri, Laikipia, Kirinyaga, Embu and Nyaraka-Nithi.

Chapter 1: Introduction.

1.1 Background

The events industry has witnessed immense digitization globally, with online platforms becoming pivotal for discovery and bookings. Hotel chains globally make over 32% of total revenue from venue bookings for events in their banquet halls, lawns and conference rooms. Also, online booking channels drive 19-26% of total hotel venue revenue on average. Thus, online platforms have significant importance to the venue booking sector. However, in emerging markets like Africa, tech adoption in hospitality remains relatively nascent. Just 29% of bookings happened online in the Mt. Kenya region in the pre-pandemic period with the majority still offline. This means the African market has not fully utilized the potential and benefits of having an online platform and presence.

In the Mt. Kenya Region, players like 10times, Booking.com and TripAdvisor have brought convenience to customers by centralizing varied venue options on a single marketplace. However, localization remains inadequate with availability of venues specific to regions being limited. They also fail to provide integrated booking abilities. Mt. Kenya region itself, is home to over 500 hotels, retreat venues and conference halls. Dependence on referrals also continues for locale discovery. This research focuses on the vibrant region of Mt. Kenya and its evolved yet digitally underleveraged venue landscape which remains reliant on offline bookings.

The Mt. Kenya region hosts a lot of bookable hotels, gardens, conference centers and independent venues. These venues are suitable for events like graduations, weddings, retreats and corporate team building activities. The area's cool climate, abundant greenery, heritage sites and adventure offerings also attract domestic and international tourists. These tourists rely predominantly on global platforms lacking authentic local specifics. International tourists put

high value on unique and authentic places like the Mt. Kenya region. A lack of online visibility results in large amounts of revenue loss projection for the regional industry.

Venue discovery remains confined to word-of-mouth and referrals for locals while non-resident visitors find it challenging to experience hidden gems beyond quintessential suggestions on common listing directories. Relying on individual searches and physical access is time-intensive and availability being dynamic, bookings often necessitate multiple contacts. The fragmented analogue process obscures visibility that digitization could unlock for locale owners through expanded reach and bookings management. Increased listings can also prevent over-reliance on a few sites.

The Mt. Kenya region has a smartphone penetration of over 85%. Thus, an online marketplace can serve as a catalyst towards visibility and formalization of Mt. Kenya region's potential. User studies underline convenience, search filters, transparent pricing and real-time availability as pivotal facets for venue selection. Features enabling personalized search, seamless booking and curated suggestions are essential in making this goal come to life. There remains immense potential for innovative models catering to the region's needs by bridging the booking technology gap for planners while optimizing visibility and forecasting for administrators.

The Mt. Kenya region venue aggregation platform will apply global digitization inspirations localized for regional uniqueness. Listing a breadth of venues with pricing diversity can make high-quality experiences more accessible to middle-income residents. Hence, transform perceptions skewed by prohibitive rates of renowned sites. Beyond convenience and cost benefits, channeling Mt. Kenya region's heritage while sustaining operator livelihoods also bears sociocultural influence as a differentiator. This overall platform will bring a lot of benefits to the venue booking sector in a rich and diverse Mt. Kenya region.

Smaller venues also experience negligible online presence apart from social media pages as a key business constraint. Online spaces rely predominantly on partnerships for third party listing rather than integrated booking abilities, causing dependence on call center coordinators. This affects real-time visibility into availability. Limited management bandwidths also impact response rates, causing prospects to often seek alternatives.

With globalization and remote work policies enabling higher mobility, Mt. Kenya region's allure as an events destination can be spotlighted to attract MICE tourism. Mt. Kenya region's weather advantage over other regions gives its unique positioning as a year-round destination. However, localized limitations have constrained optimal market potential realization thus far. The platform aims to address these gaps through its nuanced approach serving all stakeholders.

1.2 Statement of the Problem

In Mt. Kenya region, discovering and booking venues for events currently involves largely offline interactions (phone calls mostly) and in-person visits. Venue discovery happens mainly through personal referrals. Bookings require physically traveling to locations or calling them. Such high dependence on analogue practices and reliance on localized social connections for sourcing venues gives rise to multiple limitations. Non-resident event planners are unable to tap localized knowledge networks, constraining their information access. Locals also face difficulties pre-planning without aggregated online visibility into availability across sites.

Mainstream booking platforms have an unfocused national orientation lacking nuanced coverage of Mt. Kenya region's market specifics. Prominent sites on recommendation channels like TripAdvisor and Booking.com also provide limited perspectives. This impacts venue selection suiting unique needs. Evidently, offline booking dominance in Mt. Kenya region creates barriers around informed venue discovery and reservations, especially for visitors. It limits overall events

sector growth from suboptimal technological enablement. There lies a definitive gap in providing accurate, digitized venue information on a tailored hyperlocal platform to ease bookings.

