

IT 320 Course Project  
Semester-2, 1446H



# Software Product Release

## PlanPerfect

Phase 4: Sprint 2

Prepared by

Group #	4	
Section #	69232	
Group Members	Name	ID
	Tarfah Bin Moammar	444200611
	Najla Almazyad	444200948
	Jood Alkhrashi	444203007
	Ghala Musallam	444200807
	Reuof Alanazi	444200528

Supervised by  
**Dr. Reem Fahad Alqifari**

[GitHub](#)



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## 1 Chapter 1: Introduction

The event planning industry is expanding rapidly, yet it remains fragmented and inefficient. Individuals and organizations often face difficulties in finding trustworthy service providers such as venues, caterers, and photographers. Traditional methods, including word-of-mouth recommendations and scattered online searches, result in delayed decision-making, miscommunication, and budget mismanagement.

To address these inefficiencies, PlanPerfect offers a centralized digital platform designed to streamline vendor discovery, booking, and event coordination. The platform ensures a smooth planning process by providing structured search capabilities, direct booking options, and financial tracking tools, making event organization more efficient and stress-free.

Technological solutions in event planning are increasingly essential. In Saudi Arabia, there is a growing demand for digitized service coordination, reflecting the rapid development of the event industry. Globally, digital event planning platforms are improving accessibility, making services more scalable and user-friendly. PlanPerfect enhances efficiency, provides businesses with better visibility, and ensures users can organize events effortlessly.

This document outlines the problem, solution, and scope of the project. It also details the platform's objectives, key features, and project constraints, alongside the Scrum team structure and implementation plan.

## 1.1 The Problem

### **Real World Problem**

Despite the continuous growth of the event planning industry, the lack of an organized system makes it challenging for users to locate reliable vendors, manage expenses, and coordinate services effectively. Many individuals still rely on manual searches and unverified sources, leading to inefficiencies in the planning process.

### **Concrete Example**

Consider a couple planning their wedding. They must contact multiple vendors, compare prices, and confirm availability while managing their budget. Due to the fragmented nature of event planning, they may face delays, miscommunication, or overbooked services, making the process stressful and time-consuming.

### **Focus of the project**

PlanPerfect provides a structured event planning solution by consolidating vendors into one platform, automating the booking process, and ensuring greater transparency. This approach improves coordination, enhances business visibility, and ensures users can plan efficiently with reliable vendor support. The platform also offers secure transactions and a user-friendly interface to make the event planning experience more accessible and seamless.

## 1.2 The Solution

PlanPerfect is a user-centric digital platform that allows individuals and businesses to plan and manage their events efficiently. It simplifies the vendor search, booking, and event coordination process, providing users with a structured and transparent system.



### Solution Benefits:

1. Simplified planning process by eliminating the need to juggle multiple websites, calls, and manual searches, saving time and effort.
2. Personalized vendor recommendations based on user preferences to suggest vendors that match budget, availability, and service needs.
3. Enhanced transparency and trust through verified ratings and reviews to help users make informed decisions.
4. Increased visibility for vendors by providing a structured digital marketplace, improving reach, and customer engagement.
5. Improved coordination and budget management to help users track expenses, avoid overbookings, and streamline event logistics.

By centralizing event planning, PlanPerfect provides a seamless and accessible system that minimizes inefficiencies and enhances user experience.

## 1.3 The Product

### 1.3.1 Product Vision

**FOR** individuals and organizations planning events **WHO** struggle with the fragmented and time-consuming event planning process, **THE** PlanPerfect platform **IS A** centralized event planning solution **THAT** streamlines the search, comparison, and booking of event services, reducing inefficiencies and improving coordination.

**UNLIKE** Instagram, where event planners and vendors rely on direct messages for inquiries and bookings, and are spread across scattered accounts, making it difficult to compare options and manage bookings efficiently, **OUR PRODUCT** provides a structured, user-friendly platform with integrated vendor listings, direct booking options, personalized recommendations, verified reviews, and budgeting tools, ensuring a seamless and efficient event planning experience.

### 1.3.2 Product Roadmap

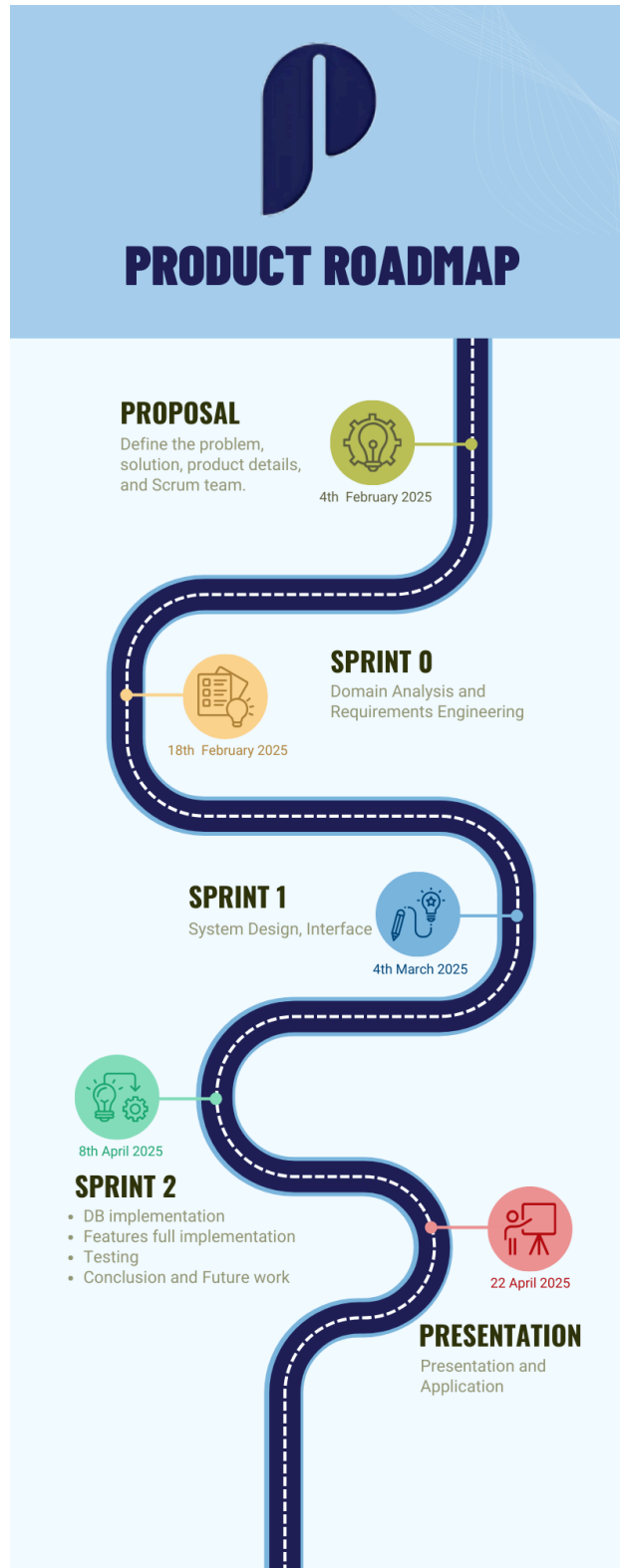


Figure 1. Product Roadmap



### 1.3.3 Objectives

The objectives of **PlanPerfect** are categorized into three levels: Product, Project, and Learning. These objectives define what the project aims to achieve, how it will be implemented, and what new skills will be gained during its development.

#### Product Objectives (Customer Focus - Value)

These objectives define how **PlanPerfect** will solve user challenges and deliver value through its features:

- Provide a centralized platform that connects users with verified event service providers, including venues, caterers, photographers, and planners
- Enable users to search and filter service providers based on budget, location, and ratings
- Allow users to create accounts and manage their profiles for a personalized experience
- Provide a Favorites List feature, enabling users to save preferred vendors for future reference
- Facilitate booking management, allowing users to add, modify, and cancel reservations as needed
- Offer trust-building mechanisms through verified reviews and ratings
- Incorporate budget tracking tools to assist users in managing event costs

#### Project Objectives (Solution Focus - Plan)

These objectives outline the key steps and phases required to successfully develop PlanPerfect:

- Conduct market research to understand common event planning challenges
- Perform user requirements gathering through interviews and surveys
- Define system requirements and design based on collected insights
- Develop wireframes, database structures, and system workflows to guide development
- Implement both frontend and backend functionalities, ensuring responsiveness and usability
- Implement key features such as vendor search, booking system, payment processing, and user accounts
- Conduct testing and validation, including unit testing and user acceptance testing
- Deploy the application in a cloud environment, ensuring reliability and scalability
- Collect user feedback and iterate on improvements for future versions

#### Learning Objectives (Student Focus - Skill Development)

These objectives highlight the new skills and knowledge gained by the development team:

- Gain experience with new web technologies, including full-stack development with database integration

- Utilize cloud hosting services for deployment and performance optimization
- Improve project management skills by working in an agile environment and using tools like Trello or **Jira**
- Enhance UI/UX design capabilities, ensuring a user-friendly and accessible platform
- Develop security best practices, including GDPR compliance and secure authentication methods
- Strengthen problem-solving and critical thinking skills by addressing real-world challenges in event planning
- Apply AI-driven recommendations and automation, enhancing the efficiency of event planning

#### 1.3.4 Scope

In this section, we will define the limitations of our application and what is outside our scope, which will be deemed for future work.

PlanPerfect is a web-based platform designed to connect users with event service providers. It will support English and be optimized for desktop and mobile browsers.

Users will be able to:

- Search and filter event service providers based on various criteria
- Book and manage event services
- Track event budgets using built-in budgeting tools
- Save preferred vendors in a personalized *Favorites List*
- View verified ratings and reviews from other users
- AI-powered recommendations and automated planning assistance will not be included in the initial phase but will be considered for future development.

On the other hand, **PlanPerfect** will not include:

- Direct chat functionality between users and vendors
- A marketplace for event-related product purchases (e.g. decorations, party supplies...)
- Offline payment processing (online transactions supported only)
- A native mobile application (only a responsive web design version will be available in the initial phase, but a mobile app may be developed in future phases)
- Supports multiple languages (Support will not be available for languages other than Arabic)

Any additional features, expanded platform support, or third-party integrations will be considered for future development.

#### 1.4 The Scrum Team

Scrum Team	
Product Owner:	Najla Almazyad
Developers:	Najla Almazyad Jood Alkhrashi Ghala Musallam Reuof Alenzi Tarfah Bin Moammar
Scrum Master (SM):	Dr. Reem Fahad Alqifari
Stakeholders:	Dr. Reem Fahad Alqifari

Table 1. The Scrum Team

## 2 Chapter 2: Domain Analysis

### 2.1 Background

#### Understanding the Event Planning Industry

Event planning is an essential part of life, from weddings and birthdays to graduation parties and corporate events. Each event requires multiple elements to come together, venues, catering, coffee services, decorations, and giveaways. People often find themselves juggling different providers, which makes the process more stressful than it needs to be.

#### Problem Domain

The biggest challenge in event planning is the lack of a single, convenient platform to manage everything. Most people have to search across different websites, contact multiple vendors, and manually track budgets. At the same time, many businesses struggle to promote their services and reach new clients.

Key challenges:

- Finding trusted vendors.
- Comparing services and prices.
- Tracking expenses and bookings.
- Helping vendors showcase their services effectively.

#### Solution Domain

PlanPerfect offers a straightforward solution by bringing all event services together in one platform. Users can easily search, compare, and book everything they need, while vendors get better exposure to potential clients.

Our platform provides:

- A user-friendly search interface with filters.
- A budgeting tool to track event expenses.
- A rating and review system for vendor credibility.
- A space for vendors to list their services and reach more clients.
- Localization to cater to Saudi market preferences, including language support and culturally relevant services.

### Key Definitions:

- **Event Planning:** The process of organizing and coordinating all aspects of an event, from selecting a venue to arranging catering and decorations.
- **Vendor:** A business or individual providing services or products for events, such as catering, decorations, or photography.
- **Venue:** A location where an event takes place, such as a banquet hall, outdoor space, or conference center.
- **Catering Services:** Companies or individuals providing food and beverages for events.
- **Budget Tracking:** Tools that help users monitor and manage event expenses.
- **Booking System:** A feature that allows users to reserve event services directly through the platform.
- **Recommendations:** Personalized suggestions for vendors and services based on user preferences and past activities.

### External Software:

- **Development Environment:** Visual Studio Code for efficient coding and debugging.
- **Frameworks and Libraries:** React.js for frontend and Node.js for backend.
- **Database Management:** MongoDB to store event details, vendor services, and user information.
- **Project Management:** Jira for task tracking, sprint planning, and backlog management.
- **Cloud Hosting:** GitHub Pages for frontend hosting.
- **Data Analysis:** Google Sheets for early-stage budget tracking and requirement analysis.
- **Google Maps API:** To provide venue locations and support location-based filtering.
- **Microsoft Forms:** For conducting user surveys and gathering feedback.

