SRS Report for AYOJOK

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Abstract

AYOJOK is an all-in-one wedding and event management platform designed to simplify the complexities of event planning for clients and vendors across the country. The system integrates a comprehensive suite of tools enabling users to manage vendors, customize service packages, handle online bookings and payments, send digital invitations with RSVP tracking, and monitor budgets from a single, centralized platform.

By offering unique features such as an eco-friendly mode and real-time communication channels, **AYOJOK** aims to provide an organized, stress-free, and efficient planning experience. The platform is built to cater to engaged couples, event planners, and service providers, fostering a transparent and trusted ecosystem for creating memorable events.

Acknowledgements

We express our heartfelt gratitude to everyone who supported the creation of AYOJOK, a platform designed to be a reliable companion throughout the event planning process. From vendor management to budget tracking and supporting sustainable choices, AYOJOK strives to empower users with practical and innovative solutions for creating memorable experiences.

Special thanks go to all mentors, peers, and testers whose guidance, collaboration, and feedback have been invaluable during each stage of development. Their insights helped shape the system's features and improved the quality of our work.

We also acknowledge the various tools, technologies, and resources that enabled the successful realization of this project. The combined efforts and expertise of everyone involved are reflected in AYOJOK, and we hope it serves as a trusted assistant for users seeking a transparent, organized, and meaningful event planning journey.

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Chapter 1

Introduction

1.1 Purpose

AYOJOK is a web-based wedding management platform developed to make the entire planning process easier, more organized, and accessible for engaged couples and event planners. The system is designed to bring all essential wedding services under one roof allowing users to book vendors, manage guest lists, track budgets, and coordinate event details from a single dashboard.
By combining structure, flexibility, and user-friendly tools, **AYOJOK** helps users reduce stress and save time while planning their special day. It also promotes better communication between clients and vendors, ensures transparency in pricing, and encourages sustainable event practices.
The platform offers:

- Vendor search, comparison, and booking with detailed profiles and client reviews.
- Customizable service packages with instant pricing updates.
- Secure online booking and payment integration.
- Personalized digital invitations and tracking.
- Event timeline creation with automated checklists and reminders.
- Guest accommodation management with hotel suggestions and coordination tools.
- Budget tracking with alerts, graphs, and financial summaries.
- Real-time communication with vendors, guests, and team members.
- Gallery and inspiration board for theme planning and idea sharing.
- Eco-friendly mode promoting sustainable choices and paperless planning.

1.1.1 Problem Background

Wedding planning in Bangladesh and globally is often a complex and stressful process. Couples and event planners typically rely on multiple disconnected tools, manual coordination, and informal communication to manage vendors, guest lists, budgets, and timelines. This fragmented approach leads to confusion, delays, and unnecessary expenses. In many cases, there is no centralized system that offers complete control over the planning process.

1.1.2 Problem Description

Currently, most wedding planning is done through phone calls, spreadsheets, social media, and separate websites for vendors. There is no unified platform that allows users to manage all aspects of a wedding from one place. As a result, users face difficulties in tracking progress, comparing services, managing finances, and ensuring smooth communication. This lack of integration creates stress and reduces the overall quality of the event experience.

1.1.3 Problem Reasoning

The main reason behind these challenges is the absence of a digital solution that combines all essential wedding planning features into one system. Without a centralized platform:

- Users waste time switching between tools and contacts.
- Vendor coordination becomes inefficient and error-prone.
- Budget tracking is manual and lacks real-time updates.
- Guest management is scattered and hard to monitor.
- Sustainable planning options are rarely considered.

AYOJOK is designed to solve these problems by offering a complete wedding management system that simplifies planning, improves coordination, and promotes eco-friendly practices.

1.2 Goal

The goal of AYOJOK is to build a user-friendly, web-based platform that helps couples and event planners organize weddings more efficiently. The system will allow users to:

- Search and book vendors with transparent pricing and reviews.
- Customize service packages based on budget and preferences.
- Send digital invitations and track RSVPs.
- Manage guest accommodations and event schedules.

- Monitor expenses with a built-in budget tracker.
- Communicate in real time with vendors and team members.
- Explore themes and ideas through a gallery and inspiration board.
- Choose eco-friendly options to reduce environmental impact.

By integrating all these features, AYOJOK aims to reduce stress, save time, and deliver a smoother planning experience.

1.3 System Development Life Cycle (SDLC)

To develop AYOJOK, we will follow the Waterfall Model of the System Development Life Cycle (SDLC), which includes the following phases:

1. **Requirement Analysis**
    - Identify user needs and define system features.
    - Conduct surveys and interviews with target users.
2. **System Design**
    - Create UI mockups, database schema, and system architecture.
    - Plan workflows and feature integration.
3. **Implementation**
    - Develop frontend using React.js and backend using Node.js, PHP, and Java.
    - Integrate MongoDB, MySQL, and PostgreSQL for data management.
4. **Testing**
    - Perform unit testing, integration testing, and user acceptance testing.
    - Fix bugs and optimize performance.
5. **Deployment**
    - Launch the system for real-world use.
    - Ensure server stability and user accessibility.
6. **Maintenance**
    - Provide updates, add new features, and fix post-deployment issues.
    - Monitor user feedback for continuous improvement.

Chapter 2

System Study or Information Gathering

2.1 Introduction

Before starting the design and development of **AYOJOK**, it was essential to study the current landscape of wedding planning and understand the needs, expectations, and pain points of potential users. This chapter outlines the methods used to gather relevant information, which helped shape the system's features and overall structure. The study involved both internal and external sources, including team discussions, academic resources, market research, and user feedback. The goal was to ensure that **AYOJOK** is not only technically sound but also practically useful and aligned with real-world demands.

2.2 Information Sources

To build a system that truly addresses the challenges of wedding planning, we relied on a combination of internal and external sources. These sources provided insights into user behavior, industry standards, and technical feasibility.

2.2.1 Internal Sources

- **Team Brainstorming:** Our group held multiple sessions to discuss common issues faced during wedding planning and how technology could solve them.
- **Instructor Guidance:** Faculty members provided feedback on system scope, feasibility, and design strategies.
- **Previous Academic Projects:** We reviewed past UIU projects related to event management and system design to understand documentation standards and technical approaches.

- **Course Materials:** Concepts from System Analysis & Design helped us structure our research and development phases effectively.

2.2.2 External Sources

- **User Interviews:** We spoke with engaged couples and event planners to understand their workflow, frustrations, and expectations.
- **Online Surveys:** A short questionnaire was distributed to gather data on how people currently plan weddings and what tools they use.
- **Competitor Analysis:** We studied platforms like WeddingWire, The Knot, and local Bangladeshi services to identify common features and gaps.
- **Vendor Websites:** Service providers' websites gave us insight into pricing models, availability, and service categories.
- **Social Media & Forums:** Platforms like Facebook groups and Reddit threads helped us observe real-time discussions around wedding planning challenges.

2.3 Information Gathering

The process of gathering information was both qualitative and quantitative. We focused on understanding user needs, identifying missing features in existing systems, and validating our ideas through direct feedback.

2.3.1 Internal Sources

- **Team Discussions:** We listed out key problems such as vendor miscommunication, budget overruns, and guest coordination issues.
- **Mock Use Cases:** We created sample user journeys to visualize how someone would interact with the system.
- **Instructor Feedback:** Suggestions from faculty helped us refine our feature list and prioritize essential components.
- **Academic References:** We used course frameworks to guide our SDLC planning and system modeling.

2.3.2 External Sources

To understand the broader context of wedding planning and identify gaps in existing solutions, we explored several external sources. These helped us validate our ideas and shape the system features based on real-world needs.

