King Saud University

College of Computer and Information Sciences

Information Technology Department

IT214 User Experience Design

Second semester, 2023

Introduction:

Effective event planning is crucial to the success of any event. It is a complex task that involves many details, from choosing the venue to managing the catering services. Despite technological advances, many still suffer from fragmented communication and missed deadlines. So, we have come up with this app, which aims to simplify this process by providing a comprehensive platform for seamless event management. Our app offers features like customizable event schedules, guest list management and vendor collaboration, saving time and enhancing the experience for both planners and attendees.

Methodology:

For the interview, questions are designed to provide a comprehensive understanding of participants' experiences, preferences, challenges, and expectations regarding event planning apps. The responses can guide the development or improvement of event planning technology by addressing specific user needs and concerns. Participants sought for this study are individuals older than 20 interested in organizing events in Riyadh city. We welcome both those with experience in planning events, such as weddings, corporate events, or social gatherings, and individuals who are new to event organization. We are using a random sampling method where every member of the population has an equal chance of being selected.

For the questionnaire, we collected data through an online survey that we shared via different social media applications to collect information from various kinds of people who are interested in event planning. The survey contains 8 closed questions to know the preferences of users for event planning apps and what features are expected from these apps to reach their requirements. 23 people answered the questions.

Results:

• Interview result:

We interviewed 8 people who matched our wish-for sample. People of different ages planned different events. We asked a variety of questions to know more about the users' need to organize their events in the best way and the issues they face with event planning. They had some common problems like the long time preparing for the event, high cost, and good quality. We note that our app will solve these problems and it's desirable and wanted by our sample to save their money and time. Calendars, money budgets and reviews will be taken into consideration to fulfill their requirements for our idea.

• Questionnaire result:

Based on the 23 responses we've collected we noticed that 60% have never used event planning apps which proves that the app is innovative, and we don't have much competition. 43% prefer planning their events in person so it would be smart to add the vendors' addresses so they can check them out in person and be more at ease when booking them. 78% would be more likely to use the app if it had a sending invitation feature so we'll be sure to include that feature. When it comes to other features most people were interested in an events calendar, tools to set a budget, and ability to connect with vendors. 78% of people prefer photo sharing after an event so we'll be sure to include a tab where attendees can share photos especially when more than half prefer Instagram, so we'll make sure the app has lots of pictures.
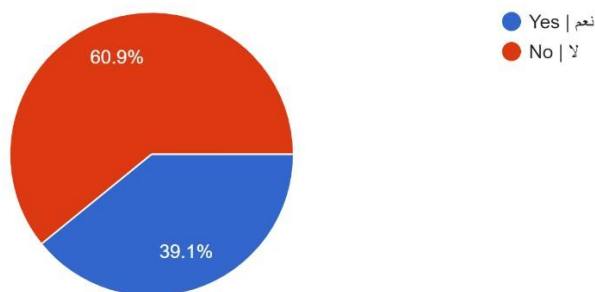
What is your age?   كم عمرك؟
23 responses

- 18-23
- 24-29
- 30+

91.3%
8.7%
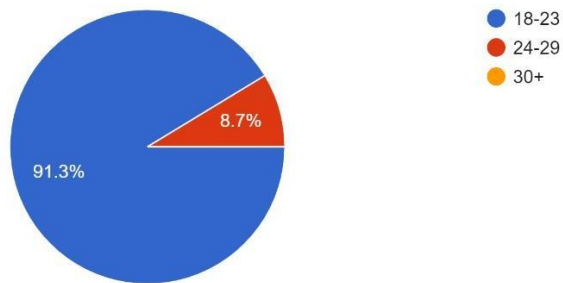
Have you ever tried to plan an event using event planning apps?   هل سبق لك أن جربت التخطيط لمناسبة ما باستخدام تطبيقات تخطيط المناسبات؟
23 responses