## 2.2 Literature Review

**PlanA - Event Planner [7]:** An Instagram account that organizes various events like birthday parties and Eid celebrations.

### Strengths:

1. Plan and execute a variety of events.
2. Share their work on Instagram by posting pictures.
3. Provide ideas for decorations and themes that can inspire clients.
4. Can organize events tailored to meet customer preferences.
5. They provide various services, including decorations, playing corners, photo booths, grown-up seating areas, and giveaways, catering to different event needs.
6. Can organize corporate events.

### Limitations:

1. Restricted Service Area: only operates in Jeddah and Riyadh.
2. Limited communication options.
3. They do not display customer feedback.
4. Their services do not include food or drink catering.
5. To save the profile, follow the account; this makes it harder to find among others.

**Event Kayef - Event Planner [8]:** An Instagram account that coordinates different events such as bridal showers, graduation celebrations, and Saudi National Day festivities.

### Strengths:

1. Plan and execute a variety of events.
2. Share their work on Instagram by posting pictures.
3. Can organize events tailored to meet customer preferences.
4. They offer a variety of services, including decorations, seating, photo booths, entertainment, and food machines like ice cream, popcorn, and pancake makers.
5. They offer a selection of drinks, including both hot and cold.
6. They offer special packages that are perfect for budget management.

### Limitations:

1. Restricted Service Area: only operates in Riyadh.
2. Limited communication options.
3. They do not display customer feedback.

4. Their services do not include food catering.
5. To save the profile, follow the account; this makes it harder to find among others.

***Nada Savor - Food caterer [9]:*** An Instagram account for food catering, offering a variety of appetizers, main courses, desserts, and drinks for events and gatherings.

**Strengths:**

1. Showcasing their dishes and engaging with their audience through their account.
2. Offers a broad menu that caters to different tastes.
3. Ability to accommodate events of any size, from small gatherings to large-scale functions.
4. Offers customized food themes, such as Saudi National Day-inspired dishes.

**Limitations:**

1. Restricted Service Area: only operates in Riyadh.
2. Limited communication options.
3. Catering is limited to food without additional event elements such as table setups or decorations.
4. They do not display customer feedback.
5. To save the profile, follow the account; this makes it harder to find among others.

***Durrah - Food caterer [10]:*** An Instagram account for food catering, offering a variety of appetizers, main courses, and desserts for events and gatherings.

**Strengths:**

1. Showcasing their dishes and engaging with their audience through their account.
2. Offers a broad menu that caters to different tastes.
3. Capability to cater to large-scale events.
4. Display customer feedback.
5. Provides table decorations

**Limitations:**

1. Restricted Service Area: only operates in Riyadh.
2. Limited communication options.

3. Catering doesn't include table setups.
4. To save the profile, follow the account; this makes it harder to find among others.

<i>Feature / System</i>	<b>PlanA</b>	<b>Event Kayef</b>	<b>Nada Savor</b>	<b>Durrah</b>	<b>PlanPerfect</b>
<b>Broader Service Area</b>	✖	✖	✖	✖	✖
<b>Integrated Customer Feedback &amp; Reviews</b>	✖	✖	✖	✓	✓
<b>Food &amp; Drink Catering Options</b>	✖	✖	✓	✓	✓
<b>Direct Communication &amp; Booking System</b>	✓	✓	✓	✓	✓
<b>Save Vendor to Favorites Through Profile</b>	✖	✖	✖	✖	✓

Table 2. Comparison of Competing Software Features with PlanPerfect.

While existing event planning services focus on either event coordination or catering individually, PlanPerfect differentiates itself by offering a comprehensive, all-in-one platform that integrates event planners, food caterers, and other vendors into a single, user-friendly system.

- **One-Stop Solution for Event Planning & Catering**

Unlike competitors that specialize in either event planning or catering, PlanPerfect combines both under one platform. Users can book event planners, decorators, caterers, photographers, and venues all in one place, eliminating the struggle of coordinating across multiple services.



- **Integrated Customer Reviews & Transparent Ratings**

Many existing services do not display user feedback, making vendor selection uncertain. PlanPerfect enhances trust and transparency by featuring ratings and reviews, allowing users to confidently make informed decisions.

- **Budget Tracking & Expense Management**

Competitors do not offer built-in budget management. PlanPerfect includes expense tracking tools, helping users monitor costs, avoid overbooking, and stay within budget.

### 3 Chapter 3: Requirements Engineering

#### 3.1 Requirements Elicitation and Analysis

To gather requirements for the event planning platform, we conducted interviews, questionnaires, observations, and competitive analysis. These methods helped identify key user needs, challenges, and feature expectations. The results and findings are analyzed below, with detailed transcripts and survey responses provided in the appendices.

##### 3.1.1 Interviews

We conducted structured interviews with **five industry professionals**, including event organizers, vendors, and service providers. The interviews aimed to understand the challenges faced in event planning, vendor selection, budget management, and digital tool usage.

##### Interview Participants:

	Name	Age	Gender	Nationality	Occupation
Interviewee 1	Sultan Alghamdi	36	Male	Saudi	Business Analyst
Interviewee 2	Arwa Aldarwish	42	Female	Saudi	Event Planner
Interviewee 3	Malak Alnafisah	53	Female	Saudi	Photographer
Interviewee 4	Omar Alghazi	25	Male	Saudi	TI perfumes
Interviewee 5	Nada Musallam	29	Female	Saudi	Food caterer

Table 3. Interview Participants:

## Results and Findings

- **Vendor Coordination Challenges:** Most interviewees struggle with managing multiple vendors, last-minute changes, and a lack of a centralized communication tool.
- **Budgeting & Expense Tracking Issues:** Event planners and vendors rely on manual budget tracking, making financial management inefficient.
- **Limited Vendor Visibility & Trust:** Many vendors depend on word-of-mouth or Instagram marketing, lacking a structured review system for credibility.
- **Feature Priorities:** Interviewees emphasized the need for real-time communication tools, verified vendor directories, and integrated budget tracking.

### 3.1.2 Questionnaire

A questionnaire was conducted to gather **quantitative insights** into user preferences, challenges, and feature requirements for an event planning platform. **40 participants** responded to the survey.

Question	Most Common Response	Percentage
Do you use an event planning platform?	No	92.5%
How do you find vendors?	Personal recommendations	78%
Do you struggle with budgeting?	Yes	57.5%
Is vendor rating and review important?	Yes	95%
Do you use multiple tools for event management?	Yes	47.5%

Table 4. Questionnaire

The results indicate a strong demand for a centralized event planning platform that integrates vendor search, budgeting tools, and customer feedback systems.

### 3.1.3 Observations

During observations of event planning workflows, the following key issues were noted:

- **Lack of Integration:** Event planners use multiple disconnected tools (email, spreadsheets, social media), leading to inefficiencies.
- **Communication Gaps:** Vendors and planners struggle with last-minute changes, requiring real-time notifications.
- **Budget Constraints:** Many event organizers experience unexpected expenses due to poor financial tracking.

### 3.1.4 Sources of Information

To ensure a comprehensive understanding of user needs and market gaps, multiple sources were utilized during the requirements elicitation process. These sources provided qualitative and quantitative data that shaped the feature set and design of the proposed event planning platform.

1. **Stakeholders** – Interviews with event organizers, vendors, and service providers highlighted challenges in vendor coordination, budgeting, and visibility.
2. **User Surveys** – A questionnaire with 40 respondents provided insights into event planning habits, budget struggles, and vendor selection preferences.
3. **Observations** – Analyzed how planners manage events, revealing inefficiencies in using multiple disconnected tools.
4. **Competitive Analysis** – Reviewed platforms like PlanA, Event Kayef, and Durrah, identifying gaps such as the lack of verified vendor reviews and budgeting tools.

By leveraging these sources, the requirements elicitation process was able to pinpoint critical user needs and validate the demand for an integrated event planning platform.

### 3.1.5 Summary of Findings

The requirements elicitation process revealed that event organizers and vendors face significant challenges with coordination, budgeting, and vendor visibility. The findings suggest a strong need for a centralized event planning platform with the following core features:

- Verified vendor directory with customer reviews
- Real-time communication and booking system
- Integrated budgeting and expense-tracking tools
- Multi-city service expansion beyond Riyadh
- Automated inquiry and vendor response management

These insights will directly inform the design and development of our proposed platform.

## 3.2 System Users

This section describes the general characteristics of our users, including educational level, experience, and technical expertise.

Our system features two types of users who can access it to plan events or display products.

- **Nationality:** Users must be of Saudi nationality and should be able to read/write and be familiar with Arabic words and letters.
- **Educational Level:** There is no specific educational level for our users, they can have diverse educational levels as long as they are adults and responsible.
- **Technical expertise:** Users do not need to have complete knowledge of technology to navigate and use the features effectively.
- **Experience in Event Planning:** Users are expected to have basic familiarity with similar systems in general.
- **Age:** Users are expected to be +18 years old, i.e. Adults.
- **Gender:** Users are of both genders,[ Female and Male].

### 3.3 Use Case Diagram

In this section, we will provide an overview of the system's functionality and interactions with its actors (user or external system) and use cases (functionality). It's important to note that our users can do all the functionalities directly with no need to have an extends or include relationships.