- **User Interviews:** We conducted informal interviews with engaged couples and event planners to learn about their experiences, challenges, and expectations. Most expressed frustration with managing multiple vendors and tracking guest responses manually.
- **Online Surveys:** A short survey was distributed among university students and young professionals to gather insights on how people currently plan weddings. The responses highlighted a strong interest in digital tools that could simplify the process.
- **Competitor Platforms:** We studied websites like WeddingWire, The Knot, and local Bangladeshi platforms to analyze their features, user interfaces, and limitations. While these platforms offer vendor listings and inspiration galleries, they often lack real-time communication, budget tracking, and eco-friendly planning options.
- **Vendor Websites & Social Media:** We reviewed service provider pages on Facebook and Instagram to understand how vendors present their offerings, pricing, and availability. This helped us design vendor profiles that are informative and easy to compare.
- **Online Articles & Blogs:** We explored blogs and articles on wedding trends, digital planning tools, and sustainable event practices. These sources helped us identify emerging needs such as paperless invitations and green alternatives.

2.4 Research Papers

To support the development of **AYOJOK**, we reviewed several research papers focused on digital wedding planning systems and event management platforms. These studies highlighted the need for centralized vendor coordination, budget tracking, and user-friendly design. One paper emphasized the benefits of integrating real-time communication and scheduling tools, while another explored eco-friendly planning practices. These insights helped validate our system features and guided the overall design approach.

1. Wedding Planner – IJTRD

This paper presents a system that helps users search and select wedding service vendors based on input data and scoring algorithms. It includes features like:

- Vendor recommendation based on category and user preferences
- Electronic storefronts for vendors
- Guest list management and SMS invitations

It highlights the fragmented nature of the wedding industry and the need for a centralized digital solution—very much aligned with AYOJOK's goals.
Link: Wedding Planner

2. "Your Dream" Virtual Wedding Planning System – SCIRJ

This study focuses on a virtual wedding planner that supports:

- Automated scheduling and reminders via SMS
- Vendor search using web scraping
- Guest list and budget management

It addresses the challenge of balancing career and wedding planning, especially for young couples—similar to the user-centric approach of AYOJOK.
Link: "Your Dream" Virtual Wedding Planning System

3. Development of Wedding Planner Using Extreme Programming – IOP Conference Series

This paper describes the development of a wedding planner system using the Extreme Programming (XP) methodology. Key features include:

- Time management tools
- Budget comparison across traditional wedding packages
- Alerts and reminders for scheduling

It's especially useful if you want to reference agile development practices or compare SDLC models.
Link: Development of Wedding Planner Using XP

2.5 Similar Websites

Here's an expanded description of each platform, emphasizing how their features relate to Project AYOJOK's objectives:

1. **Shaandaar Events**
   Shaandaar Events is a premium wedding and event management company based in Northern India, particularly active in Chandigarh, Gurugram, Jaipur, and surrounding regions. The company specializes in luxury weddings and offers a wide range of services including décor design, logistics coordination, vendor management, photography, videography, hospitality, entertainment, stationery, and customized gifting. Shaandaar Events has earned a strong reputation for delivering seamless and personalized experiences, and client feedback consistently highlights their professionalism and attention to detail.

2. **Wedding Vogue (Bangladesh)**
   Wedding Vogue is an event-related entity based in Bangladesh with a primary focus on wedding planning. While its digital presence is limited, available information suggests that the organization offers planning and coordination services for weddings and related social occasions. The company's communication channels, including a Facebook page, indicate a developing presence in the industry; however, its portfolio and detailed scope of services are not extensively documented in the public domain.

3. **BD Icons Group (Icon Event Management & Wedding Planner)**
   BD Icons Group, through its brand Icon Event Management & Wedding Planner, is recognized as one of the leading event management companies in Bangladesh. With more than a decade of experience, the group provides comprehensive services covering weddings, corporate events, birthdays, and other special occasions. Their services range from venue selection and décor to vendor management, cultural customization, and overall event coordination. The company is government-enlisted and has been consistently ranked among the top wedding planners in Bangladesh, owing to its emphasis on client satisfaction, professionalism, and creative execution.

4. **Eraya Events**
   Eraya Events is a wedding and event management company operating in Bangladesh, offering full-service event planning solutions. Their services include décor and venue styling, photography, catering, pre-wedding shoots, and entertainment arrangements. With a flexible approach, Eraya Events provides both in-house décor expertise and the option for clients to engage external decorators, while still managing the overall planning process. The company maintains an active presence on regional wedding platforms such as WedMeGood, which further enhances its credibility and visibility within the industry.

2.6 Define and Desired State

Define (Current State)

The current state refers to the existing condition of event management or subsidy tracking systems, focusing on how services are currently delivered and what limitations are observed. In many cases, traditional event management or agricultural service platforms suffer from:

- **Fragmented Services:** Vendor management, payment systems, guest communication, and budgeting tools are often scattered across multiple providers rather than being integrated into a single platform.
- **Manual or Semi-Digital Processes:** Bookings, payments, and communication may still rely heavily on manual interaction, causing delays and inefficiencies.

- **Limited Accessibility:** Existing systems often lack user-friendly interfaces, multilingual support, or mobile-friendly solutions, making them less accessible for rural or less tech-savvy users.
- **Lack of Transparency:** Features such as live updates (market rates, subsidy status, or event timelines) are missing or underdeveloped, reducing trust and efficiency.
- **Poor Innovation Adoption:** Eco-friendly practices, real-time tracking, and analytics are rarely integrated into current platforms.

Desired State

The desired state outlines the vision of an improved, future-ready system that integrates innovation to address the above limitations. This should describe a holistic, user-centered, and technology-enabled platform:

- **Unified Digital Platform:** All core functions (vendor management, booking, payments, invitations, guest management, subsidies) should be available in a single, seamless platform.
- **Automation and Smart Features:** Automated reminders, real-time notifications, and intelligent budget tracking should replace manual processes.
- **User-Centric Design:** Interfaces should be simple, multilingual, and mobile-friendly, ensuring accessibility for diverse users including rural communities.
- **Transparency and Trust:** Real-time updates (market rates, subsidy status, guest confirmations) should be embedded to build confidence.
- **Innovative and Sustainable Practices:** Integration of eco-friendly event modes, digital invitations, and paperless communication reduces environmental impact.
- **Scalability and Flexibility:** Customizable packages and modular features allow the platform to serve both small-scale users (e.g., farmers, small event planners) and large-scale users (corporates, luxury events).
- **Data-Driven Insights:** Advanced analytics, reporting, and monitoring tools help stakeholders make informed decisions and continuously improve services.

Addressing the Gaps

The gap analysis lies in identifying where the current systems fall short (e.g., fragmented services, lack of automation, poor accessibility) and aligning them with the desired innovations (e.g., integrated platforms, automation, user-friendly design, eco-friendly features). Bridging these gaps will ensure efficiency, inclusivity, sustainability, and enhanced user satisfaction.

Chapter 3

System Analysis

3.1 Introduction

System Analysis is a critical phase in the development of any information system, as it focuses on understanding the current processes, identifying challenges, and defining the requirements for an improved solution. For the Smart Farmers' Marketplace & Subsidy Tracker, the system analysis serves as the foundation for designing a platform that addresses the existing inefficiencies in agricultural marketplaces and subsidy distribution.

The agricultural sector, particularly in rural regions, faces several persistent challenges such as limited market access, lack of transparency in subsidy allocation, inadequate digital tools for farmers, and heavy reliance on traditional word-of-mouth information channels. These issues often lead to financial losses for farmers, inefficiencies in government resource distribution, and restricted opportunities for growth.