- نعم | Yes
- لا | No

60.9%
39.1%
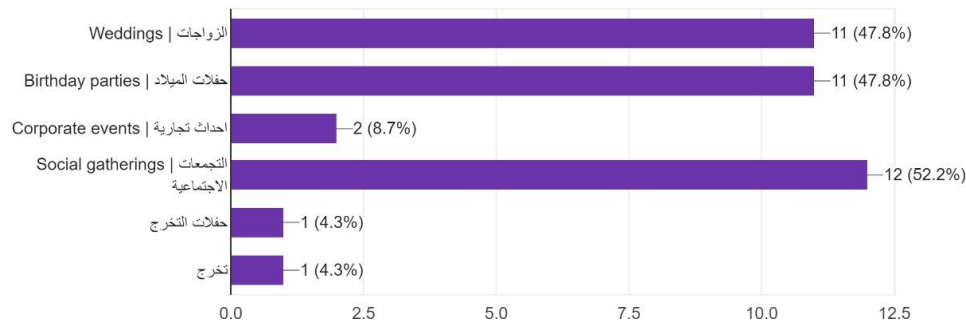
5

What type of events do you typically plan using event planner apps? ما نوع المناسبات التي تخطط لها عادةً باستخدام تطبيقات تخطيط المناسبات؟
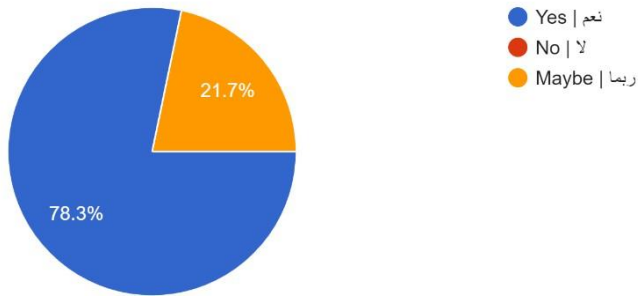
23 responses

Type	Count (%)
Weddings | الزواجات	11 (47.8%)
Birthday parties | حفلات الميلاد	11 (47.8%)
Corporate events | احداث تجارية	2 (8.7%)
Social gatherings | التجمعات الاجتماعية	12 (52.2%)
حفلات التخرج	1 (4.3%)
تخرج	1 (4.3%)

Would it make it more likely for you to use the app if it had a sending invitations feature? هل سيزيد احتمال استخدامك للتطبيق إذا كان يحتوي على ميزة إرسال الدعوات؟
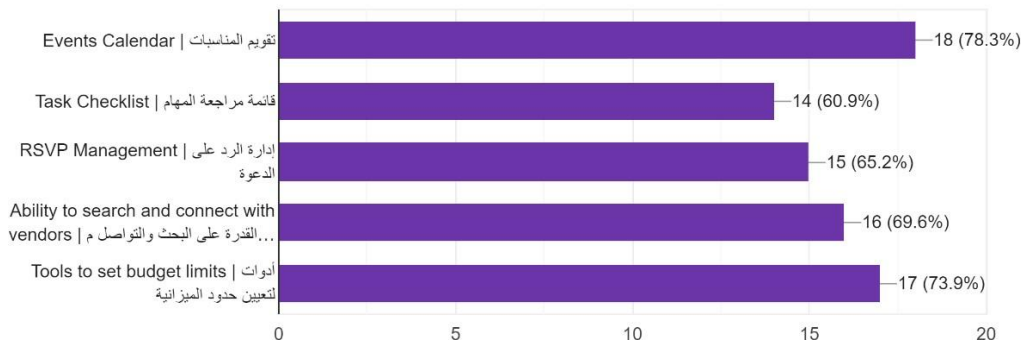
23 responses

- Yes | نعم
- No | لا
- Maybe | ربما

78.3%
21.7%

What features do you consider essential in an event planning app? ما هي الميزات التي تعتبرها أساسية في تطبيق تخطيط المناسبات؟

23 responses

Feature	Count (%)
Events Calendar | تقويم المناسبات	18 (78.3%)
Task Checklist | قائمة مراجعة المهام	14 (60.9%)
RSVP Management | إدارة الرد على الدعوة	15 (65.2%)
Ability to search and connect with vendors | القدرة على البحث والتواصل م...	16 (69.6%)
Tools to set budget limits | أدوات لتعيين حدود الميزانية	17 (73.9%)

How would you like to plan your event?   كيف تفضل التخطيط للمناسبة الخاصة بك؟
23 responses

● By social media | عن طريق مواقع التواصل الاجتماعي
● in Person | شخصياً
● By an app | عن طريق تطبيق