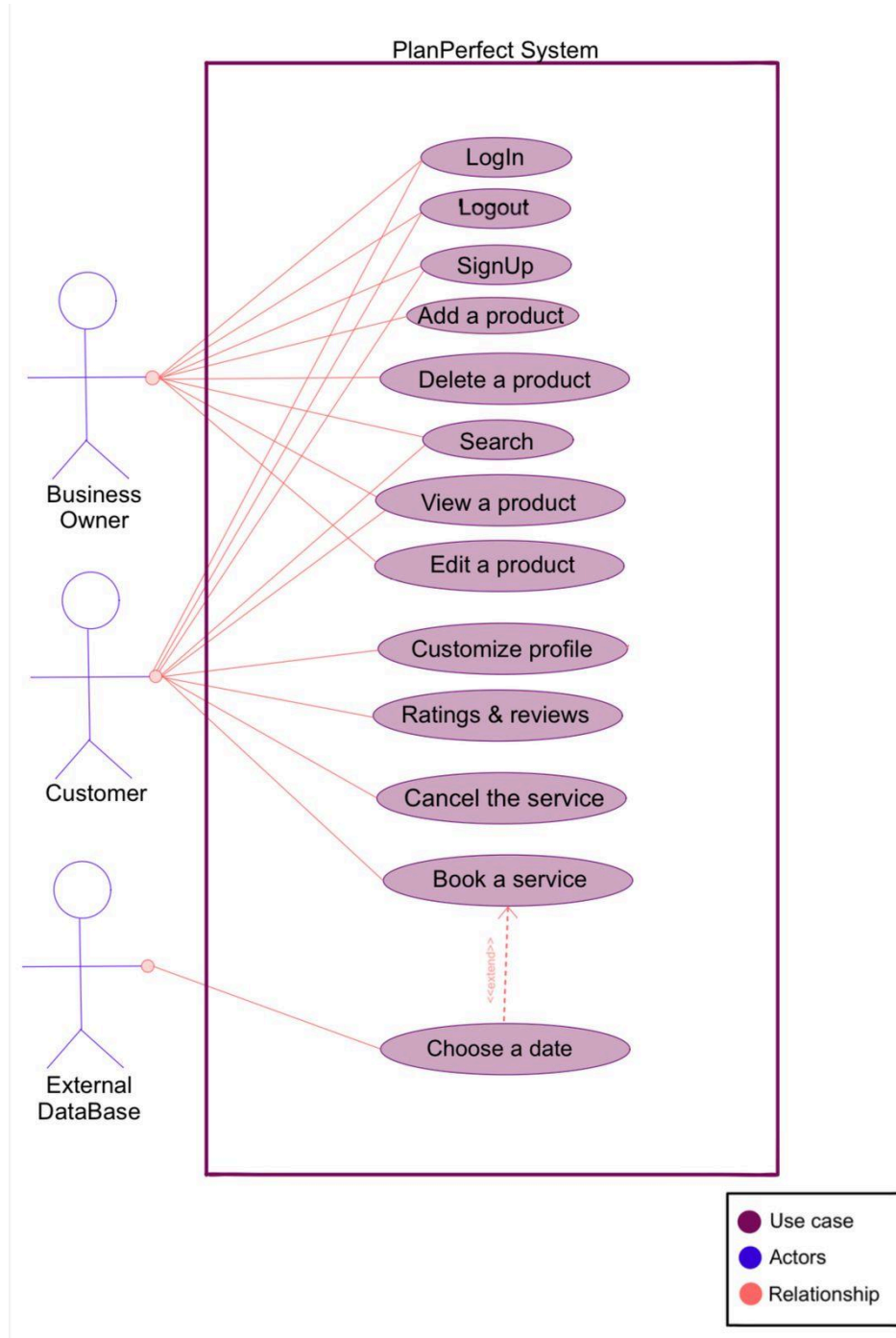


Figure 2. Use case diagram for PlanPerfect

### 3.4 Product Backlog

PBI (User Story)	Size (Story Points)	Type (Feature, defect, technical work, knowledge acquisition)	Acceptance Criteria: The conditions of satisfaction that must be met for that item to be accepted.
User Registration: As a user, I want to register for an account using my email so that I can access the platform's features.	5	Feature	<p>Must be able to enter an email, create a password, and confirm the password.</p> <p>Passwords must include at least 8 characters, combining uppercase, lowercase, and special characters.</p> <p>The system sends a verification email upon successful registration.</p> <p>The system displays an error message if the email is already registered.</p>
User Login: As a user, I want to log in securely so that I can access my account and manage my bookings.	3	Feature	<p>Must enter a valid email and password to log in.</p> <p>The system displays an error for incorrect credentials.</p> <p>Option to reset password via email.</p> <p>Redirect to the dashboard upon successful login.</p>
User Logout: As a user, I want to log out safely so that my account remains secure when I leave the platform.	2	Feature	<p>Can log out from any part of the platform.</p> <p>The session is terminated upon logout.</p> <p>Cannot access authenticated areas after logging out.</p>
Vendor Registration: As a vendor, I want to register for an account using my email so that I can access vendor-specific features on the platform.	5	Feature	<p>Vendors can enter an email, create a password, and confirm the password.</p> <p>Passwords must include at least 8 characters, combining uppercase, lowercase, and special characters.</p> <p>The system sends a verification email upon successful registration.</p> <p>The system displays an error message if the email is already registered.</p>
Vendor Login: As a vendor, I want to log in securely so that I can manage my services and view bookings on the platform.	3	Feature	<p>Vendors must enter a valid email and password to log in.</p>

			<p>The system displays an error for incorrect credentials.</p> <p>Redirects to the vendor dashboard upon successful login.</p>
Vendor Logout: As a vendor, I want to log out safely so that my account remains secure when I leave the platform.	2	Feature	<p>Vendors can log out from any part of the platform.</p> <p>The session is terminated upon logout.</p> <p>Vendors cannot access authenticated areas of the platform after logging out.</p>
Vendor Service Addition: As a vendor, I want to add my services so that users can see what I offer.	5	Feature	<p>Vendors can add service details like name, description, price, category, and upload images.</p> <p>Services are stored immediately in the database and are visible in searches.</p>
Vendor Service Editing: As a vendor, I want to edit my service details so that I can keep my information up to date.	3	Feature	<p>Vendors can update service details unless the service is booked.</p> <p>Changes are reflected immediately on the platform.</p>
Vendor Service Deletion: As a vendor, I want to delete my services when they are no longer available	3	Feature	<p>Vendors can delete services through a confirmation process.</p> <p>Services are removed immediately from all listings once deleted.</p>
Vendor Search: As a user, I want to search for event vendors based on location, and price so that I can easily find suitable options.	5	Feature	<p>Users can search using keywords and apply filters for location, price range, and ratings.</p> <p>Results appear within 3 seconds.</p>
Vendor Profile Viewing: As a user, I want to view vendor profiles and services so that I can evaluate my options.	3	Feature	<p>Detailed profiles are accessible by clicking the vendor's name in search results.</p>
Vendor Ratings & Reviews: As a user, I want to rate and review vendors after booking so that I can help others make informed decisions.	5	Feature	<p>Users can submit a star rating (1-5) and write a review.</p> <p>Users can only review vendors they have booked.</p> <p>Reviews appear on vendor profiles.</p> <p>Vendors can respond to reviews.</p>
Customizable User Profile: As a user, I want to create a customizable profile where I can add my preferences, budget, and	8	Feature	<p>Users can update their profile information (name, budget, event type).</p>

event details so that I get tailored recommendations.			System saves preferences and suggests vendors accordingly.  Users can modify preferences anytime.
Book a Service: As a user, I want to book a service from a vendor so that I can confirm my event needs.	5	Feature	Users can select a vendor's service and schedule a booking.  System verifies vendor availability.  Users receive confirmation emails.  Vendors are notified about new bookings.
Choose a Date: As a user, I want to select a date when booking a service so that I can plan my event accordingly.	3	Feature	User must select a date before confirming the booking.  System checks vendor availability before finalizing.
Cancel a Service: As a user, I want to cancel a booked service so that I can manage my schedule changes.	4	Feature	Users can cancel a booking from their dashboard.  Vendors receive a cancellation notification.
Performance Optimization: As a user, I want the website to load in under 3 seconds so that I have a smooth experience.	3	Non-Functional (Performance)	Page loading time is $\leq 3$ seconds under normal traffic.  Search results must appear within 2-3 seconds.
High Availability System: As a user, I want the platform to be available 99.9% of the time so that I can access it whenever needed.	5	Non-Functional (Availability)	Platform maintains 99.9% uptime, excluding planned maintenance.  Load balancing and auto-scaling are implemented to manage load.

Table 5. Product Backlog

### Our Jira Project



## 4 Chapter 4: System Design

### 4.1 System Architecture

The system architecture of an application affects its overall performance, scalability, and maintainability. In this section, we will talk about the system architecture we chose for our web application "PlanPerfect".

The system architecture is the basis of the whole program, outlining how various components interact and communicate with one another to deliver the desired functionality and user experience.

We chose the Client-Server architecture for our application (Figure 4.1). The Client-Server Architecture separates the system into the following components:

**1. Frontend (Client-side):** interacts with the user through a web interface, it sends HTTP requests to the backend (server-side) effectively capturing user input and presenting the data to users in a user-friendly format.

It is built using:

- HTML
- CSS
- JavaScript

**2. Backend (Server-side):** responsible for responding to user requests, performing necessary computations, ensuring that users have access to correct and up-to-date data and handling business logic, interacting with the database and client-side.

It is built using:

- PHP

**3. Database:** the database used is MySQL, managed via phpMyAdmin, a popular tool for handling SQL databases.

We chose Client-Server Architecture because it provides a structured, efficient and scalable way to manage communication between the user and the system.

This architecture allows the separation of the various parts of the system ensuring that the frontend (client) focuses on user experience, while the backend (server) manages business logic, data processing, and security.

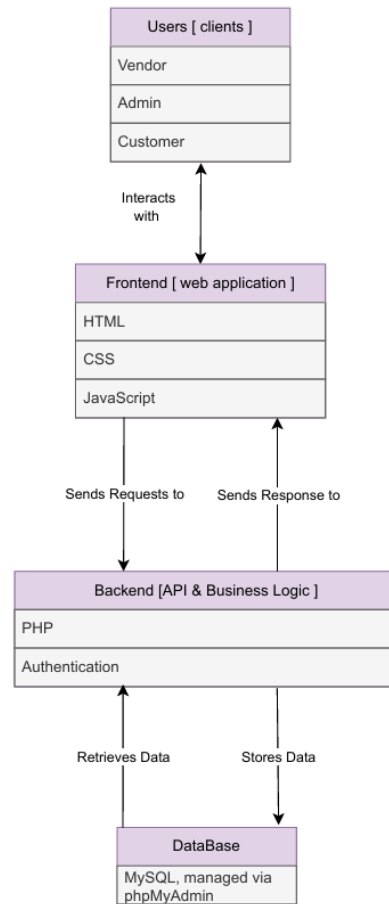


Figure 3. System Architecture diagram for PlanPerfect

## 4.2 Class Diagram

In this section, we will represent the class diagram of “PlanPerfect”. We provide a detailed representation of the classes in our system, representing their attributes, methods, and relationships.

The Class Diagram serves as a visual plan that shows the structure and organization of the code developed during implementation of the object-oriented design of “PlanPerfect”.

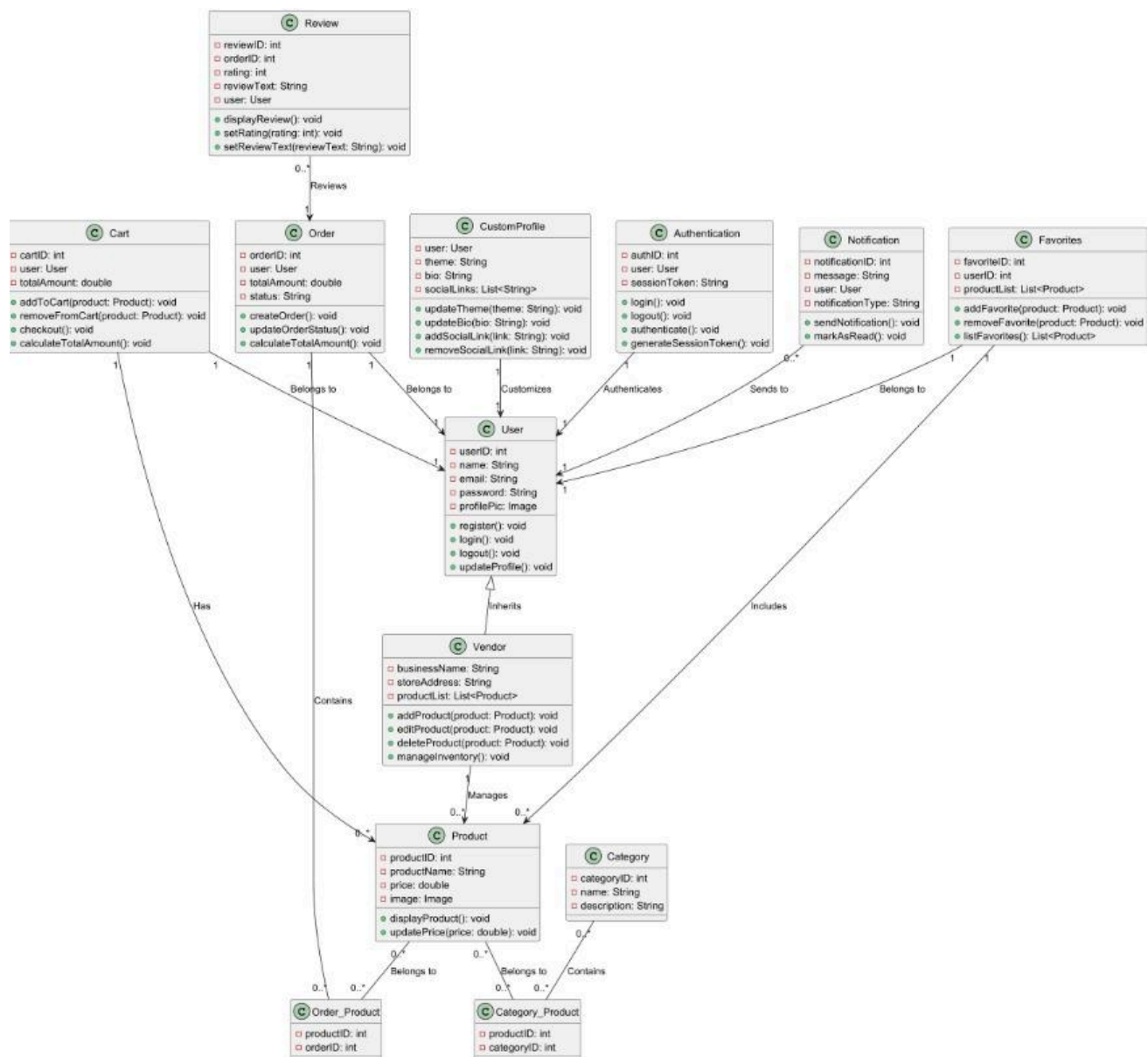


Figure 4. Class diagram for PlanPerfect

### 4.3 Data Design

The Event Planning Portal PlanPerfect data design uses an ER diagram and a non-relational model. The ER diagram shows the relationships between entities like User, Order, Product, and Vendor, helping define how data is structured in a relational database.

The non-relational model uses a tree-like structure where user data, such as orders and products, are stored together in one document. This allows for faster and more flexible data retrieval without the need for complex joins, making the system scalable and efficient.