By conducting a structured system analysis, this project aims to:

1. **Define the Current State** – Assess existing platforms, manual processes, and service gaps in agricultural marketplaces and subsidy management systems.
2. **Identify User Needs** – Understand the requirements of farmers, buyers, and government agencies, focusing on accessibility, transparency, and ease of use.
3. **Establish the Desired State** – Outline the vision for a unified digital platform that integrates features such as farmer registration, online marketplace access, subsidy tracking, live market updates, multilingual support, and eco-friendly practices.
4. **Bridge the Gaps** – Compare current limitations with desired innovations, ensuring the new system provides efficiency, inclusivity, and sustainability.

Through this analysis, the project emphasizes not only technical improvements but also social impact—empowering rural farmers with modern tools, ensuring fair subsidy distribution, and building trust between stakeholders. The outcome of this phase will directly guide the design, development, and implementation of the proposed system.

3.2 Gap Analysis

A GAP analysis is conducted to identify the discrepancies between the current state of agricultural marketplaces and subsidy distribution systems and the desired state envisioned by the proposed Smart Farmers' Marketplace & Subsidy Tracker. This analysis highlights the limitations of existing processes and demonstrates how the new system will bridge these gaps through innovation and integration.

3.2.1 Current State

1. **Fragmented Services** – Platforms are scattered with no centralized solution.
2. **Manual Subsidy Allocation** – Processes are time-consuming and error-prone.
3. **Word-of-Mouth Dependency** – Farmers rely on informal sources for information.
4. **Limited Marketplace Access** – Farmers cannot easily reach reliable buyers.
5. **No Real-Time Notifications** – Communication is delayed and inefficient.
6. **Complex User Interfaces** – Systems are not rural-friendly or multilingual.
7. **Semi-Digital Transactions** – Payments are not fully secure or online.
8. **Lack of Analytics** – No reporting or decision-support tools exist.
9. **Poor Coordination** – Event or farmer management lacks automation.
10. **Paper-Based Processes** – Heavy reliance on physical records and documents.

3.2.2 Desired State

1. **Unified Digital Platform** – All services integrated into one system.
2. **Automated Subsidy Tracking** – Transparent, real-time subsidy updates.
3. **Direct Marketplace Access** – Farmers connect with trustworthy buyers.
4. **Live Data Availability** – Continuous updates on prices and subsidy status.
5. **Instant Notifications** – SMS and app alerts for real-time communication.
6. **Inclusive User Design** – Simple, multilingual, and mobile-friendly interfaces.
7. **Secure Online Payments** – Fully digital and safe financial transactions.
8. **Data-Driven Insights** – Advanced analytics and reporting for stakeholders.
9. **Automated Workflows** – Event and farmer coordination made seamless.
10. **Eco-Friendly Operations** – Paperless, sustainable, and digital-first practices.

3.3 Benchmark

Benchmark Analysis on AYOJOK involves examining existing wedding planning systems and platforms to identify best practices and performance standards. This analysis helps highlight the strengths and weaknesses of current solutions, providing insights into user-friendly and efficient features. By comparing AYOJOK with competitors, we can pinpoint gaps and opportunities for innovation in wedding management. The findings guide the development of intuitive, comprehensive, and stress-free planning tools for engaged couples and event planners. Ultimately, benchmarking ensures that AYOJOK delivers a seamless, competitive, and highly effective wedding planning experience.

Benchmark Analysis of Event Management Platforms

Feature	Shaandaar Events	Wedding Vogue BD	BD Icons Group	Eraya Events	AYOJOK (User Website)
Vendor Management	✔	✘	✔	✔	✔
Customizable Packages	✔	✘	✔	✔	✔
Online Booking & Payment	✘	✘	✔	✘	✔
Digital Invitations & RSVPs	✔	✘	✔	✔	✔
Event Timeline & Checklist	✔	✘	✔	✔	✔
Guest Accommodation	✔	✘	✔	✔	✔
Budget Tracker	✘	✘	✔	✘	✔
Real-Time Communication	✘	✘	✔	✘	✔
Gallery & Inspiration	✔	✘	✔	✔	✔
Eco-Friendly Mode	✘	✘	✘	✘	✔
Full Support	6/10	0/10	9/10	6/10	10/10

Figure 3.1: Benchmark Analysis

3.4 Survey

In order to develop a user-friendly and effective wedding event management platform, we conducted a Customer Feedback Survey. The goal of this survey was to understand the needs, preferences, and challenges faced by people when planning or attending weddings. By collecting this feedback, we were able to identify which features of our proposed system, **AYOJOK**, are most useful and relevant.

The survey also helped us measure the level of interest in different services such as vendor management, online booking, digital invitations, budget tracking, and eco-friendly options. The insights we gathered guided us in refining our system so that it better aligns with customer expectations and ensures a smooth, stress-free wedding planning experience.

3.4.1 Survey Methodology

1. **Survey Type:**
    - Structured Online Questionnaire using Google Forms
2. **Sample Size:**

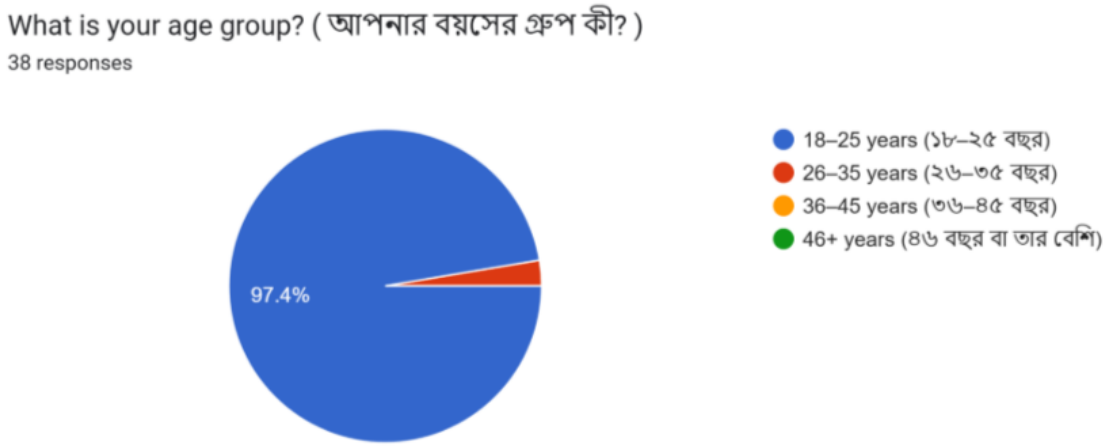
- 38 Respondents (Aged 18-35)

3. **Distribution Method:**
   - Shared through university student groups
   - Shared via personal friend circles
   - Distributed through social media platforms (Facebook/WhatsApp)
   - Word of mouth
4. **Target Respondents:**
   - Individuals who are planning weddings or events in the near future
   - University students and young professionals (as potential future clients)
   - Friends and family members with prior experience in wedding management
   - General participants familiar with online services and event planning
5. **Survey Objectives:**
   - Identify whether respondents have previously used any wedding/event management services (online or offline)
   - Explore the main difficulties faced in planning/attending weddings (e.g., budget, vendors, guest management)
   - Measure demand for a centralized platform offering venue booking, vendor hiring, guest list management, and payments
   - Evaluate user interest in key features such as *Vendor Management, Online Booking, Digital Invitations, Budget Tracking, Real-time Communication, and Eco-Friendly Options*
   - Assess trust levels regarding online payments for wedding services
   - Understand preferences for digital invitations versus traditional printed cards
   - Measure likelihood of recommending such a platform to others
6. **Survey Tools Used:**
   - Google Forms for questionnaire design and response collection
   - Google Sheets and Microsoft Excel for response analysis and filtering
   - Charts and Graphs (bar, pie charts) were generated to visualize survey results and draw conclusions