43.5%
21.7%
34.8%
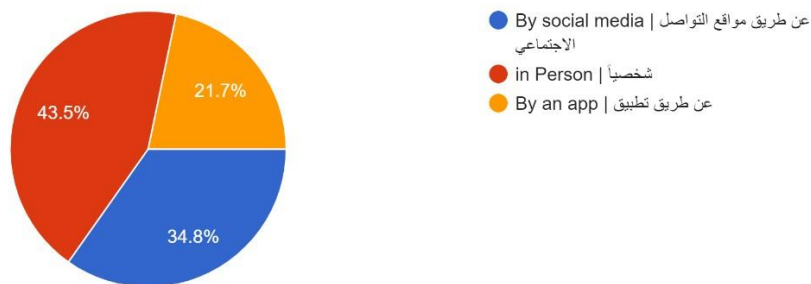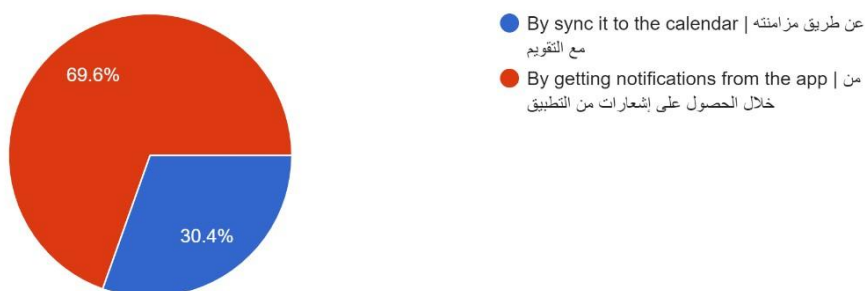
How do you prefer to receive reminders for your upcoming events?   كيف تفضل تلقي التذكيرات لمناسباتك القادمة؟
23 responses

● By sync it to the calendar | عن طريق مزامنته مع التقويم
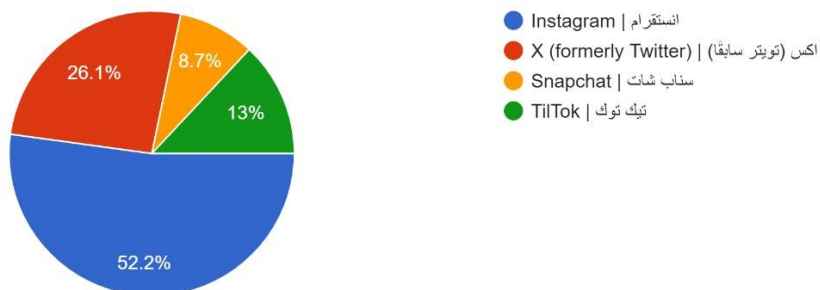● By getting notifications from the app | من خلال الحصول على إشعارات من التطبيق

69.6%
30.4%

What are some of the apps and websites you use the most?   ما هي بعض التطبيقات ومواقع الويب التي تستخدمها أكثر من غيرها؟
23 responses

● Instagram | انستقرام
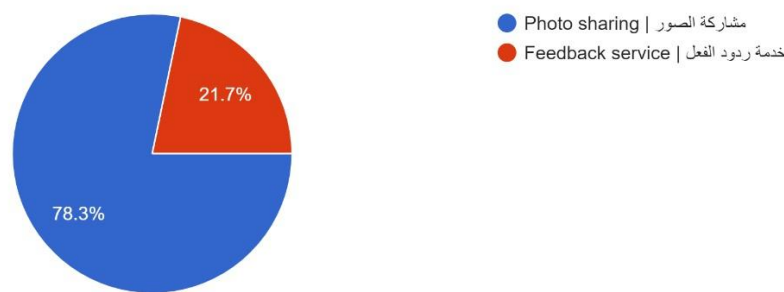● X (formerly Twitter) | اكس (تويتر سابقًا)
● Snapchat | سناب شات
● TilTok | تيك توك

26.1%
8.7%
13%
52.2%

7

What post event features would you like to see?   ما هي ميزات "ما بعد المناسبة" التي ترغب في رؤيتها؟
23 responses

- ● مشاركة الصور | Photo sharing
- ● خدمة ردود الفعل | Feedback service

78.3%

21.7%

Appendix A: Interviews

• **Questions:**

Q1: Have you ever tried to plan an event? And what was it?

Q2: If there was an app for event planning, would you see it helpful? And why?

Q3: What is the most important thing to you when planning an event?

Q4: How long does it take you to plan an event? And how do you think event planning apps can speed up the process?

Q5: How do you currently communicate and collaborate with others when planning events?

Q6: What are some of the obstacles you face when organizing events, and how do you believe event planning apps can help you overcome these obstacles?

Q7: What specific features would you like to see in an event planning app?

Q8: How do you anticipate sharing event details and updates with attendees using an app?

Q9: How would you measure the success of an event planning app in meeting your needs and expectations?

Q10: Do you have any concerns or reservations about using an event planning app?

• Interviews' Transcriptions:

Interview #1:

Interviewee: Noura.