### 4.3.1 ER Diagram

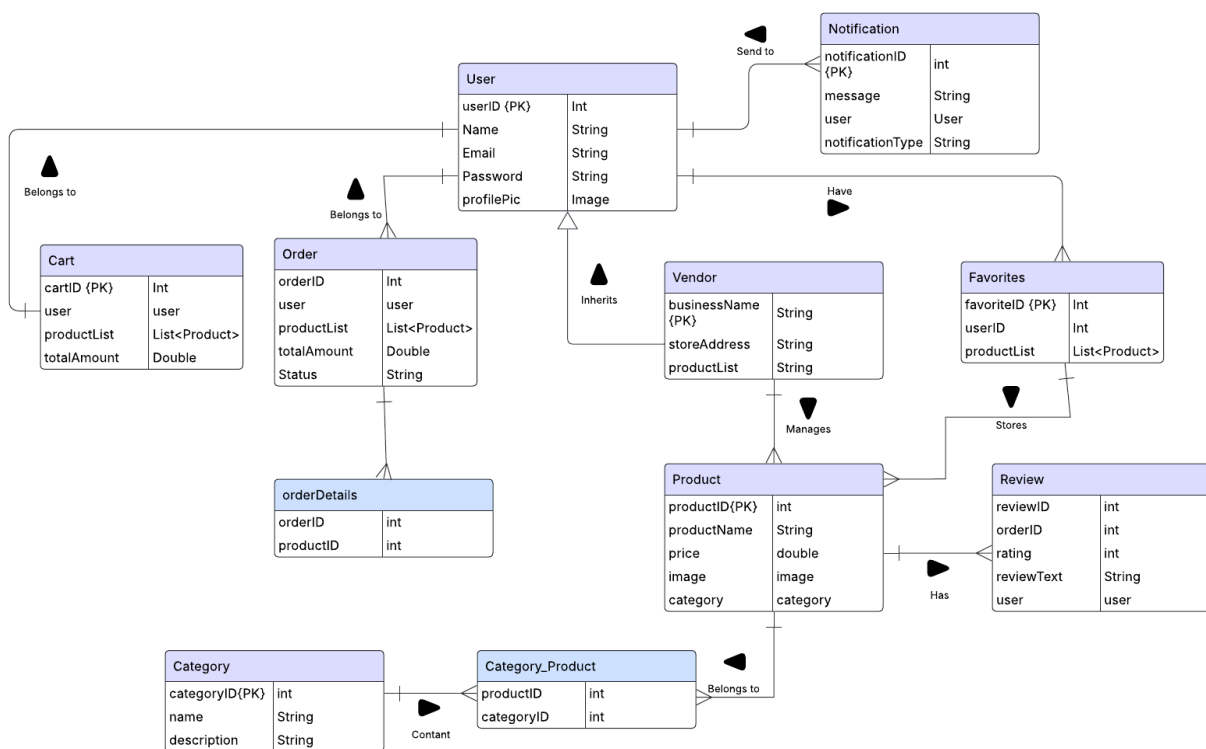


Figure 5. ER diagram for PlanPerfect

#### 4.3.2 Non-relational data model

```
{
  "userID": "12345",           // Primary key
  "name": "azima_kitchen",
  "email": "azima@planperfect.com",
  "profilePic": "url_to_image",

  "favorites": [
    {
      "productID": "111",
      "productName": "Event Planner",
      "price": 100.00,
      "vendor": {
        "vendorID": "V001",
        "businessName": "Vendor 1",
        "storeAddress": "1234 Vendor St."
      },
      "category": {
        "categoryID": "1",
        "name": "Event Planning",
        "description": "Everything related to event planning services"
      },
    },
    {
      "productID": "112",
      "productName": "Catering Service",
      "price": 150.00,
      "vendor": {
        "vendorID": "V002",
        "businessName": "Vendor 2",
        "storeAddress": "5678 Vendor St."
      },
      "category": {
        "categoryID": "2",
        "name": "Catering",
        "description": "Professional catering services"
      },
    },
  ],

  "orders": [
    {
      "orderID": "001",
      "totalAmount": 250.00,
      "status": "completed",
      "products": [
        {
```

```
"productID": "111",
"productName": "Event Planner",
"price": 100.00,
"quantity": 2,
"vendor": {
  "vendorID": "V001",
  "businessName": "Vendor 1",
  "storeAddress": "1234 Vendor St."
},
"category": {
  "categoryID": "1",
  "name": "Event Planning",
  "description": "Everything related to event planning services"
}
},
{
  "productID": "112",
  "productName": "Catering Service",
  "price": 150.00,
  "quantity": 1,
  "vendor": {
    "vendorID": "V002",
    "businessName": "Vendor 2",
    "storeAddress": "5678 Vendor St."
  },
  "category": {
    "categoryID": "2",
    "name": "Catering",
    "description": "Professional catering services"
  }
}
],
"review": {
  "rating": 5,
  "reviewText": "إخدمة رائعة ومنتج ممتاز"
}
},
{
  "orderID": "002",
  "totalAmount": 150.00,
  "status": "pending",
  "products": [
    {
      "productID": "113",
      "productName": "Photography Service",
      "price": 150.00,
      "quantity": 1,
      "vendor": {
```

```

    "vendorID": "V003",
    "businessName": "Vendor 3",
    "storeAddress": "7890 Vendor St."
  },
  "category": {
    "categoryID": "3",
    "name": "Photography",
    "description": "Professional photography services"
  }
}
]
},
"cart": {
  "products": [
    {
      "productID": "111",
      "productName": "Event Planner",
      "price": 100.00,
      "quantity": 2,
      "vendor": {
        "vendorID": "V001",
        "businessName": "Vendor 1",
        "storeAddress": "1234 Vendor St."
      },
      "category": {
        "categoryID": "1",
        "name": "Event Planning",
        "description": "Everything related to event planning services"
      }
    },
    {
      "productID": "114",
      "productName": "Event Planning",
      "price": 300.00,
      "quantity": 1,
      "vendor": {
        "vendorID": "V004",
        "businessName": "Vendor 4",
        "storeAddress": "2345 Venue St."
      },
      "category": {
        "categoryID": "4",
        "name": "Venue",
        "description": "Event Planning"
      }
    }
  ]
}

```



```
],  
  "totalAmount": 500.00  
},  
  
"notifications": [  
  {  
    "notificationID": "1",  
    "message": "!.طلبك قيد التجهيز",  
    "notificationType": "Order Update"  
  },  
  {  
    "notificationID": "2",  
    "message": "!.الخدمات في سلتك جاهزة للإتمام",  
    "notificationType": "Reminder"  
  }  
]  
}  
}
```



## 4.4 Components Design

In this section, we describe the design of three key components of the Event Planning Portal, providing a clear understanding of how each component works and how they contribute to the overall system. The components selected for design documentation are:

1. Product Search and Filtering
2. Vendor Item Management
3. Cart Management

For each component, we provide the following:

### 1. Product Search and Filtering:

This component allows users to search for products and filter the results based on categories. This ensures that users can quickly find the products they are interested in.

#### - Activity Diagram:

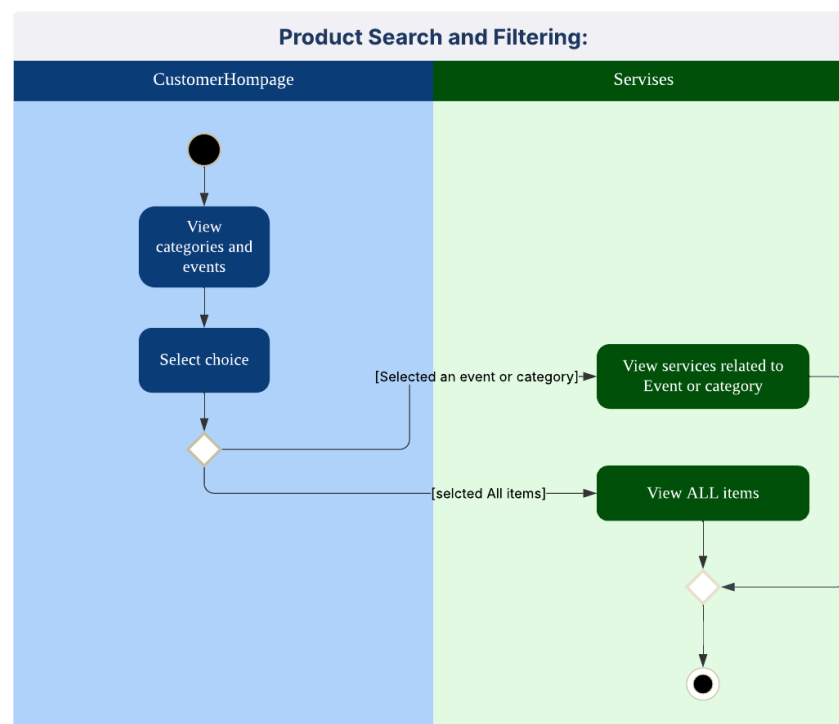


Figure 6. Activity diagram for Product Search and Filtering

#### - Pseudocode:

Start

Display CustomerHomepage

Show options: "View categories and events"

Wait for user input  
 If user selects "View categories and events"  
   Show categories and events  
   Wait for user choice  
   If user selects an event or category  
     Show services related to the selected event or category  
   Else if user selects "View ALL items"  
     Show all available items  
 End If  
 End

## 2. Vendor item management:

This component enables Vendors to add, delete and edit their items.

### - Flowchart:

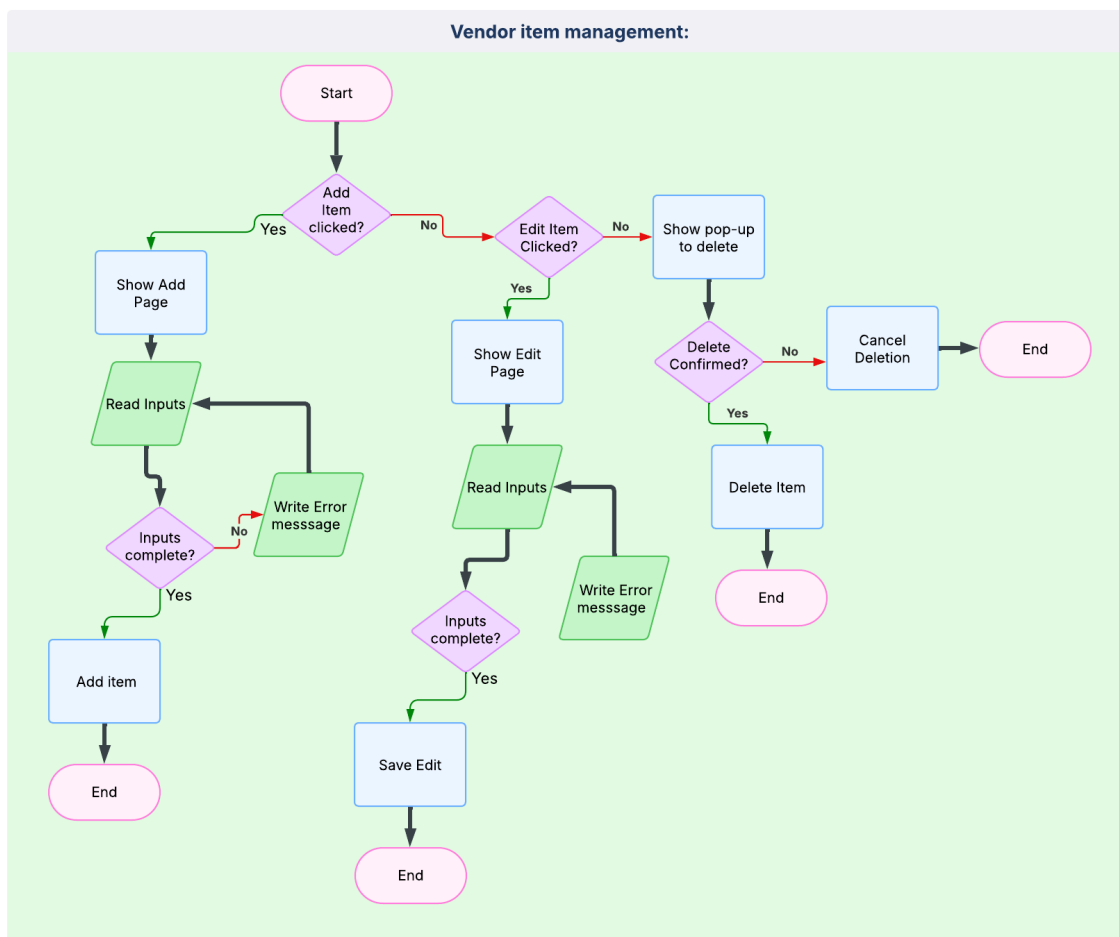


Figure 7.Flowchart for VendorPage

#### - Pseudocode:

Start

    If "Add Item clicked?"

        Show Add Page

        Read Inputs

        If Inputs are complete

            Add item

        End

    Else

        Write Error message

    End

    Else If "Edit Item Clicked?"

        Show Edit Page

        Read Inputs

        If Inputs are complete

            Save Edit

        End

    Else

        Write Error message

    End

    Else If "Delete Item clicked?"

        Show pop-up to delete

        If "Delete Confirmed?"