3.4.2 Survey Questions

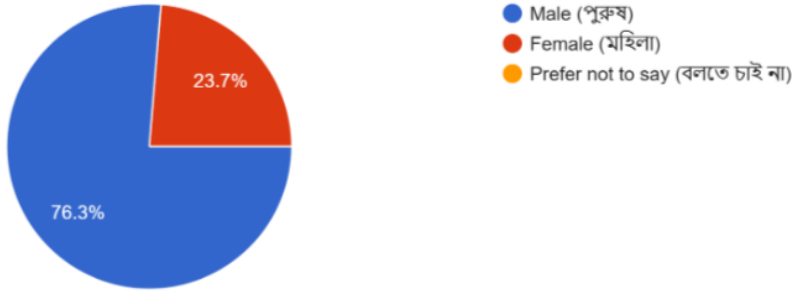
1. What is your age group?
2. What is your gender?
3. What is your Occupation?
4. Have you ever used any event/wedding planning service?
5. If yes, which platform/service did you use?
6. What difficulties did you face while managing/attending a wedding?
7. How satisfied were you with existing solutions?
8. Do you think a centralized wedding management platform is needed?
9. Which features would you find most useful?
10. Would you trust making online payments through our platform?
11. How important is a budget tracker for you?
12. Would you prefer digital invitations (eco-friendly) over printed cards?
13. How likely are you to recommend such a platform?
14. Do you have any suggestions for additional features?

3.4.3 Survey Results and Analysis



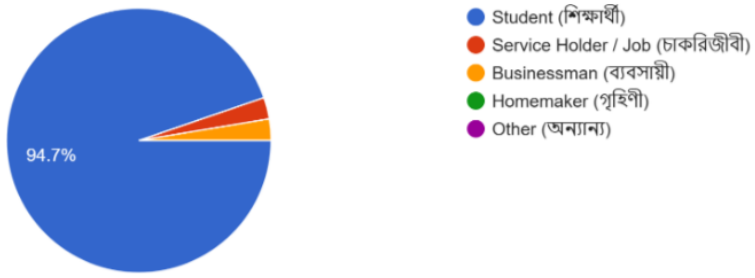
What is your gender? (আপনার লিঙ্গ কী?)

38 responses



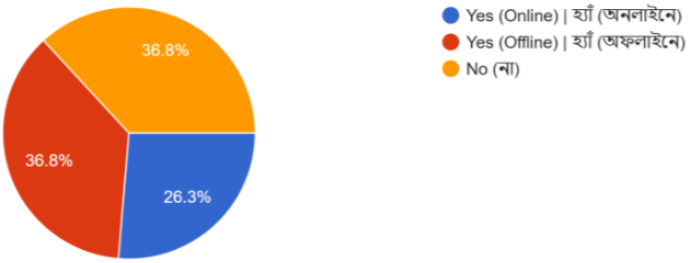
What is your Occupation? (আপনার পেশা কী?)

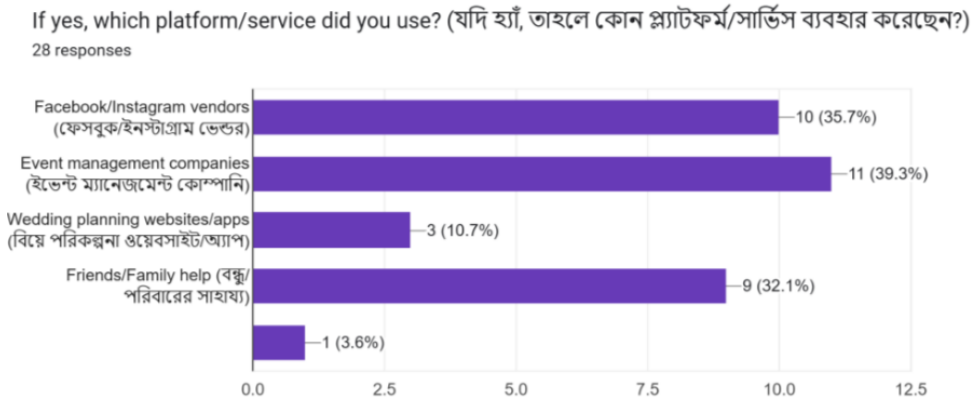
38 responses

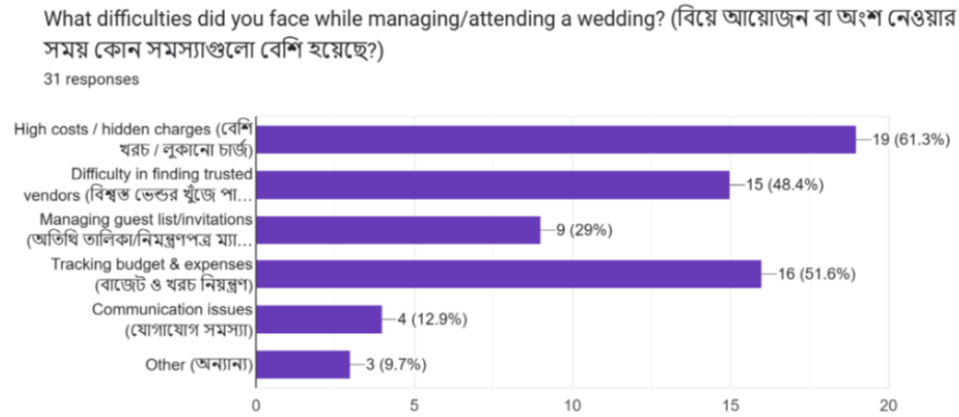


Have you ever used any event/wedding planning service? (আপনি কি কখনো কোনো বিয়ে/ইভেন্ট ম্যানেজমেন্ট সার্ভিস ব্যবহার করেছেন?)