1.3 Objectives

1.3.1 General Objective

To develop an online booking platform uniquely tailored for venues in the Mt. Kenya region that simplifies discovery and reservations for event hosts while increasing visibility for locale owners.

1.3.2 Specific Objectives

- I. Provide a unified online platform where users can easily find suitable venues in the Mt. Kenya region.
- II. Reduce the time and effort it takes to find and book a venue.
- III. Provide online exposure to the venues found in Mt. Kenya region.
- IV. Connect Mt. Kenya region venue owners and potential customers.
- V. Provide comprehensive venue listings with detailed information on pricing, amenities, and guest capacity digitally.
- VI. Provide a recommendation system that seeks to provide the most suitable venues to each customer.

1.4 Research Questions

- I. How can the user interface be designed for intuitive navigation and searching of Mt. Kenya region's localized offerings?
- II. What is the profile of venues available for hosting events across categories like hotels, gardens, and independent options in Mt. Kenya region?
- III. What design and functionality features need to be implemented to build a suitable venue booking system.

1.5 Justification

The platform creates value for diverse stakeholders within the regional events ecosystem. It empowers nonlocal event planners through easy venue discovery suiting specific visions. Venue owners receive expanded visibility enabling bookings growth and sustainability. Residents benefit from showcasing Mt. Kenya region's rich locale options to visitors. The county's socioeconomic progress gets a boost from increased tourism and modernization of the events industry.

This research aims to develop an online booking platform tailored uniquely to serving the needs of Mt. Kenya region's events and hospitality ecosystem. The project has been conceptualized based on identified gaps highlighted by three key stakeholder groups.

Firstly, it shall benefit event planners and individuals hosting functions who face difficulties discovering venues suiting their exact preferences and budgets currently. The platform will have listings and convenient booking, saving time and effort.

Secondly, underrepresented venues miss out on revenue potential and branding despite offerings. The project gives localized exposure to not very well-known venues via comprehensive listings and booking abilities, enabling sustainable livelihoods for their owners through increased customer acquisition.

Lastly, consumers overall find their choices limited. This platform aims to unveil the breadth of venues available to locals and visitors planning celebrations in Mt. Kenya region, elevating the entire sector.

1.6 Scope

The platform focuses on venues in Mt. Kenya region, hosting personal events like weddings and corporate functions catering from intimate gatherings to big conferences. The scope covers creating a platform meeting distinct preferences of Mt. Kenya region's market. The target population are individuals [local/tourists], event planners and organizers and the venue owners/organizations. The venues listed are restricted to ones only located in Mt. Kenya region. The people of Mt. Kenya region and those from far off places stand to benefit from this platform's convenience.

1.7 Limitation.

One major limitation I've encountered is finding research data and statistics specific to only venue bookings in the hotel industry. Most of the data on the internet is based on the overall hotel booking in terms of accommodation of guests that sleep there.

Chapter 2: Literature Review.

2.1 Introduction

This chapter examines existing literature on online venue booking platforms, with a focus on global, national, and local scales. It evaluates how current solutions serve their markets and identifies the gaps that exist for locales like Mt. Kenya region.

2.2 Case Studies

2.2.1 Case Study 1: Peerspace – A Global Venue Marketplace

Peerspace is an online marketplace that allows users across various global cities to book spaces for events such as weddings, corporate meetings, and creative productions. Literature reviews cite its vast, diverse directory and the ability to cater to niche needs as key strengths. The platform's user interface and transactional processes are highly streamlined, offering users a hassle-free booking experience. However, critiques often highlight the lack of localization in terms of cultural relevance and logistical nuances for users in non-western regions. For example, a user in Mt. Kenya region looking for a culturally significant venue aligned with local customs may find the options on Peerspace limited or inapplicable. Moreover, the platform's global scale could mean less focus on market-specific marketing strategies, which could hinder the discoverability of local venues in smaller towns or regions.

2.2.2 Case Study 2: Airbnb Event Spaces – A Broader Approach

Airbnb, known for its accommodation services, also provides users with the ability to book spaces for events through its Airbnb Event Spaces feature. As a platform operating on a global scale, Airbnb leverages its extensive accommodation listings to offer a variety of event spaces, including gardens, halls, and unique properties. The literature notes Airbnb's advantageous use of

a review system, which builds trust and provides social proof. However, studies indicate it may fall short in providing a fully-fledged booking system specifically for event spaces, as its primary focus remains on lodging. Additionally, the platform's generalist strategy might not meet the specific requirements and expectations of different African markets, where users often seek highly personalized experiences and services.