            Delete Item

        End

    Else

        Cancel Deletion

    End

End If

End

### 3. Cart Management:

The Cart Management component handles user shopping carts, including adding and removing items, updating quantities, and calculating the total amount.

## - State Diagram:

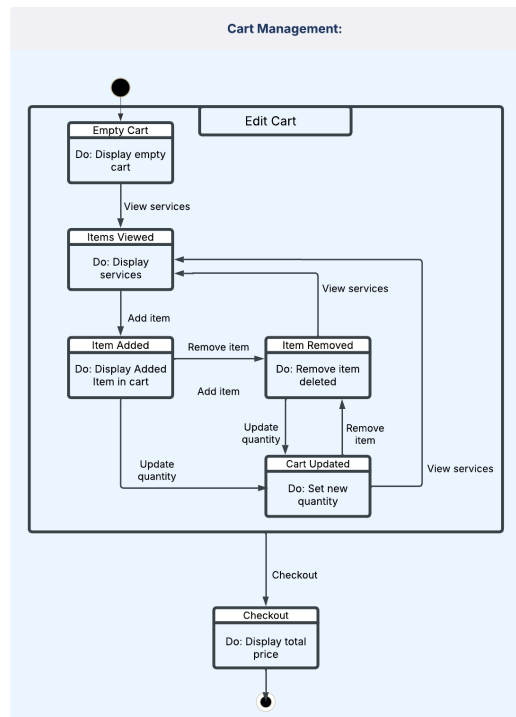


Figure 8. State diagram for Cart Management

## - Pseudocode:

Start

Display empty cart

Wait for user to view services

If user views services

Display services

Wait for user action

If user adds item

Display added item in cart

Wait for user to view services or remove item or update quantity

If user removes item

Remove item from cart

Wait for user to view services or add item or update quantity

Else if user updates quantity

Set new item quantity in cart

Wait for user to view services or remove item or update quantity

End If

If user checks out

Display total price

End



End If  
End

## 4.5 Interface Design

### 4.5.1 Site Map

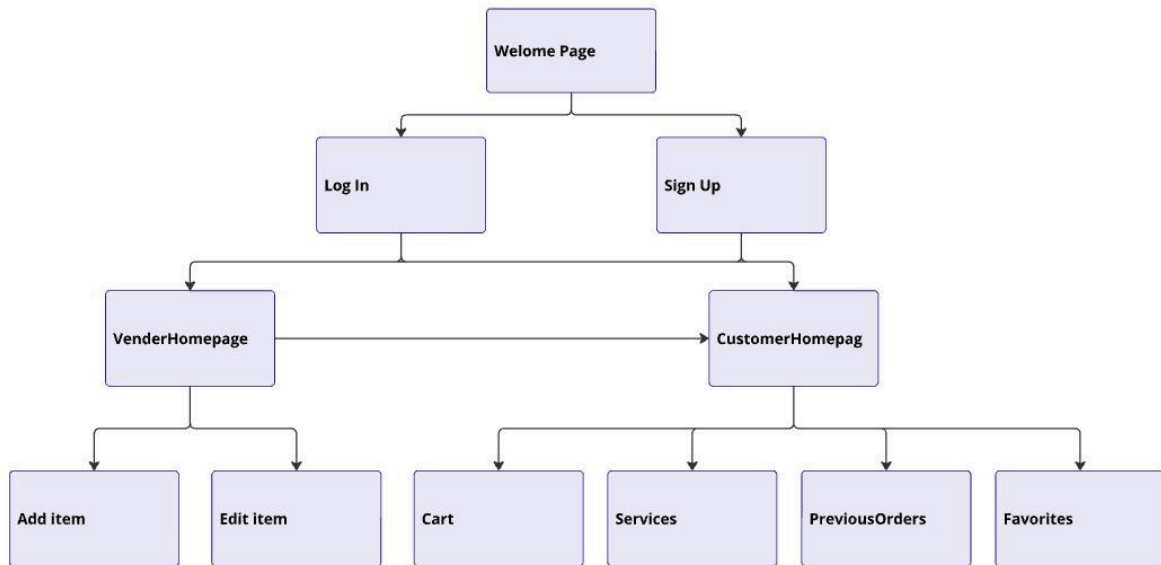


Figure 9. SiteMap for PlanPerfect

### 4.5.2 UX Guidelines implemented for each interface:

#### 1. Consistency design:

Guarantees clients have a consistent and comfortable experience across the website. It involves using standardized visual components—like color palettes, fonts, and layouts—across different screens.

#### 2. Match Between the System and the Real World:

By using real-world terms like "Order", "Product", "Cart", etc. That are easy for the user to understand therefore models the processes in a straightforward way.

#### 3. User Control and Freedom:

The users have control over their actions, like adding products to the cart, editing the profile & managing their orders.

#### 4. Flexibility and Efficiency of use:

Provide streamlined workflows for quick and efficient task completion.

#### 5. Recognition Rather Than Recall:

By showing to the users their saved products & orders.

#### 4.5.3 GitHub repository link

### GitHub

#### 4.5.4 Jira project link

### Our Jira Project

## 5 Chapter 5: Testing

In this chapter, we will conduct software testing, user story acceptance testing, integration testing, and user acceptance testing to ensure that our application meets functional requirements and user expectations. These comprehensive testing methods are designed to ensure a robust and easy-to-use product.

### 5.1 User Story Acceptance Testing

We will begin with User Story Acceptance Testing, where each feature is evaluated against the agreed-upon user stories to ensure user needs fulfilment from the user prescriptive, by making sure that the acceptance criteria are met for each user story.

We first prepared the user stories to be tested, then conducted the testing with real users from our targeted users in prepared settings and environment. Then we observed the users while they performed the tests to ensure that the acceptance criteria were met.

All user stories were tested, which are related to: sign up, log in , log out, search, Wishlist , book a service , delete a service, view item information and etc. ,in addition to non-functional requirements related user stories, such as speed and availability, detailed information about the user stories tested and there acceptance criteria will be provided in the following table.

Sprint Number	User story	Acceptance criteria	Test cases(s)	Pass?	Comments
	As a user, I want to register an account using my email so that I can	As a non-registered user, if I go to the sign-up page, enter	1. Click on the "Sign Up" option from the		

2	access the platform's features.	my email, name, and a password and click on the "Sign Up" button, then I should be successfully registered and redirected to my dashboard.	<p>main page of the website.</p> <ol style="list-style-type: none"> <li>2. Fill in the signup fields with an invalid email, a short password, and a blank field.</li> <li>3. Click on the "Create Account" button.</li> <li>4. Verify that an error message is shown for invalid inputs.</li> <li>5. Fill all signup fields properly (Email, Name, Password, and user type).</li> <li>6. Verify that the account is created, and the user is directed to the Homepage (Dashboard).</li> </ol>	yes	
2	As a user, I want to log in securely so that I can access my account and manage my bookings.	As a registered user, if I go to the login page, enter my correct email and password, and click on the "Login" button, then I should be securely logged in and redirected to my account dashboard.	<ol style="list-style-type: none"> <li>1. Click on the "Login" button on the homepage.</li> <li>2. Enter an incorrect email and password.</li> <li>3. Click on the "Login" button.</li> <li>4. Verify that an error message appears indicating invalid credentials.</li> <li>5. Enter the correct email and password.</li> <li>6. Click on the "Login" button.</li> <li>7. Verify that the user is logged in and redirected to their dashboard.</li> </ol>	yes	



2	As a vendor, I want to register an account using my email so that I can access vendor-specific features on the platform.	As a non-registered vendor, if I go to the sign-up page, enter my email, business name, password, and other required details, and click on the "Sign Up" button, then I should be registered as a vendor and redirected to the vendor dashboard.	<ol style="list-style-type: none"> <li>1. Click on the "Sign Up" option from the main page of the website.</li> <li>2. Fill in the registration form with an invalid email, short password, and blank required fields.</li> <li>3. Click on "Create Account".</li> <li>4. Verify that an error message is shown for invalid entries.</li> <li>5. Fill all fields correctly (email, name, password, and user type).</li> <li>6. Verify that the vendor account is created and redirected to the vendor dashboard.</li> </ol>	yes	
2	As a vendor, I want to log in securely so that I can manage my services and view bookings on the platform.	As a registered vendor, if I go to the login page, enter my correct email and password, and click on the "Login" button, then I should be securely logged in and redirected to my vendor dashboard.	<ol style="list-style-type: none"> <li>1. Click on the "Login" option from the main page of the website.</li> <li>2. Enter an invalid email and password.</li> <li>3. Click on "Login".</li> <li>4. Verify that an error message appears indicating invalid credentials.</li> <li>5. Enter valid login credentials (email and password).</li> <li>6. Click on "Login".</li> <li>7. Verify that the vendor is redirected to the vendor dashboard.</li> </ol>	yes	

2	As a vendor, I want to log out safely so that my account remains secure when I leave the platform.	As a logged-in vendor, if I click on the "Logout" button, then I should be securely logged out, and my session should end, redirecting me to the login page.	<ol style="list-style-type: none"> <li>1. Log in to the vendor account using valid information.</li> <li>2. Click on the "LogOut" button from the dashboard.</li> <li>3. Verify that the vendor is logged out and redirected to the login page.</li> <li>4. Verify that the session is terminated, and the vendor can no longer access the dashboard without logging in.</li> </ol>	yes	The vendor can log out and the session is ended however upon clicking the back button, the account gets logged in again
2	As a vendor, I want to add my services so that users can see what I offer.	As a logged-in vendor, if I go to the "Add Service" page, fill in the required details (service picture, service name, description, price, category), and click "Save," then the service should be successfully added to my profile and visible to users.	<ol style="list-style-type: none"> <li>1. Log in to the vendor account.</li> <li>2. Navigate to the "Add Service" section.</li> <li>3. Fill in the service details (service picture, service name, description, price, category).</li> <li>4. Click on the "Add Service" button.</li> <li>5. Verify that the new service is added to the vendor's service list.</li> <li>6. Verify that users can see the new service in the marketplace.</li> </ol>	yes	
2	As a vendor, I want to edit my service details so that I can keep my information up to date.	As a logged-in vendor, if I go to the "Edit a Service" page, select a service, edit its details, and click "Save," then the updated service information should be saved and visible to users.	<ol style="list-style-type: none"> <li>1. Log in to the vendor account.</li> <li>2. Navigate to the "My Services" section.</li> <li>3. Select an existing service to edit.</li> </ol>	yes	

			<ol style="list-style-type: none"> <li>4. Modify service details (e.g., change price, description, or add new images).</li> <li>5. Click on "Save Changes".</li> <li>6. Verify that the service details are updated in the system.</li> </ol>		
2	As a vendor, I want to delete my services when they are no longer available.	As a logged-in vendor, if I go to the "VendorHomePage", select a service, and click the "Delete" button, then the service should be successfully removed from my profile and no longer visible to users.	<ol style="list-style-type: none"> <li>1. Log in to the vendor account.</li> <li>2. Navigate to the "My Services" section.</li> <li>3. Select a service to delete.</li> <li>4. Click on the "Delete" option next to the service.</li> <li>5. Confirm the deletion action.</li> <li>6. Verify that the service is removed from the vendor's service list.</li> </ol>	yes	
2	As a user, I want to search for event vendors based on location and price so that I can easily find suitable options.	As a user, if I go to the "Service" page and apply filters ( location and price), then I should see a list of vendors that match my search criteria.	<ol style="list-style-type: none"> <li>1. Navigate to the "Services" section of the platform.</li> <li>2. Enter a location and price range in the search filters.</li> <li>3. Click on "Search".</li> <li>4. Verify that the search results display vendors matching the selected criteria.</li> </ol>	no	The "Search" feature on the "Service"only supports price search.
2	As a user, I want to view vendor profiles and services so that I can evaluate my options.	As a user, if I click on a vendor's profile, then I should be able to view their services, descriptions, pricing, and reviews.	<ol style="list-style-type: none"> <li>1. Navigate to the "Vendor Profiles" section.</li> </ol>	no	vendor's profile is not available for the users.

			<ol style="list-style-type: none"> <li>Click on a vendor's profile.</li> <li>Verify that the vendor's profile information and list of services are displayed correctly.</li> <li>Check that service details, pricing, and vendor reviews are available.</li> </ol>		
2	As a user, I want to rate and review vendors after booking so that I can help others make informed decisions.	As a user, after I complete a booking, I should receive a prompt to rate the vendor and leave a review, and my review should be successfully posted and visible on the vendor's profile and for customers in the services page.	<ol style="list-style-type: none"> <li>Book a service from a vendor.</li> <li>After the event, navigate to the vendor's profile.</li> <li>Leave a rating (1 to 5 stars) and a written review.</li> <li>Submit the review.</li> <li>Verify that the rating and review are displayed on the vendor's profile and services page.</li> </ol>	yes	
2	As a user, I want to create a customizable profile where I can add my preferences, budget, and event details so that I get tailored recommendations.	As a logged-in user, if I go to my profile page and fill in my preferences (budget, event details, etc.), and click "Save," then my preferences should be saved, and I should start receiving tailored recommendations.	<ol style="list-style-type: none"> <li>Log in to the user account.</li> <li>Navigate to the "Profile" section.</li> <li>Enter preferences, budget, and event details (date, type of event, etc.).</li> <li>Save the profile settings.</li> <li>Verify that the preferences and budget information are saved and visible in the profile.</li> </ol>	no	The ability to enter preferences, budget, event details (date, event type, etc.) and receive personal recommendations is not available. However, I can change my email address, password, username, mobile number for both the user and the vendor, and name, and city for the vendor.