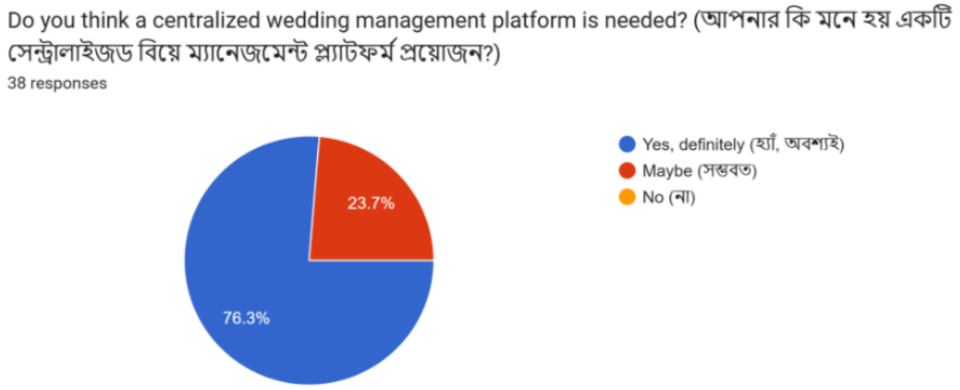
38 responses

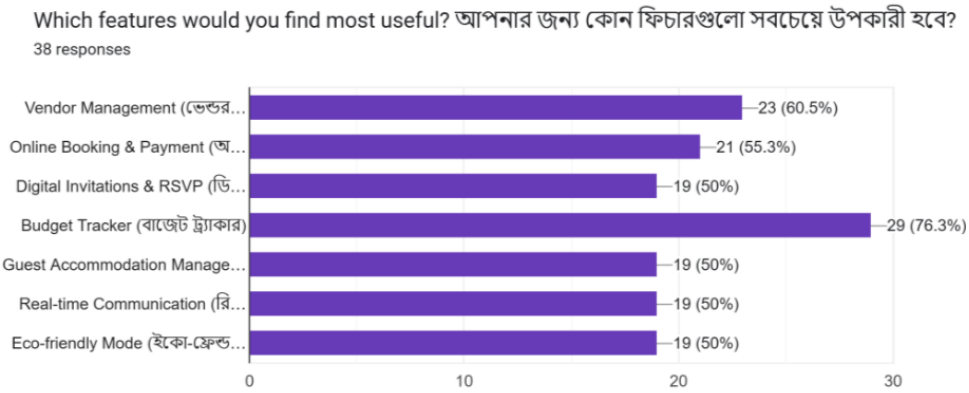


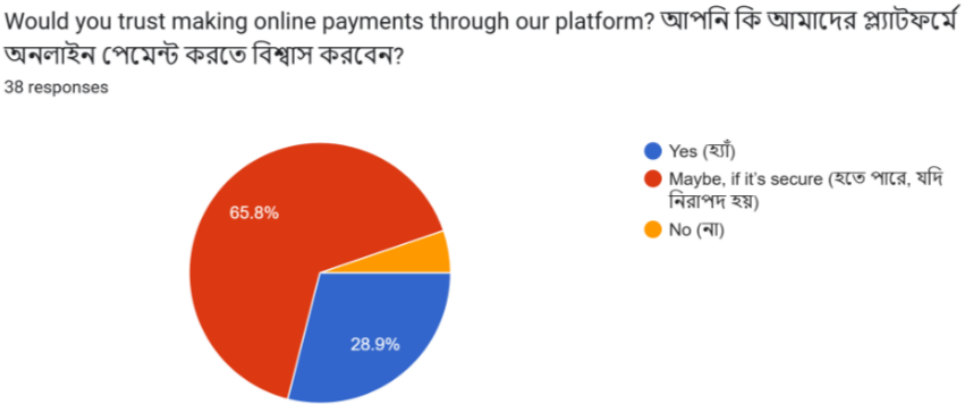

If yes, which platform/service did you use? (যদি হ্যাঁ, তাহলে কোন প্ল্যাটফর্ম/সার্ভিস ব্যবহার করেছেন?)
28 responses
Facebook/Instagram vendors (ফেসবুক/ইনস্টাগ্রাম ভেন্ডর)
10 (35.7%)
Event management companies (ইভেন্ট ম্যানেজমেন্ট কোম্পানি)
11 (39.3%)
Wedding planning websites/apps (বিয়ে পরিকল্পনা ওয়েবসাইট/অ্যাপ)
3 (10.7%)
Friends/Family help (বন্ধু/পরিবারের সাহায্য)
9 (32.1%)
1 (3.6%)
0.0
2.5
5.0
7.5
10.0
12.5

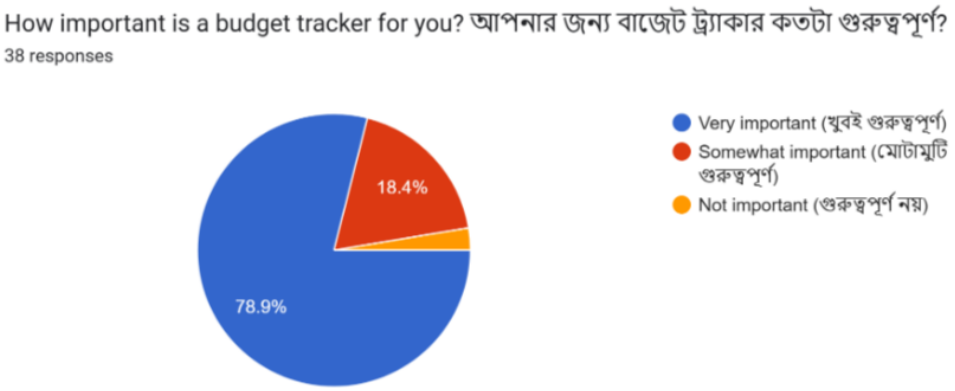

What difficulties did you face while managing/attending a wedding? (বিয়ে আয়োজন বা অংশ নেওয়ার সময় কোন সমস্যাগুলো বেশি হয়েছে?)
31 responses
High costs / hidden charges (বেশি খরচ / লুকানো চার্জ)
19 (61.3%)
Difficulty in finding trusted vendors (বিশ্বস্ত ভেন্ডর খুঁজে পা...
15 (48.4%)
Managing guest list/invitations (অতিথি তালিকা/নিমন্ত্রণপত্র ম্যা...
9 (29%)
Tracking budget & expenses (বাজেট ও খরচ নিয়ন্ত্রণ)
16 (51.6%)
Communication issues (যোগাযোগ সমস্যা)
4 (12.9%)
Other (অন্যান্য)
3 (9.7%)
0
5
10
15
20

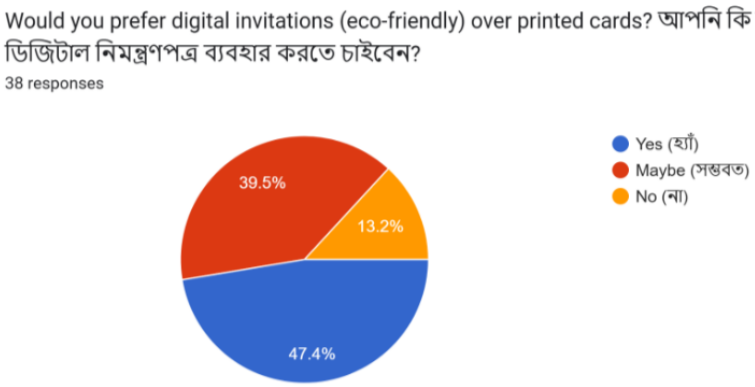

How satisfied were you with existing solutions? (আপনি বিদ্যমান সেবাগুলো নিয়ে কতটা সন্তুষ্ট ছিলেন?)
30 responses
63.3%
20%
Very Satisfied (খুব সন্তুষ্ট)
Satisfied (সন্তুষ্ট)
Neutral (মধ্যম)
Dissatisfied (অসন্তুষ্ট)
Very Dissatisfied (খুব অসন্তুষ্ট)

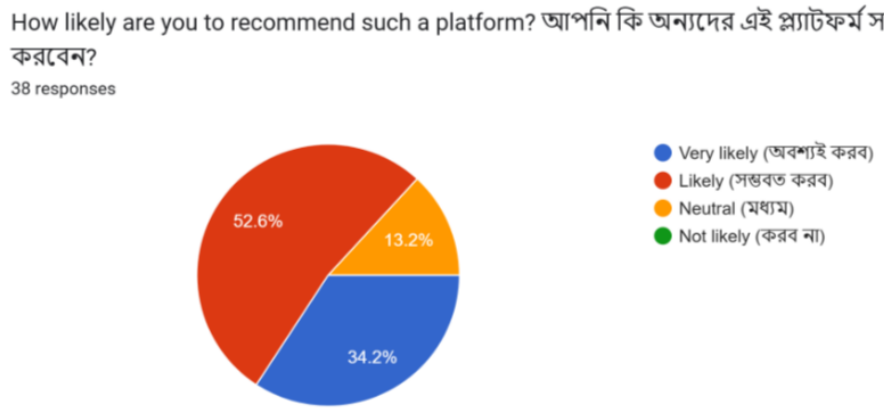

Do you think a centralized wedding management platform is needed? (আপনার কি মনে হয় একটি সেন্ট্রালাইজড বিয়ে ম্যানেজমেন্ট প্ল্যাটফর্ম প্রয়োজন?)
38 responses
23.7%
76.3%
Yes, definitely (হ্যাঁ, অবশ্যই)
Maybe (সম্ভবত)
No (না)


Which features would you find most useful? আপনার জন্য কোন ফিচারগুলো সবচেয়ে উপকারী হবে?
38 responses
Vendor Management (ভেন্ডর...
Online Booking & Payment (অ...
Digital Invitations & RSVP (ডি...
Budget Tracker (বাজেট ট্র্যাকার)
Guest Accommodation Manage...
Real-time Communication (রি...
Eco-friendly Mode (ইকো-ফ্রেন্ড...
23 (60.5%)
21 (55.3%)
19 (50%)
29 (76.3%)
19 (50%)
19 (50%)
19 (50%)
0
10
20
30


Would you trust making online payments through our platform? আপনি কি আমাদের প্ল্যাটফর্মে অনলাইন পেমেন্ট করতে বিশ্বাস করবেন?
38 responses
65.8%
28.9%
Yes (হ্যাঁ)
Maybe, if it's secure (হতে পারে, যদি নিরাপদ হয়)
No (না)







3.5 SWOT Analysis

3.5.1 Strength

- **All-in-one platform:** A single solution for all event needs.