2.2.3 Case Study 3: ogaVenue - An African Venue Booking Platform

ogaVenue is a Nigerian-based platform that provides an online service for booking event venues. As one of Africa's largest venue booking portals, ogaVenue boasts a comprehensive listing of event spaces suitable for various occasions. Literature on ogaVenue commends it for addressing the event venue booking needs within Nigeria by offering users detailed information about each venue, including real-time availability, pricing, and amenities. The platform also provides supportive services such as event planning and decoration, positioning it as a full-service solution for event organizers. Despite its success in Nigeria, studies suggest ogaVenue's model has yet to be replicated or customized for other African markets with their own unique set of needs and cultural specifics. Thus, while ogaVenue serves as an excellent model for what Our platform could achieve, the latter could aim to fill the regional service gap by tailoring specifically to the Mt. Kenya region market, with local knowledge and presence.

2.2.4 Case Study 4: Cvent - Expansive Venue Listings in Mt. Kenya Region

Cvent is a global event management software provider that offers a venue sourcing platform for event planners. In Kenya, Cvent is recognized for its comprehensive list of hotel venues, especially in Nairobi, which serve a range of events from corporate conferences to social gatherings like weddings. Literature on Cvent often commends it for its extensive database and powerful search tools that allow users to filter venues based on specific criteria such as location, capacity, price, and available amenities.

However, critics point out that despite Cvent's wide array of listings in urban areas like Nairobi, it may not provide the same level of service and localized content in smaller towns or regions. Researchers have indicated that event planners in less urbanized areas may find the platform less tailored to their needs. Furthermore, while Cvent offers a robust set of features for venue sourcing, the platform's global focus may not resonate as deeply with local traditions and exposure of the offerings in the Mt. Kenya region.

This gap offers a unique opportunity for a platform like Ours that could specialize in the Mt. Kenya region market. This platform could differentiate itself by providing a more local experience, highlighting the unique attributes of each venue and perhaps integrating local reviews and ratings, which are more relatable to the local user. The platform could also offer enhanced features such as local language support, integration with popular mobile payment options like M-Pesa, and dedicated customer service to cater specifically to the needs and expectations of the Mt. Kenya region market.

2.3 Summary

The literature review has outlined the current state of online venue booking platforms, with a comparison across global and local scales. Platforms like Peerspace and Airbnb Event Spaces demonstrate strong market presence with their extensive listings and user-friendly interfaces, providing streamlined processes for venue booking globally. However, these platforms often fall short in addressing the cultural and logistical specifics of local markets, particularly in African regions where personalization and local practices play a crucial role. ogaVenue's success in Nigeria illustrates the potential for such platforms when they offer localized content and services, but its model has yet to be extended effectively to cater to other African countries like Kenya. Cvent, with its extensive database, suffers similar limitations outside major urban centers and lacks deep integration with local customs and payment systems. A common weakness identified across these platforms is their inadequate tailoring to the unique demands of smaller, more culturally distinct markets such as Mt. Kenya region, where a gap exists for a dedicated and locally nuanced service.

2.4 Research Gap

The research gap in the literature is evident; there is a lack of venue booking platforms that address the unique characteristics and needs of the Mt. Kenya region market. The needs include preference for cultural relevance, affordability and flexibility, emphasis on community engagement and accessibility and inclusivity. While existing platforms provide a robust framework for global and national audiences, they often overlook the importance of localization, comprehensive venue details, and integration with local payment and communication systems. There is a pronounced need for a platform that not only lists venues but also aligns with the cultural and practical expectations of local users, potentially enhancing the visibility and accessibility of Mt. Kenya region's venues to a wider audience.

2.5 Proposed Methodology

In alignment with the research gap identified, this platform will be developed using the Agile methodology to ensure a focus on user-centric design, adaptability, and iterative refinement. Agile is particularly suited to this project as it allows for incremental development, with regular testing and feedback at each stage. This approach will enable the accommodation of complex features such as user profile management, venue listings, and booking functionalities, which are critical to the platform's success.

The development will be structured around a series of sprints, each resulting in a workable version of the system that introduces or improves upon these features. User feedback will be solicited continuously throughout the development process to inform subsequent sprints. This will ensure that This platform not only meets the technical requirements of an online booking platform but also aligns closely with the user needs and preferences of the Mt. Kenya region market, facilitating a seamless and intuitive experience for managing venue listings and bookings.

Chapter 3: Methodology.