2	As a user, I want to book a service from a vendor so that I can confirm my event needs.	As a user, if I go to the "Service" page, select a service, and click on the "cart" button, then the service should be added to the cart, and when the order is placed I should receive a booking confirmation.	<ol style="list-style-type: none"> <li>1. Search for a service vendor.</li> <li>2. Click on "cart" button.</li> <li>3. Place the order.</li> <li>4. Verify that the booking confirmation screen appears.</li> <li>5. Verify that the booking details (vendor, service, date, etc.) are correct.</li> </ol>	yes	
2	As a user, I want to select a date when booking a service so that I can plan my event accordingly.	As a user, if I select a date for the service, then the date should be saved.	<ol style="list-style-type: none"> <li>1. Search and select a service.</li> <li>2. Choose the event date from the calendar.</li> <li>3. Click on the "Book Now" button.</li> <li>4. Verify that the selected date is reflected in the booking details.</li> </ol>	no	Scheduling services are not available through PlanPerfect. However, you can arrange them when the vendor contacts you.
2	As a user, I want to cancel the booked service so that I can manage my schedule changes.	As a user, if I go to my "PreviousOrders" page, select a booking, and click "Cancel", then the booking should be successfully canceled.	<ol style="list-style-type: none"> <li>1. Log in to the customer account.</li> <li>2. Navigate to the "PreviousOrders" section.</li> <li>3. Select a service to cancel.</li> <li>4. Click on "Cancel" and confirm the action.</li> <li>5. Verify that the service is canceled and that the status is updated.</li> </ol>	yes	Services can be canceled while they are being prepared (الحالة: قيد التجهيز)
2	As a user, I want the website to load in under	As a user, if I access the platform, the website should load in less than 3 seconds on	<ol style="list-style-type: none"> <li>1. Open the homepage of the platform.</li> </ol>	yes	

	3 seconds so that I have a smooth experience.	standard network speeds for a smooth user experience.	<ol style="list-style-type: none"> <li>2. Measure the time it takes for the page to fully load.</li> <li>3. Verify that the page loads in less than 3 seconds.</li> </ol>		
2	As a user, I want the platform to be available 99.9% of the time so that I can access it whenever needed.	As a user, I should be able to access the platform with minimal downtime, ensuring the platform is available 99.9% of the time over the course of a month.	<ol style="list-style-type: none"> <li>1. Access the platform at different times over a period of several days.</li> <li>2. Monitor the uptime and availability of the website.</li> <li>3. Verify that the platform is accessible and functional at least 99.9% of the time.</li> </ol>	yes	
2	As a user, I want to log out safely so that my account remains secure when I leave the platform.	As a logged-in user, if I click on the "Logout" button, then I should be securely logged out, and my session should end, redirecting me to the login page.	<ol style="list-style-type: none"> <li>1. Log in to the user account.</li> <li>2. Click on the "Logout" button from the dashboard.</li> <li>3. Verify that the user is logged out and redirected to the login page.</li> <li>4. Ensure that the session is terminated, and the user cannot access any personal data without logging in again.</li> </ol>	yes	

Table 6. User story acceptance testing

As shown in the table above, most of the user story acceptance criteria were met, indicating that the system reflects the user's needs and requirements and satisfies them well.

## 5.2 Integration Testing

In this section, we will use integration testing to examine the interactions that occur when Components are combined into a system.

The next testing we will perform is the integration testing. Integration testing checks how individual components interact when integrated into a system. It is conducted each time a new component is added to the system, and it focuses on the interface between the system components, to verify that different components of the application work seamlessly together, ensuring a smooth, integrated user experience.

### 5.2.1 Integration Hierarchy

In this subsection, we will present the “PlanPerfect” integration hierarchy graph, which is designed to show the structure and the sequence in which various components of the system are integrated and tested to form “PlanPerfect” application.

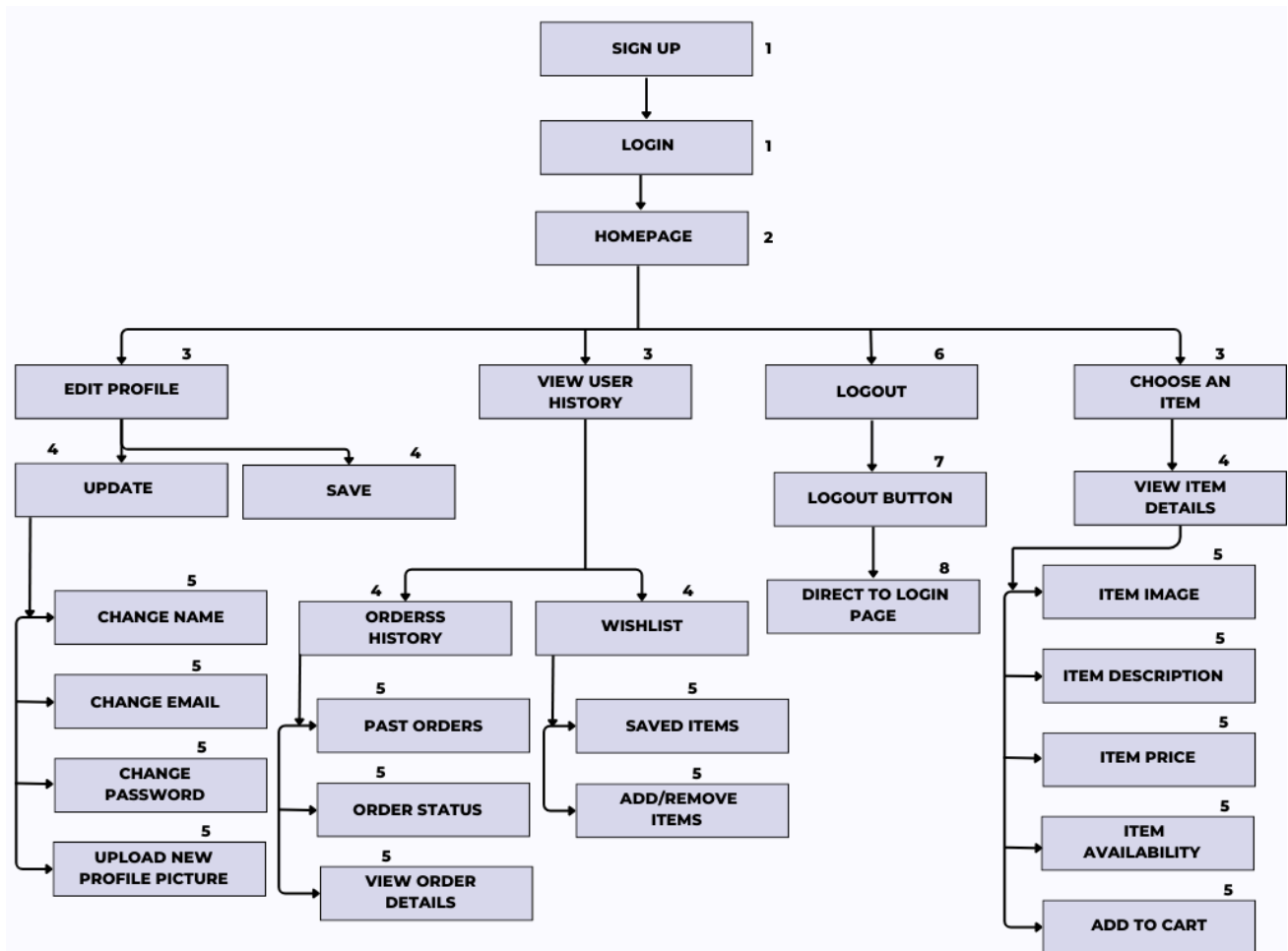


Figure 10. Integration Hierarchy for PlanPerfect

### 5.2.2 Integration Testing Plan

In this subsection, we will present the integration testing plan table that is introduced to ensure that the system components interact with the new components properly by examining some test cases related to them, with an indication whether these components pass the test cases.

System components	New component	Test case	Pass?	Comments
<ul style="list-style-type: none"> <li>SignUp / LogIn to the system</li> </ul>	View Available Items	<ol style="list-style-type: none"> <li>1. A user signedUp / Logged In to the system successfully.</li> <li>2. The logged in user viewed all the available items.</li> </ol>	Yes	
<ul style="list-style-type: none"> <li>SignUp / LogIn to the system.</li> <li>View Available Items.</li> </ul>	View Item Details	<ol style="list-style-type: none"> <li>1. A user signedUp / Logged In to the system successfully.</li> <li>2. The logged in user viewed all the available items.</li> <li>3. The logged in user selects and views item details.</li> </ol>	Yes	
<ul style="list-style-type: none"> <li>SignUp / LogIn to the system.</li> <li>View Available Items.</li> <li>View Item Details.</li> </ul>	Add Item to Cart	<ol style="list-style-type: none"> <li>1. A user signedUp / Logged In to the system successfully.</li> <li>2. The logged in user viewed all the available items.</li> <li>3. The logged in user selects and views item details.</li> <li>4. The logged in user clicks "Add to Cart".</li> </ol>	Yes	



<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Items to Cart.</li> </ul>	View User Profile	<ol style="list-style-type: none"> <li>1. A user signedUp / Logged In to the system successfully.</li> <li>2. The logged in user viewed all the available items.</li> <li>3. The logged in user selects and views item details.</li> <li>4. The logged in user clicks "Add to Cart".</li> <li>5. The logged in user navigates to their profile.</li> </ol>	Yes	
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Items to Cart.</li> <li>• View User Profile.</li> </ul>	Edit Profile	<ol style="list-style-type: none"> <li>1. A user signedUp / Logged In to the system successfully.</li> <li>2. The logged in user viewed all the available items.</li> <li>3. The logged in user selects and views item details.</li> <li>4. The logged in user clicks "Add to Cart".</li> <li>5. The logged in user navigates to their profile.</li> <li>6. The logged in user edits his profile.</li> </ol>	Yes	
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Items to Cart.</li> <li>• View User Profile.</li> <li>• Edit Profile.</li> </ul>	View Purchase History	<ol style="list-style-type: none"> <li>1. A user signedUp / Logged In to the system successfully.</li> <li>2. The logged in user viewed all the available items.</li> <li>3. The logged in user selects and views item details.</li> <li>4. The logged in user clicks "Add to Cart".</li> <li>5. The logged in user navigates to their profile.</li> </ol>	Yes	

		<p>6. The logged in user edits his profile.</p> <p>7. The logged in user navigates to orders history.</p>		
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Items to Cart.</li> <li>• View User Profile.</li> <li>• Edit Profile.</li> <li>• View Orders History.</li> </ul>	View Favorites	<p>1. A user signedUp / Logged In to the system successfully.</p> <p>2. The logged in user viewed all the available items.</p> <p>3. The logged in user selects and views item details.</p> <p>4. The logged in user clicks "Add to Cart".</p> <p>5. The logged in user navigates to their profile.</p> <p>6. The logged in user edits his profile.</p> <p>7. The logged in user navigates to orders history.</p> <p>8. The logged in user navigates to their Favorites.</p>	Yes	
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Items to Cart.</li> <li>• View User Profile.</li> <li>• Edit Profile.</li> <li>• View Orders History.</li> <li>• View Favorites.</li> </ul>	Add/Remove Items from Favorites	<p>1. A user signedUp / Logged In to the system successfully.</p> <p>2. The logged in user viewed all the available items.</p> <p>3. The logged in user selects and views item details.</p> <p>4. The logged in user clicks "Add to Cart".</p> <p>5. The logged in user navigates to their profile.</p> <p>6. The logged in user edits his profile.</p>	Yes	