- **Unique Features:** Eco-Friendly Mode and Real-Time Communication offer a competitive edge.
- **Customization:** High flexibility in creating personalized packages.
- **Professionalism & Trust:** Aims to build a trusted network of verified vendors.

3.5.2 Weakness

- **Technical Complexity:** Integrating diverse features requires high expertise.
- **Market Entry:** Competing with established players can be challenging.
- **Resource Intensive:** Development and vendor onboarding require significant investment.
- **Vendor & User Onboarding:** Attracting a critical mass of vendors and users is a hurdle.

3.5.3 Opportunities

- **Untapped Features:** Gaps in the market, like eco-friendly options and real-time chat.
- **Growing Event Industry:** The market for organized events is expanding.
- **Expansion Potential:** The platform can be scaled to manage other event types beyond weddings.
- **Partnership with Vendors:** Collaborating with vendors can create a strong ecosystem.

3.5.4 Threats

- **Competitive Market:** The event management space has several established competitors.
- **Technical Risks:** Potential for bugs, security breaches, and scalability issues.
- **Data Privacy Concerns:** Handling sensitive user and payment data requires robust security.
- **Vendor Cooperation:** Success depends on the willingness of vendors to join and actively use the platform.

3.5.5 Strategy

- All-in-one wedding management platform
- Unique Eco-Friendly and Real-Time Features
- Early Vendor Onboarding for Fast Growth
- Transparent Pricing and Seamless Mobile Experience
- Expansion to Diverse Event Types and Strategic Partnerships

Chapter 4

Design of the System

4.1 Introduction

This chapter describes the system's design process, including the general framework and the specifics of its operation. Identifying the primary application components, outlining their functions, and describing how they interact with the system architecture are the key goals of the design process. The goal is to create a transparent architecture that guarantees dependability, seamless user engagement, and efficient data management. A collection of

diagrams that depict both functional and non-functional elements of the system design are used to convey the design. During implementation, these representations serve as a guide for developers, guaranteeing a smooth and intuitive transition from user input to feature execution, including mood tracking, community interaction, and habit creation.

4.2 Context Diagram (0 level Diagram)

The context diagram illustrates the interaction between the system and its external actors. It defines the scope of the system by showing what lies inside and outside its boundaries. This diagram provides a high-level view of how data flows between the system and entities such as users, administrators, or third-party services. By mapping these relationships, the diagram helps in understanding the overall environment in which the system operates.

System Name:

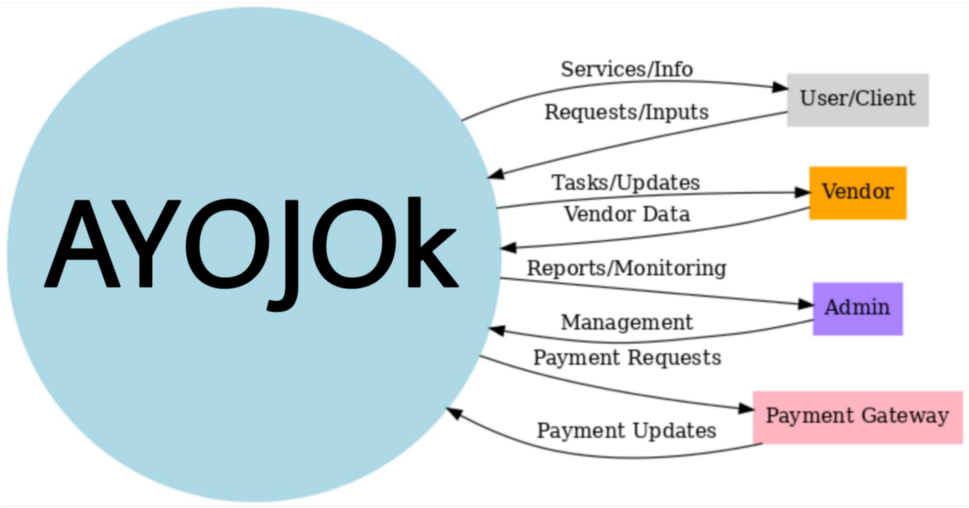
AYOJOK – Wedding Management System

- **External Entities:**
  - **Users/Clients** (couples, event planners)
  - **Vendors/Service Providers** (caterers, decorators, photographers, etc.)

- **Guests** (receiving invitations, RSVP, accommodation info)
- **Payment Gateway** (for online transactions)
- **Database** (storing user info, event details, transactions, vendor data)

• **System Functions:**

- Vendor Management
- Customizable Packages
- Online Booking & Payment
- Digital Invitations & RSVPs
- Event Timeline & Checklist
- Guest Accommodation Management
- Budget Tracker
- Real-Time Communication
- Gallery & Inspiration Board
- Eco-Friendly Mode



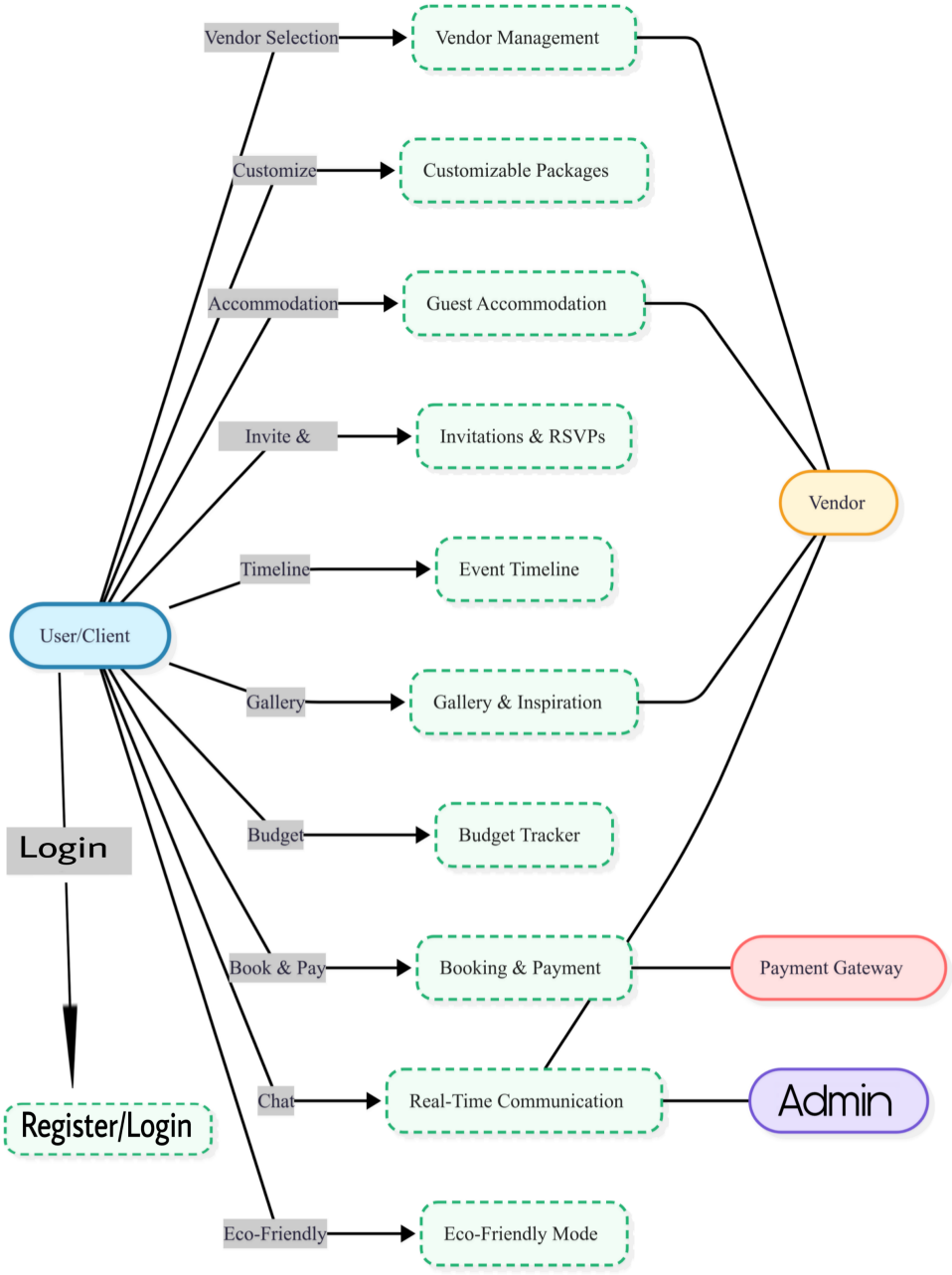
4.3 DFD Diagram (1 level Diagram)