3.1 Introduction

This section introduces the Agile methodology and its applicability to the project, emphasizing continuous improvement, flexibility, and user involvement.

3.2 Fact-Finding Techniques

To gather requirements and insights for This platform, various fact-finding techniques will be employed. This will include:

- **Online Market Analysis:** Conducting a thorough review of existing online venue booking platforms through their websites and industry publications to understand the features they offer and identify common shortcomings.
- **User Reviews and Feedback:** Analyzing user reviews on various platforms to gain insights into what users appreciate and what they feel could be improved in current venue booking experiences.
- **Competitor Analysis:** Assessing competitor websites and their market positioning to determine strengths and weaknesses in their offerings and identifying opportunities This platform can capitalize on.

3.3 Software Design

The platform will be developed using an Agile approach broken into rapid iterations called sprints. Each sprint will focus on designing, building and testing a core set of features, leading to a potentially releasable product increment. The development will involve continuous

collaboration between the technical team and key users/stakeholders. Requirements will be dynamically prioritized based on feedback to meet the most pressing user needs. Design decisions around interfaces and system architecture will also evolve through regular user testing and reviews rather than getting fully locked up front. This allows incorporating evolving user insights.

The cyclic approach of gathering requirements, prototype, develop, test and refine ensures that This platform gets shaped by actual field needs rather than assumptions during formulation. Agile principles anchor the software design methodology powering the platform.

3.4 Preliminary Data Processing and Analysis

After the completion of tasks and at regular intervals, the implemented features of This platform will be evaluated based on user feedback, system analytics, and performance metrics. This continuous data gathering and analysis will inform any necessary adjustments to the project workflow, ensuring that This platform remains responsive to user needs and market developments.

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Appendices

Appendix A: Project Resources

1. Hardware Resources.

Devices required for project development and testing:

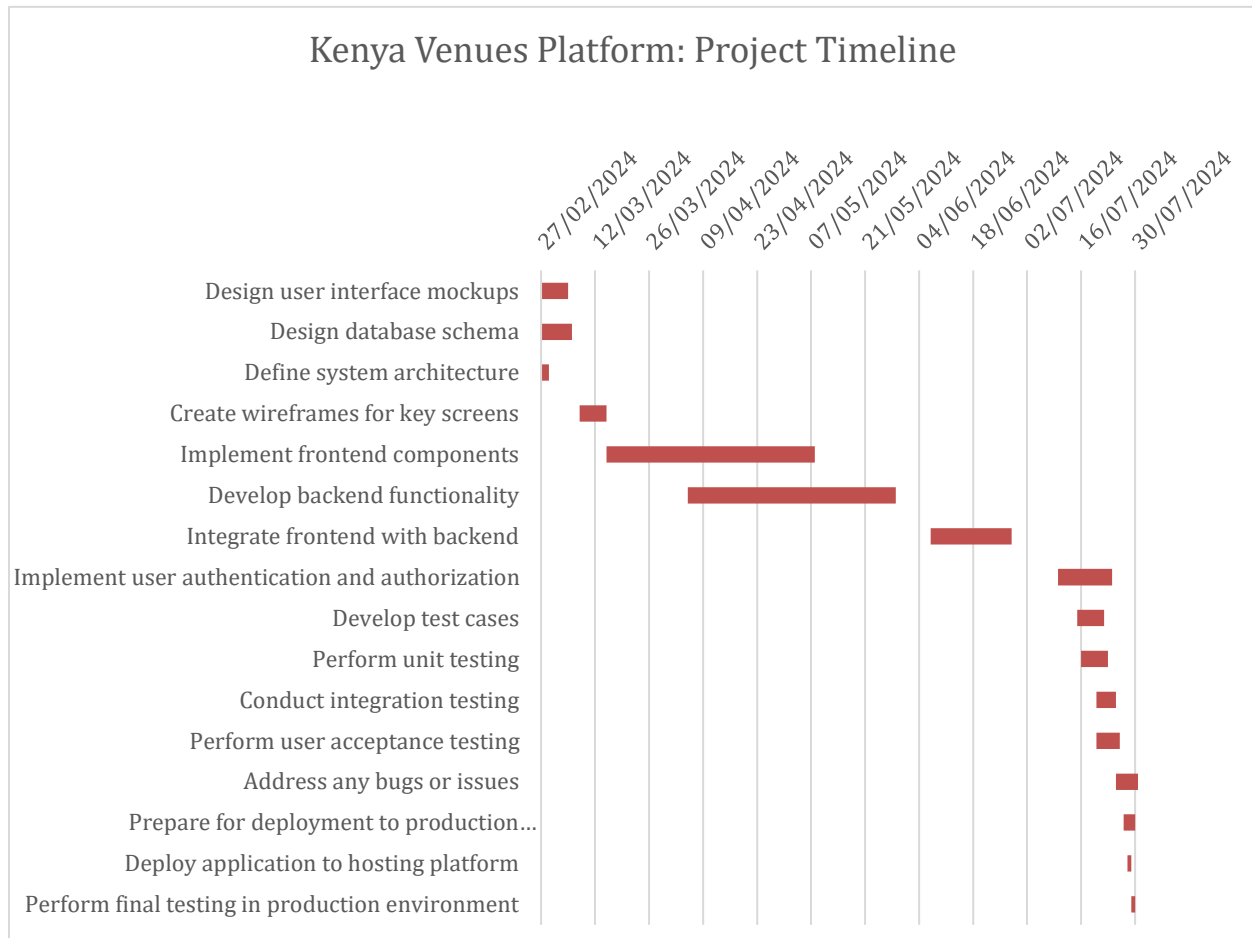
- Laptops – for building the website.
- Mobile phones - for testing responsiveness