Interviewer: Nouf Alaskar.

A1: Yes, I've planned several events, most of them small gatherings like birthday parties and dinners.

A2: Yes, because it would streamline the planning process, keep everything organized in one place, and prevent oversights.

A3: The most important thing to me when planning an event is ensuring a seamless and memorable experience for the attendees.

A4: I find that it typically takes me a few weeks to plan an event. However, I believe that event planning apps can significantly speed up the process by streamlining tasks such as finding venues and managing guest lists.

A5: I communicate and collaborate through email, phone calls, and messaging apps like WhatsApp.

A6: Sometimes it's difficult for me to manage guests. I believe event planning apps can overcome this problem by automating RSVPs.

A7: I'd like to see features like integrated calendar, budget tracker, task lists, seating arrangements and event timeline.

A8: I think updates and event details would be shared in-app messages and social media integration within the app.

A9: I'd measure the success of an event planning app by its ability to simplify planning, save time and provide essential features like RSVP management.

A10: My main concerns would be privacy and security of sensitive information, as well as ensuring the app user-friendly and enhances the planning process without adding complexity.

Interview #2:

Interviewee: Amal.

Interviewer: Nouf Alaskar.

A1: Yes, I have tried planning an event in the past. It was a small birthday party for a friend.

A2: Yes, planning events can be overwhelming and time-consuming, so an event planner app would provide me with a convenient and efficient platform to manage and organize all aspects of my events at a time.

A3: The most important thing for me is selecting an appropriate venue.

A4: The time it takes to plan an event can vary depending on the size and complexity of the event. They can speed up the process by helping with communication and collaboration among the event planning team.

A5: Through in-person meetings.

A6: Managing multiple tasks and deadlines, Event planning apps can help by providing features such as scheduling tools.

A7: I'd like to see a comprehensive vendor directory with reviews and ratings.

A8: Through notifications or feedback service.

A9: I would measure it by evaluating its effectiveness in helping me plan, organize, and execute events efficiently. I would consider factors such as user-friendliness and ease of navigation.

A10: No, I do not have any concerns and I am open to embracing new technology to enhance my event planning experience.

Interview #3:

Interviewee: Maria

Interviewer: Juri Alghamdi.

A1: No.

A2: Yes.

A3: Location, decor, and events

A4: I haven't tried it, but maybe in two months. An app would be helpful if it consolidates various venues and services in one platform, allowing us to make informed choices.

A5: Whether through Instagram or by visiting their official websites.

A6: Considering factors like quality and prices, having an app could streamline our search efforts, saving us valuable time.

A7: Categorizing information into sections for places, events, and food/services within the app would greatly facilitate the organizational process.

A8: Ability to share event experiences directly from the app on social media.

A9: the quality.

A10: No.

Interview #4:

Interviewee: Layan.

Interviewer: Juri Alghamdi.

A1: Yes, it was my congratulation party.

A2: Yes, I would find it helpful to interact with them more easily.

A3: The most important thing is the quality and whether people would enjoy it or not.

A4: Perhaps in one or two months, I believe using an application would make organizing an event easier and more efficient.

A5: Typically, I communicate with them in person.

A6: Balancing numerous tasks and meeting deadlines can be both time-consuming and demanding. Having access to tools

for task management, calendars, or reminders would be helpful.

A7: I would appreciate having feedback and reading people's reviews about their experiences.

A8: Through notifications.

A9: By incorporating attendees' feedback and comments.

A10: I am concerned about security issues.

Interview #5:

Interviewee: Rana

Interviewer: Raghad Alhulwah.

A1: Yes, graduation party.

A2: Yes, it reduces time and organizes ideas.

A3: Organization and quality.

A4: Week to two weeks, it saves time visiting many stores and searching for suitable options.

A5: WhatsApp, phone number, social media account.

A6: Availability and the best quality that fits my budget.

A7: A calendar for recording appointments and the ability to communicate with reserved places, the possibility of a group participating in organizing the event.

A8: WhatsApp, messages.

A9: If it's spared me the need to use any other application and was easy to use.

A10: Inaccurate appointments and technical issues hinder the use of the application.

Interview #6:

Interviewee: Leen

Interviewer: Raghad Alhulwah.

A1: Yes, eid.

A2: Yes, it will make event planning easier.

A3: Decors, food, the logo, punctuality, good prices, and packages.

A4:10 days to 3 weeks, everything in one place.

A5: phone number, WhatsApp, and going to the shop.

A6: High prices, long preparation time, and lack of store reviews.

A7: price range, pictures, and easy to use app.