The **Level-1 Data Flow Diagram (DFD)** of **AYOJOK** breaks down the system into its major functional modules. Each process represents a core service offered by the platform,

and the diagram illustrates how users, vendors, guests, the payment gateway, and the database interact with these modules.

- **Processes (Main Functions):**
  - Vendor Management–Allows users to search, compare, and communicate with vendors.
  - Customizable Packages–Users create or edit event packages with flexible pricing.
  - Online Booking & Payment–Handles reservations and integrates with the payment gateway.
  - Digital Invitations & RSVPs–Sends invitations and collects guest responses.
  - Event Timeline & Checklist–Manages schedules, tasks, and deadlines.
  - Guest Accommodation Management–Suggests and tracks guest accommodations.
  - Budget Tracker–Monitors expenses and provides budget reports.
  - Real-Time Communication–Supports chat between users, vendors, and planners.
  - Gallery & Inspiration Board–Offers theme inspirations and vendor showcases.
  - Eco-Friendly Mode–Promotes sustainable event planning.

- **External Entities Connected:**
  - Users/Clients interact with all processes.
  - Vendors are linked with Vendor Management.
  - Guests are connected through Invitations/RSVPs and Accommodation.
  - Payment Gateway supports Online Booking & Payment.
  - Database stores and retrieves all event-related data across processes.



4.4 Use-Case Diagram

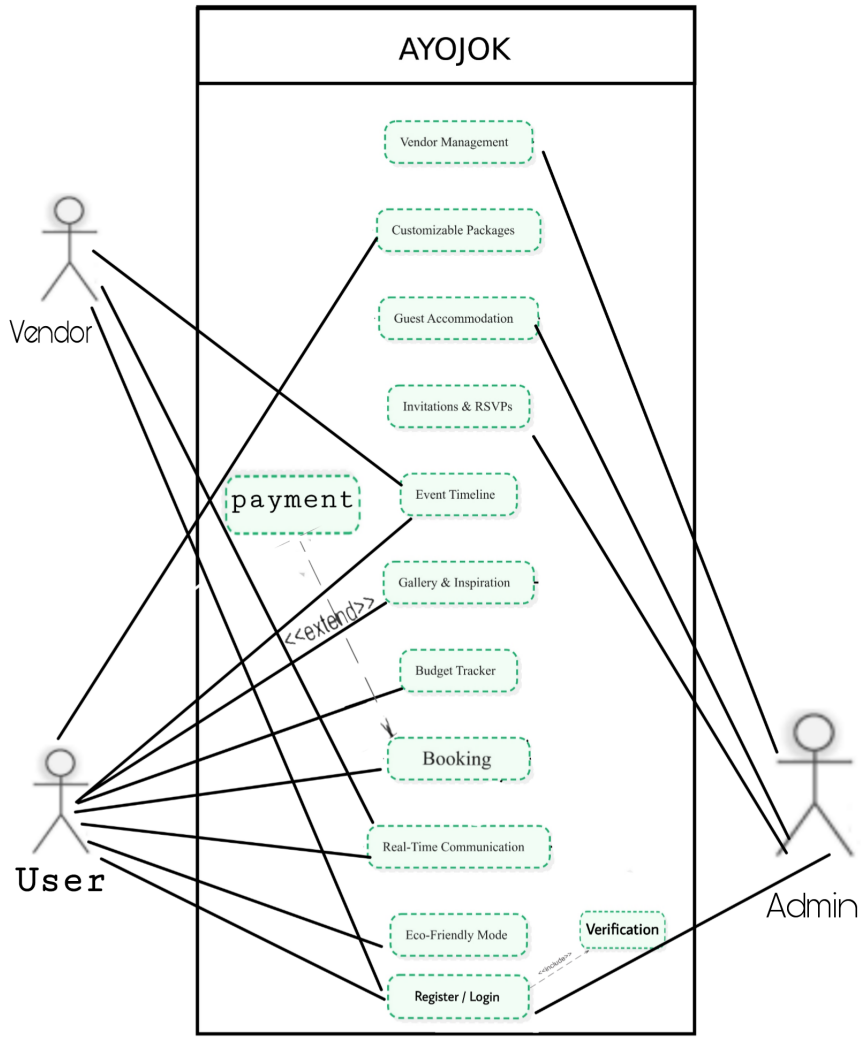
A Use-Case Diagram illustrates how different users (actors) interact with the AYOJOK system. It represents the high-level functionalities provided by the system and the relationships between users and their goals.

- **Actors:**
  - **User (Client / Event Planner):** Books services, manages events, and interacts with vendors.

- **Admin:** Manages platform activities, ensures smooth operation, and moderates vendor/service data.
- **Vendor:** Provides services (e.g., catering, photography, decoration) and interacts with clients.

• **Use Cases:**

- Vendor Management (search, compare, hire vendors)
- Customizable Packages (create and personalize event packages)
- Online Booking & Payment
- Digital Invitations & RSVPs
- Event Timeline & Checklist
- Guest Accommodation Management
- Budget Tracker
- Real-Time Communication (chat with vendors/guests)
- Gallery & Inspiration Board
- Eco-Friendly Mode



4.5 Use Case Descriptive Forms for AYOJOK

Use Case UC-01: Vendor Management

Description: The user searches, compares, and hires vendors for event services. The system helps the user make informed decisions by providing vendor details, reviews, availability, and pricing.

Stakeholders and Interests:

- **User (Client/Event Planner):** Wants reliable, affordable, and trusted vendors to make event planning smooth and efficient.
- **Vendor:** Wants visibility to attract potential customers, receive bookings, and ensure payment.
- **Admin:** Ensures vendor data is accurate, up-to-date, and verified.

Primary Actor: User (Client/Event Planner)
Pre-conditions: User must be logged in. Vendors must be registered and verified.
Success Scenario:

1. User logs into the system.
2. User searches for vendors by service type, location, or rating.
3. System displays a list of vendors, including reviews, availability, and prices.
4. User compares vendors and selects one.
5. System confirms the booking and updates the vendor's schedule.

Alternative Scenario:

- System temporarily unavailable → user retries after recovery.
- No vendors available → system displays "No results found."
- Vendor unavailable on selected date → user prompted to select another date or vendor.