2. Software Resources

These include frameworks, and platforms:

- Integrated Development Environment (IDE) – VS code
- Version Control System (VCS) – Git/GitHub
- Web Development Frameworks - React.js, Bootstrap
- Frontend Technologies – HTML, CSS, JavaScript
- Backend Technologies - PHP
- Database Management System (DBMS) - MySQL
- Project Management Tools - Jira, Trello
- Design and Prototyping Tools – Balsamiq, Figma

Appendix B: Gantt Chart



Appendix C: Budget

A comprehensive breakdown of all project-related expenses, including software licenses, hosting fees, and any other resources.

- Hosting – KES 2,500
- Domain Name – KES 500
- Wi-Fi – KES 500
- Miscellaneous – KES 1,500
- Total = KES 5,000

Appendix D: Group Modules Distribution.

Our project will be divided into four modules with each member getting one module:

Module 1: User Interface and Experience (UI/UX) Module:

To be done by: Tonny Gitonga [C026-01-1032/2021]

Scope: This module focuses on designing an intuitive and visually appealing user interface for the website. It involves creating wireframes, mockups, and prototypes to outline the user journey and interactions. Additionally, it includes designing user-friendly features such as search filters, venue profiles, and booking forms. The UX aspect involves ensuring smooth navigation, accessibility, and responsiveness across different devices.

Tasks:

- Conduct user research and gather requirements.
- Create wireframes and design mockups.
- Develop UI components and style guides.
- Implement responsive design principles.

Module 2; Backend Development Module:

To be done by: Anthony Mwangi [C026-01-0993/2021]

Scope: This module deals with building the backend infrastructure of the website, including server-side logic, databases, and APIs. It involves setting up a robust and scalable architecture to handle user authentication, venue data management, and booking transactions securely. Additionally, it includes integrating third-party services for features like payment processing and email notifications.

Tasks:

- Choose the appropriate backend technologies
- Set up databases and design schemas.
- Develop RESTful APIs for frontend-backend communication.
- Implement user authentication and authorization mechanisms.
- Integrate payment gateways and other external APIs.
- Ensure data security, privacy, and compliance with regulations

Module 3: Venue Management Module:

To be done by: Fredrick Maina [C026-01-1013/2021]

Scope: This module focuses on providing venue owners with tools to manage their listings and bookings efficiently. It involves creating a dashboard interface where venue owners can add/edit venue details, manage availability calendars, and respond to booking requests. Additionally, it includes implementing features for analytics, reporting, and communication with customers.

Tasks:

- Design and develop an admin dashboard with CRUD operations for venues.
- Implement features for managing venue availability and pricing.
- Integrate communication channels (e.g., messaging, notifications) between venue owners and customers.
- Develop analytics dashboards to track booking metrics and performance.
- Implement features for generating reports and insights for venue owners.

Module 4: Search and Booking Module:

To be done by: Musyoke Michael Ngumbi [C026-01-1008/2021]

Scope: This module deals with enabling users to search for venues based on various criteria and make bookings seamlessly. It involves implementing search algorithms, filtering options, and recommendation systems to help users discover suitable venues. Additionally, it includes developing booking workflows, reservation management, and payment processing functionalities.

Tasks:

- Design and develop search interfaces with advanced filtering options (e.g., location, capacity, amenities, price).
- Implement algorithms for personalized recommendations based on user preferences.
- Develop booking workflows with features for date selection, guest details, and payment processing.
- Implement features for managing reservations, cancellations, and refunds.
- Ensure smooth checkout experiences and secure payment transactions.