		<p>7. The logged in user navigates to orders history.</p> <p>8. The logged in user navigates to their Favorites.</p> <p>9. The logged in user removes an item from the Favorites.</p>		
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Item to Cart/Buy Now.</li> <li>• View User Profile.</li> <li>• Edit Profile.</li> <li>• View Orders History.</li> <li>• View Favorites.</li> <li>• Add/Remove Items from Favorites.</li> </ul>	Edit the Reserved Service	<p>1. A user signedUp / Logged In to the system successfully.</p> <p>2. The logged in user viewed all the available items.</p> <p>3. The logged in user selects and views item details.</p> <p>4. The logged in user clicks "Add to Cart".</p> <p>5. The logged in user navigates to their profile.</p> <p>6. The logged in user edits his profile.</p> <p>7. The logged in user navigates to orders history.</p> <p>8. The logged in user navigates to their Favorites.</p> <p>9. The logged in user removes an item from the Favorites.</p> <p>10. The logged in user edits the reserved service details.</p>	No	The user cannot choose the time of the event and confirm their booking
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> </ul>	View the Reserved Services	<p>1. A user signedUp / Logged In to the system successfully.</p> <p>2. The logged in user viewed all the available items.</p>	Yes	Depends on the row above it, if it doesn't work we cannot determine

<ul style="list-style-type: none"> <li>Add Items to Cart.</li> <li>View User Profile.</li> <li>Edit Profile.</li> <li>View Orders History.</li> <li>View Favorites.</li> <li>Add/Remove Items from Favorites.</li> <li>Edit the Reserved Service.</li> </ul>		<ol style="list-style-type: none"> <li>The logged in user selects and views item details.</li> <li>The logged in user clicks "Add to Cart".</li> <li>The logged in user navigates to their profile.</li> <li>The logged in user edits his profile.</li> <li>The logged in user navigates to orders history.</li> <li>The logged in user navigates to their wishlist.</li> <li>The logged in user removes an item from the wishlist.</li> <li>The logged in user edits the reserved service details.</li> <li>The logged in user views the reserved services</li> </ol>		
<ul style="list-style-type: none"> <li>SignUp / LogIn to the system.</li> <li>View Available Items.</li> <li>View Item Details.</li> <li>Add Items to Cart.</li> <li>View User Profile.</li> <li>Edit Profile.</li> <li>View Orders History.</li> <li>View Favorites.</li> <li>Add/Remove Items from Favorites.</li> <li>Edit the Reserved Service.</li> </ul>	Delete the Reserved Service	<ol style="list-style-type: none"> <li>A user signedUp / Logged In to the system successfully.</li> <li>The logged in user viewed all the available items.</li> <li>The logged in user selects and views item details.</li> <li>The logged in user clicks "Add to Cart".</li> <li>The logged in user navigates to their profile.</li> <li>The logged in user edits his profile.</li> <li>The logged in user navigates to orders history.</li> </ol>	Yes	Depends on the row above it, if it doesn't work we cannot determine

<ul style="list-style-type: none"> <li>View the Reserved Services.</li> </ul>		<p><b>8.</b> The logged in user navigates to their wishlist.</p> <p><b>9.</b> The logged in user removes an item from the wishlist.</p> <p><b>10.</b> The logged in user edits the reserved service details.</p> <p><b>11.</b> The logged in user views the reserved services</p> <p><b>12.</b> The logged in user deletes the reservation.</p>		
<ul style="list-style-type: none"> <li>SignUp / LogIn to the system.</li> <li>View Available Items.</li> <li>View Item Details.</li> <li>Add Items to Cart.</li> <li>View User Profile.</li> <li>Edit Profile.</li> <li>View Orders History.</li> <li>View Favorites.</li> <li>Add/Remove Items from Favorites.</li> <li>Edit the Reserved Service.</li> <li>View the Reserved Services.</li> <li>Delete the Reserved Service.</li> </ul>	Search Services	<p><b>1.</b> A user signedUp / Logged In to the system successfully.</p> <p><b>2.</b> The logged in user viewed all the available items.</p> <p><b>3.</b> The logged in user selects and views item details.</p> <p><b>4.</b> The logged in user clicks "Add to Cart".</p> <p><b>5.</b> The logged in user navigates to their profile.</p> <p><b>6.</b> The logged in user edits his profile.</p> <p><b>7.</b> The logged in user navigates to orders history.</p> <p><b>8.</b> The logged in user navigates to their Favorites.</p> <p><b>9.</b> The logged in user removes an item from the Favorites.</p> <p><b>10.</b> The logged in user edits the reserved service details.</p>	no	The "Search" feature on the "Service" page is missing.

		<p><b>11.</b> The logged in user views the reserved services</p> <p><b>12.</b> The logged in user deletes the reservation.</p> <p><b>13.</b> The logged in user User searches for service.</p>		
<ul style="list-style-type: none"> <li>• SignUp / LogIn to the system.</li> <li>• View Available Items.</li> <li>• View Item Details.</li> <li>• Add Items to Cart.</li> <li>• View User Profile.</li> <li>• Edit Profile.</li> <li>• View Orders History.</li> <li>• View Favorites.</li> <li>• Add/Remove Items from Favorites.</li> <li>• Edit the Reserved Service.</li> <li>• View the Reserved Services.</li> <li>• Delete the Reserved Service.</li> <li>• Search Search Services.</li> </ul>	Log Out from the system	<p><b>1.</b> A user signedUp / Logged In to the system successfully.</p> <p><b>2.</b> The logged in user viewed all the available items.</p> <p><b>3.</b> The logged in user selects and views item details.</p> <p><b>4.</b> The logged in user clicks "Add to Cart".</p> <p><b>5.</b> The logged in user navigates to their profile.</p> <p><b>6.</b> The logged in user edits his profile.</p> <p><b>7.</b> The logged in user navigates to orders history.</p> <p><b>8.</b> The logged in user navigates to their Favorites.</p> <p><b>9.</b> The logged in user removes an item from the Favorites.</p> <p><b>10.</b> The logged in user edits the reserved service details.</p> <p><b>11.</b> The logged in user views the reserved services</p> <p><b>12.</b> The logged in user deletes the reservation.</p>	Yes	

		<p><b>13.</b> The logged in user searches for service.</p> <p><b>14.</b> logs out of the system.</p>		
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Table 7. Integration testing plan

As shown in the previous table, most of the system components successfully passed the test cases, indicating that the components in the system interact well with each other and achieve the functionality required by the user.

### 5.3 User Acceptance Testing

User Acceptance Testing (UAT) was conducted to evaluate whether the PlanPerfect platform meets user requirements and expectations. This test was carried out with participants who match the target demographic outlined in earlier phases.

Participants:

- Total Participants: 10
- Age Range: 25–53
- Gender: Mixed
- Occupation: Event planner, vendor, photographer, business analyst, food caterer
- Tech Skill: Basic familiarity with online systems
- Language: Arabic users, Saudi nationality

Test Methodology:

We selected participants from the target user group. Testing took place in a controlled setting where users interacted with core features including:

- Registration
- Vendor search
- Service booking
- Budget tracking
- Reviews

Users were observed as they performed tasks, and feedback was collected through a post-test questionnaire with the following sample questions:

Sample Questionnaire (10 Questions)

1. Was the platform easy to navigate?
2. Were the vendor search and filtering features helpful?
3. Did you find the vendor information sufficient for making decisions?
4. Was the booking process straightforward?
5. Did the site load quickly?
6. Did you feel secure entering your personal data?
7. Was the vendor review system useful?
8. Were you able to track your bookings effectively?
9. Would you use this platform again?
10. What features did you find missing?

#### Results (Summary)

- Registration & Login: 100% success
- Vendor Profile Viewing: Feature missing
- Vendor Search: Not fully implemented
- Booking & Cancellation: 100% success
- Custom Profile Settings: Not available
- Page Load Speed: < 3s for all participants
- Uptime: 99.9% availability during testing

#### 5.4 Discussion

The results of our User Acceptance Testing confirm that PlanPerfect successfully addresses many of the core user needs, such as easy registration, secure login, booking, and fast system performance. However, it also revealed missing or incomplete features, such as:

- Vendor profile viewing
- Fully functioning vendor search and filter
- Personalized profile settings with recommendations

#### Reflections on the Process

Throughout the development, we maintained a user-centered design approach. The agile methodology helped us iterate quickly based on feedback. The UAT stage validated many of our decisions but also highlighted areas for improvement.

#### On the Results

- Functional Features like account creation, booking, and review submission worked as intended and met user expectations.
- Non-Functional Requirements (NFRs) like speed and availability were met.
- However, a few features failed UAT due to incomplete implementation or UI issues, and these must be prioritized in the next sprint.

#### Recommendations for Improvement

1. Search & Profile Viewing: Complete these essential features.
2. UX Improvements: Add more guidance or tooltips for first-time users.
3. Smart Recommendations: Implement AI suggestions based on user preferences.
4. Vendor Engagement: Improve the vendor onboarding process to ensure quality listings.
5. Mobile Responsiveness: While functional, the mobile experience could be optimized.



## 6 Chapter 6: Conclusion and Future Work

### 6.1 Global and Local Impact

PlanPerfect helps solve a real problem many people face in Saudi Arabia (organizing events and finding trusted service providers). Instead of spending time on scattered social media or asking around, users can now use one platform to plan their event smoothly and book services they need.

On a local level, the system supports small and medium businesses by helping them reach more customers and organize their services in a better way. On a global level, this idea can work in other countries too, since planning events is a challenge almost everywhere. The platform has the potential to grow and offer a more organized way of handling event planning around the world.

### 6.2 Problems and Challenges

While working on the project, we faced some challenges:

- One of the hardest parts was choosing which features to build. Event planning includes many areas, and it was difficult to limit our focus without trying to do too much at once.
- It was also tricky to balance the needs of both vendors and users. Each group has different goals and expectations, so it wasn't easy to decide which side to focus on more.
- On the technical side, connecting the frontend and backend smoothly required effort and testing.
- Time management was another challenge. Dividing tasks, keeping track of progress, and sticking to sprint deadlines added some pressure.

Even with these challenges, good teamwork and communication helped us stay on track and complete the work.

### 6.3 Limitations of the System

PlanPerfect still has a few limitations in this version:

- The platform supports only the Arabic language.
- It's only available as a responsive website; there's no mobile app yet.
- There's no live chat between users and vendors.
- Users can't pay using our platform .

These limits were mostly due to time and resources, but we see them as opportunities to improve in future versions.

## 6.4 Main Contribution

PlanPerfect brings everything users need for event planning into one place. They can search for services using filters like event type or product category, save items they liked to their favorites list, and leave reviews after booking. This helps them plan faster and more easily.

Vendors also benefit from the platform. It helps them reach a bigger audience and learn from customer reviews to improve their services.

On a technical level, the project gave our team a chance to practice full-stack development using PHP , MySQL , PHP MyAdmin database . We also got hands-on experience with agile tools like JIRA.

## 6.5 Future Work

To improve the platform, we have several ideas for future development:

- Build a native mobile app for better phone experience.
- Add smart recommendations using AI to suggest services based on user needs.
- Support more languages like English.
- Add live chat so users and vendors can communicate directly.
- Allow different payment methods.
- Add a budget tracking feature so users can keep an eye on their spending.

These updates will make PlanPerfect more useful and easier to use for everyone.

## 7 References

- [1] Social Tables, “**Top 15 Challenges Facing Event Planners (& Solutions!)**,” *Social Tables Blog*, 2025. [Online]. Available: <https://www.socialtables.com/blog/event-planning/biggest-event-planning-challenges/>. [Accessed: Jan. 25, 2025].
- [2] EventPro, “**Common Event Planning Problems and Solutions**,” *EventPro*, 2025. [Online]. Available: <https://www.eventpro.net/common-event-planning-problems-and-solutions.html>. [Accessed: Jan. 25, 2025].
- [3] Conference News, “**Long read: Why has the events industry been left behind?**” *Conference News*, 2025. [Online]. Available: <https://www.conference-news.co.uk/blogs/long-read-why-has-events-industry-been-left-behind/>. [Accessed: Jan. 25, 2025].
- [4] OnePlan, “**Nine Benefits of Using an Event Planning Software**,” *OnePlan Blog*, 2025. [Online]. Available: <https://www.oneplan.io/blog/nine-benefits-of-event-planning-software/>. [Accessed: Jan. 25, 2025].
- [5] Acelevents, “**What is Event Management Software and Why You Should Use It**,” *Accelevents Blog*, 2025. [Online]. Available: <https://www.acelevents.com/blog/why-event-management-software-is-essential-for-your-business>. [Accessed: Jan. 25, 2025].
- [6] FacilityONE, “**5 Benefits of Event Management Software**,” *FacilityONE Blog*, 2025. [Online]. Available: <https://corp.facilityone.com/education-blog/scheduling-event-management-software>. [Accessed: Jan. 25, 2025].
- [7] PlanA Event Planner, “**Ghadapartyplanner**,” *Instagram*, 2025. [Online]. Available: [https://www.instagram.com/eventplana?utm\\_source=ig\\_web\\_button\\_share\\_sheet&igsh=ZDNlZDc0MzIxNw==](https://www.instagram.com/eventplana?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==). [Accessed: Feb. 12, 2025].
- [8] Event Kayef Event Planner, “**Kayef by hdn**” *Instagram*, 2025. [Online]. Available: [https://www.instagram.com/event.kayef?utm\\_source=ig\\_web\\_button\\_share\\_sheet&igsh=ZDNlZDc0MzIxNw==](https://www.instagram.com/event.kayef?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==). [Accessed: Feb. 12, 2025].
- [9] Nada Savor Food Caterer, “**Nada Savor**” *Instagram*, 2025. [Online]. Available: [https://www.instagram.com/nada\\_savor?utm\\_source=ig\\_web\\_button\\_share\\_sheet&igsh=ZDNlZDc0MzIxNw==](https://www.instagram.com/nada_savor?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==). [Accessed: Feb. 12, 2025].
- [10] Durrah Food Caterer, “**Durrah Buffet**” *Instagram*, 2025. [Online]. Available: [https://www.instagram.com/durrah\\_21?utm\\_source=ig\\_web\\_button\\_share\\_sheet&igsh=ZDNlZDc0MzIxNw==](https://www.instagram.com/durrah_21?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==). [Accessed: Feb. 12, 2025].
- [11] UX Design Institute. (n.d.). 10 user interface guidelines. UX Design Institute. [Online]. Available: [User interface guidelines: 10 essential rules to follow - UX Design Institute](#). [Accessed: Mar. 10, 2025].