Post-conditions: Vendor is successfully booked or added to a shortlist for future consideration.

Use Case UC-02: Customizable Packages

Description: The user creates personalized event packages by combining multiple vendor services. The system ensures package customization is within budget and maintains service availability.
Stakeholders and Interests:

- **User:** Wants flexibility to design event packages within budget constraints.
- **Vendor:** Wants their services included in user packages.
- **Admin:** Ensures pricing consistency and service availability.

Primary Actor: User
Pre-conditions: User is logged in and vendor services are available.
Success Scenario:

1. User selects "Create Package."
2. System displays all available services.
3. User selects and customizes the package.
4. System validates selections and budget.

5. Customized package is saved for booking.

Alternative Scenario:

- Selected service unavailable → system prompts alternative services.
- Budget exceeded → system alerts user and requests adjustment.

Post-conditions: Customized package is saved and ready for booking.

Use Case UC-03: Online Booking & Payment

Description: The user books vendors or packages and completes secure online payments. The system ensures booking confirmation and transaction safety.

Stakeholders and Interests:

- **User:** Wants smooth, secure booking and payment.
- **Vendor:** Wants guaranteed payment and confirmation.
- **Admin:** Monitors transactions, ensures accuracy, and resolves payment issues.

Primary Actor: User
Pre-conditions: Vendor or package is selected. Payment gateway is active.
Success Scenario:

1. User selects vendor/package to book.
2. System requests payment information.
3. User enters payment details.
4. System processes payment successfully.
5. System confirms booking and generates receipt.

Alternative Scenario:

- Payment fails → system prompts retry or alternative payment.
- Vendor becomes unavailable → booking canceled or rescheduled.

Post-conditions: Booking is confirmed and receipt is generated.

Use Case UC-04: Digital Invitations & RSVPs

Description: The user creates digital invitations and collects RSVPs from guests. The system tracks responses and updates the event attendance list.

Stakeholders and Interests:

- **User:** Wants efficient invitation delivery and RSVP tracking.
- **Guest:** Wants an easy and convenient way to respond.
- **Admin:** Ensures reliable system operation and delivery.

Primary Actor: User
Pre-conditions: Event must be created and guest list uploaded.
Success Scenario:

1. User designs a digital invitation.
2. System sends invitations to the guest list.
3. Guests respond to the RSVP request.
4. System updates attendance list based on responses.

Alternative Scenario:

- Invitation delivery fails the system retries or alerts user.
- If Guests do not respond the system sends reminders or marks as no response.

Post-conditions: Guest RSVP records are updated, and the attendance list is current.

4.6 Activity Diagram

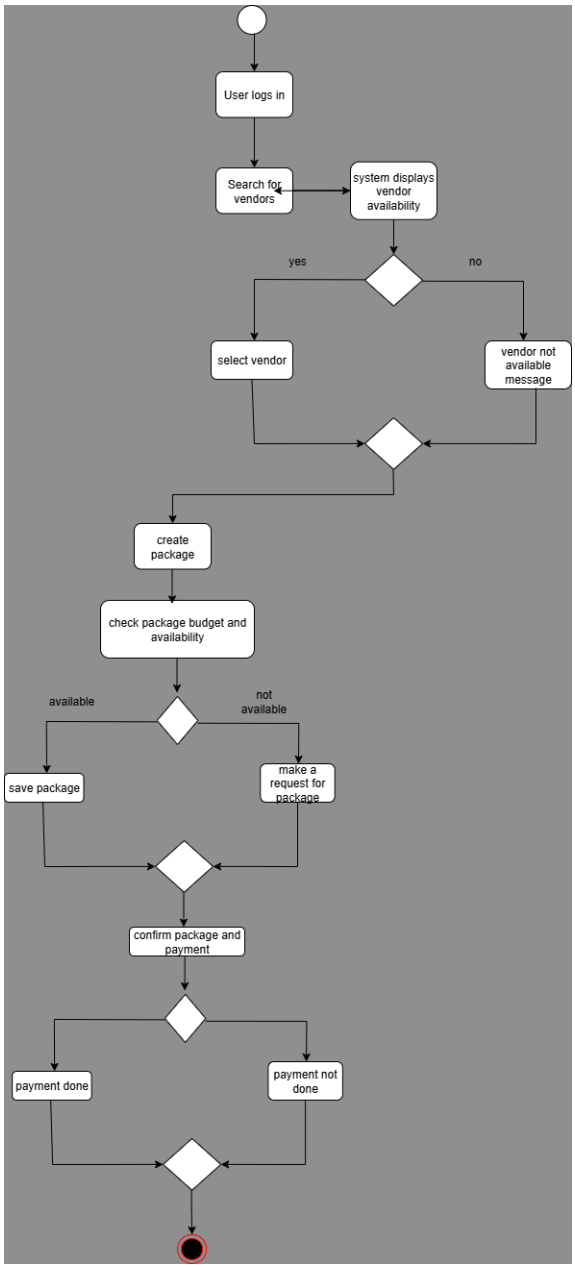


Figure 4.1: Activity Diagram

4.7 Swimlane Diagram

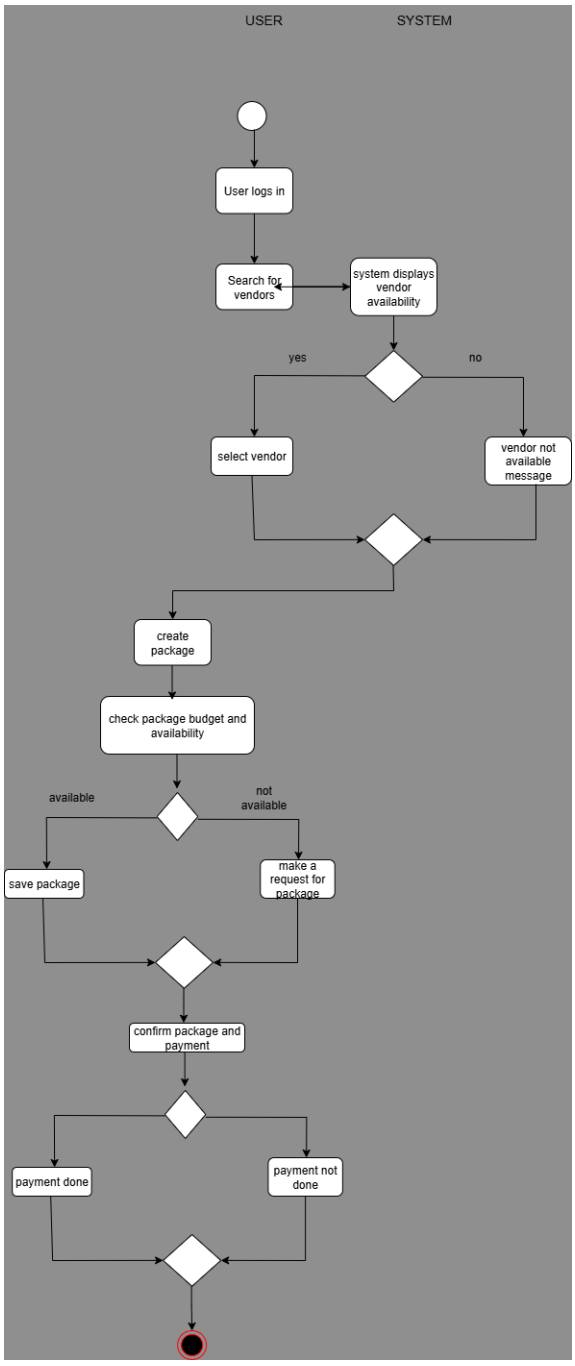


Figure 4.2: Swimlane Diagram

References