## 8 Appendix

### 8.1 Appendix 1: Interview Questions

#### Interview Transcriptions:

 **Interviews.pdf**

#### Interview Questions:

- 1- Can you describe a recent event your business helped organize? What aspects were successful, and what challenges did you encounter?
- 2- What factors influence your decision when choosing vendors or partners for an event, and how do you typically find them?
- 3- How do you manage event budgets for your clients, and what tools or strategies do you use to track expenses effectively?
- 4- If you could improve one aspect of the event planning industry or process, what would it be and why?
- 5- If you were designing the ideal event planning platform for your business, what are the top three features you'd prioritize?

**\* Interviews were conducted in Arabic and then translated.**

### 8.2 Appendix 2: Questionnaire

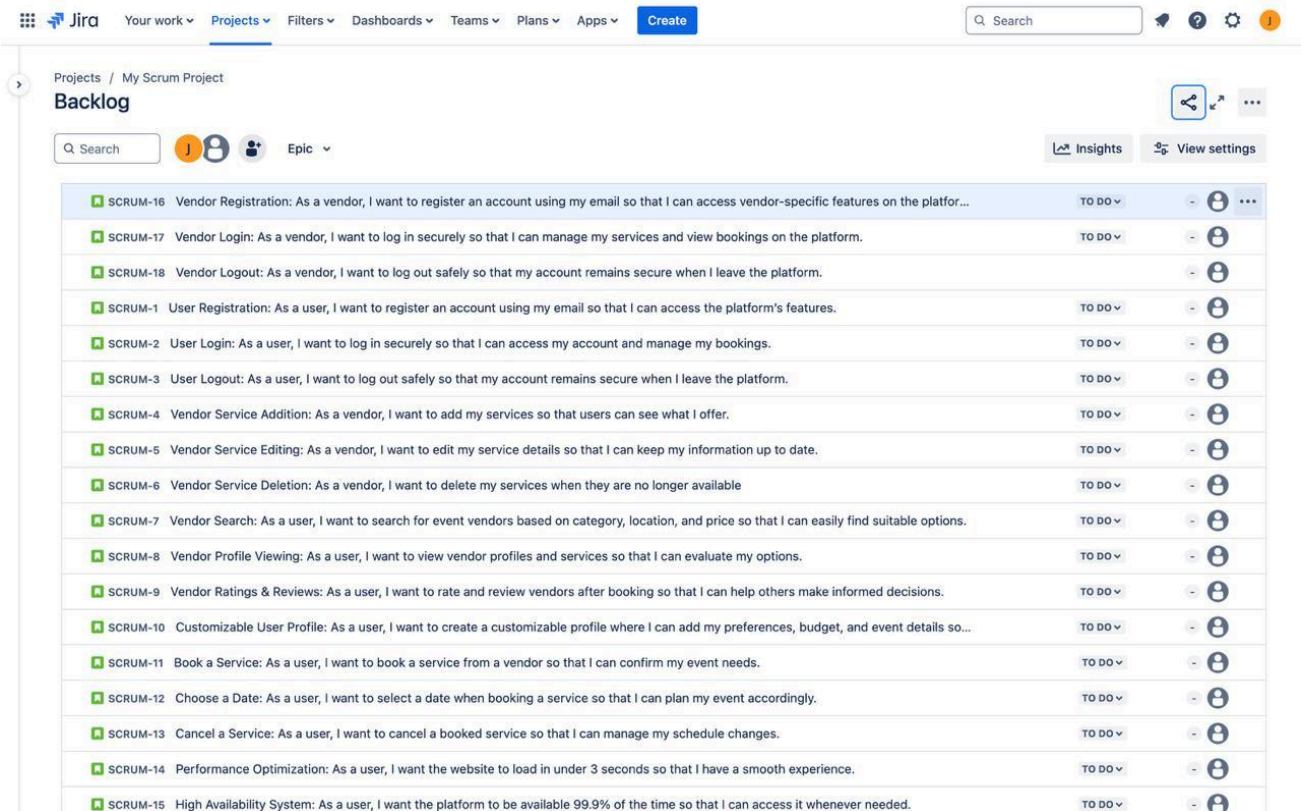
#### Questionnaire Questions and Complete Answers:

 **Questionnaire Results.pdf**

#### Link to Questionnaire:

[Questionnaire](#)

### 8.3 Appendix 3: Jira Backlog



Projects / My Scrum Project

## Backlog

Q Search

Insights View settings

Item	Description	Status	Priority
SCRUM-16	Vendor Registration: As a vendor, I want to register an account using my email so that I can access vendor-specific features on the platfor...	TO DO	High
SCRUM-17	Vendor Login: As a vendor, I want to log in securely so that I can manage my services and view bookings on the platform.	TO DO	High
SCRUM-18	Vendor Logout: As a vendor, I want to log out safely so that my account remains secure when I leave the platform.	TO DO	High
SCRUM-1	User Registration: As a user, I want to register an account using my email so that I can access the platform's features.	TO DO	High
SCRUM-2	User Login: As a user, I want to log in securely so that I can access my account and manage my bookings.	TO DO	High
SCRUM-3	User Logout: As a user, I want to log out safely so that my account remains secure when I leave the platform.	TO DO	High
SCRUM-4	Vendor Service Addition: As a vendor, I want to add my services so that users can see what I offer.	TO DO	High
SCRUM-5	Vendor Service Editing: As a vendor, I want to edit my service details so that I can keep my information up to date.	TO DO	High
SCRUM-6	Vendor Service Deletion: As a vendor, I want to delete my services when they are no longer available	TO DO	High
SCRUM-7	Vendor Search: As a user, I want to search for event vendors based on category, location, and price so that I can easily find suitable options.	TO DO	High
SCRUM-8	Vendor Profile Viewing: As a user, I want to view vendor profiles and services so that I can evaluate my options.	TO DO	High
SCRUM-9	Vendor Ratings & Reviews: As a user, I want to rate and review vendors after booking so that I can help others make informed decisions.	TO DO	High
SCRUM-10	Customizable User Profile: As a user, I want to create a customizable profile where I can add my preferences, budget, and event details so...	TO DO	High
SCRUM-11	Book a Service: As a user, I want to book a service from a vendor so that I can confirm my event needs.	TO DO	High
SCRUM-12	Choose a Date: As a user, I want to select a date when booking a service so that I can plan my event accordingly.	TO DO	High
SCRUM-13	Cancel a Service: As a user, I want to cancel a booked service so that I can manage my schedule changes.	TO DO	High
SCRUM-14	Performance Optimization: As a user, I want the website to load in under 3 seconds so that I have a smooth experience.	TO DO	High
SCRUM-15	High Availability System: As a user, I want the platform to be available 99.9% of the time so that I can access it whenever needed.	TO DO	High

Figure 11. Product Backlog of PlanPerfect in Jira

#### 8.4 Appendix 4: Password Reference Table for Testing

As part of our system's security implementation, all user passwords are securely hashed before being stored in the database. However, for the purpose of testing and evaluation, we are including a table below listing the actual usernames and passwords.

Username	Password
Sara_moh	Sara_moh11
munira_sultan	munira_sultan12
hessah_salem	hessah_salem13
azima_kitchen	azimakitchen1
rawaa_events	rawaaevents1
lahddhat_photograph	lahddhatphotograph1
jasmine_flowers	jasmine1flowers
happy_palace	happy1palace
nagham_alkhalij	nagham1alkhalij
asalat_aldiyafa	asalat1aldiyafa
creative_touch	creative1touch
happy_sweets	happy1sweets
maram_kitchen	maram1kitchen

Table 8. Password Reference

## Roles and responsibilities

### Phase-01

Student name	Role	Reviewer	Reviewer's Feedback
Tarfah Bin Moammar	Introduction, Problem, and Solution	Najla Almazyad & Jood Alkhrashi	Range of detail was very big, needed to shorten the paragraphs and make concise yet detailed and not repetitive.
Jood Alkhrashi	Introduction, Objectives, and Scope	Tarfah Bin Moammar & Jood Alkhrashi	At first was detailed, low-level, guided to make it more high-level.
Najla Almazyad	Objectives	Ghala Musallam & Jood Alkhrashi	Well-structured but required minor refinements to improve clarity.
Ghala Musallam	Product Vision & Product Roadmap	Reuof Alanazi & Jood Alkhrashi	Little changes needed, visual wise, overall amazing!
Reuof Alanazi	Objectives	Jood Alkhrashi	Needed alteration to refine it around the outlines of the project goal.

### Phase-02

Student name	Role	Reviewer	Reviewer's Feedback
Najla Almazyad	Background & Interviews	Ghala Musallam	Clear and well-written; minor clarifications were suggested regarding technical details.
Jood Alkhrashi	Product Backlog & Interviews & Requirement Elicitation	Najla Almazyad	Well-organized data; suggested adding more details about evaluation mechanisms.
Ghala Musallam	Literature Review & Interviews	Jood Alkhrashi	Comprehensive review; suggested simplifying complex terms for clarity.
Tarfah Bin Moammar	System Users&Use Case Diagram & Questionnaire & Interviews	Reuof Alanazi	Detailed and accurate; minor adjustments suggested for diagram labeling.
Reuof Alanazi	Product Backlog & Interviews	Tarfah Bin Moammar	Thorough work; suggested reordering items for better logical flow.

### Phase-03

Student name	Role	Reviewer	Reviewer's Feedback
Najla Almazyad	Developed the following pages: add.html, edit.html, Favorite.html and VendorHomepage.html.	Ghala Musallam	The code is clean, and the navigation is intuitive. One suggestion would be to refine the visual consistency across the pages
Jood Alkhrashi	Developed the following pages: cart.html, PreviosOrders.html, and CustomerHomepage.html	Najla Almazyad & Reuof Alanazi	Solid with smooth functionality and seamless navigation. I recommend improving page responsiveness.
Ghala Musallam	Authored the report and took charge of the following sections: 4.3 Data Design, 4.4 Components Design, and 4.5 Interface Design.	Jood Alkhrashi	Well-organized and provides a clear explanation of the technical concepts. The Data Design and Components Design sections are detailed and informative.
Tarfah Bin Moammar	Authored the report and took charge of the following sections: 4.1 System Architecture, 4.2 Class Diagram, and 4.5 Interface Design.	Reuof Alanazi	The structure of the System Architecture, Class Diagram, and Interface Design sections is very good. The diagrams are well-labeled and effectively illustrate the concepts.
Reuof Alanazi	Developed the following pages: Services.html, signup.html, and login.html	Tarfah Bin Moammar & Najla Almazyad	Great job on the Services.html, signup.html, and login.html pages! The code is well-structured, but minor styling inconsistencies could be improved for a more cohesive user experience.



#### Phase-04

Student name	Role	Reviewer	Reviewer's Feedback
Najla Almazyad	Authored Chapter 6: Conclusion and Future Work	Jood Alkhrashi	perfect no notes
Jood Alkhrashi	Responsible for implementing the backend functionality of the system	Ghala Musallam	Minor changes were made to ensure database integration and maintain uniformity across the project.
Ghala Musallam	Responsible for implementing the backend functionality of the system	Najla Almazyad	Everything is good!
Tarfah Bin Moammar	Authored the report and took charge of the following sections: 5.1 User Story Acceptance Testing , 5.2 Integration Testing	Reuof Alanazi	Great work nothing to mention
Reuof Alanazi	5.3 User Acceptance Testing, 5.4 Discussion	Tarfah Bin Moammar	Did all the requirements perfectly