A8: printed cards.

A9: if my event guest's reviews were high.

A10: No.

Interview #7:

Interviewee: Lulu

Interviewer: Raghad Alrashid.

A1: Yes, a birthday party for my friend.

A2: Yes, a lot because it will organize everything, and I wouldn't get overwhelmed.

A3: Catering for sure. Like cake, dinner, appetizers etc...

A4: Depends on how big the event is. For a birthday party I'd say about a week. Apps can make it easier for me to compare my options when deciding so I wouldn't search as much.

A5: Usually by texting, but I think it would be helpful for the app to share their number because it's easier to get your point across by calling rather than texting.

A6: Searching for vendors on social media. It can be time consuming so, an app would help me organize faster.

A7: I would love to see pictures of the vendors' work to help me pick which vendor I want.

A8: I would like for it to send them reminders about the event and hear their feedback on it especially if it's a big event.

A9: If I can easily book everything while being well informed of the services the vendor provides, and have everything done without me having to go in person then I'd say it's a successful app.

A10: Not having pictures to look at as examples of the vendor's work. Not having everything be exactly what I plan.

Interview #8:

Interviewee: Sarah

Interviewer: Raghad Alrashid.

A1: Yes, a graduation for my sister.

A2: Depending on the features. If it had a venue booking option, I think that would be a big help.

A3: Like I said before the venue especially if it was a big event.

A4: Anywhere from a week to a month depending on how big it is. It can show me what I need within my budget, so I don't have to search on google nonstop.

A5: WhatsApp or other social media platforms.

A6: Staying within the budget I plan and not knowing where to search for what I need for my event.

A7: Filters to narrow the results based on price, number of guests.

A8: Notifications and maybe give them the option to add to their calendars.

A9: Helping me stay within budget while saving me time.

A10: Not having a proper way of communication where I can't go in person and fix an issue if it occurs.

Appendix A: Questionnaire

• **Questions:**

Q1: How old are you?

Q2: Have you ever tried to plan an event using event planning apps?

Q3: What type of events do you typically plan using event planner apps?

Q4; How would you like to plan your event?

Q5: What features do you consider essential in an event planning app?

Q6: What post event features would you like to see?

Q7: How do you prefer to reserve reminders for your upcoming events?

Q8: What are some of the apps and websites you use the most?

Q9: Would it make it more likely for you to use the app if it had a sending invitations feature?

Raw data file:

https://docs.google.com/spreadsheets/d/1I6D5eGO_9xdeO8UgfVucLwUgyoqmlG0gPxLWuE_entk/edit?usp=sharing

Problem Definition:

Event planning is a complex task that involves many details, from choosing the venue to managing the catering services and so on. This project aims to simplify the process and reduce the time needed to plan an event for people who struggle with event planning. In addition, streamlining tasks such as finding venues and a budget tracker. Based on the interviews and the questionnaire we concluded that users need an efficient way to minimize the time they take while planning an event. Also, it is desired by the users to be able to see a comprehensive vendor directory with reviews. Finally, users care about reading guests' reviews about their experiences.

Personas:

We identified our personas based on the information we gathered from interviews and the questionnaire. The first persona is "Sara Khalid" She is an 18-year-old student who wants to plan her 19th birthday party. Sara suffers from budget and transportation, so she is trying to find a solution to plan her event with a limited budget and no transportation. We defined "Sara" based on [Interview 5 answer (4,6)], [Interview 6 answer (3,4,6,7)], [Interview 7 answer (7,9,10)], [Interview 8 answer (4,6,7,9,10)], and the questionnaire results.

The second persona is "Khalid Omar". Khalid is a 31-year-old project manager who needs to get a promotion. With a major project milestone approaching, he decided to organize a project showcase event to demonstrate the breakthroughs achieved by Khalid and his team. The problem is Khalid is a very busy man, so he needs to plan the event without taking too much time away from his job and he doesn't know where to start, he needs to book a prestigious event venue and arrange catering and invitations. We defined "Khalid" based on [Interview 1 answer (3,4,6,9)], [Interview 2 answer (3,6)], [Interview 4 answer (6,7,9)], [Interview 8 answer (2,3)], and the questionnaire results.
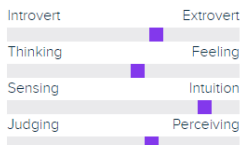
Sara Khalid

"where there's a will, there's a way."

Gender: **Female**
Age: **18**
Location: **Riyadh, KSA**
Martial status: **Single**
Family: **2 Brothers**
Work: **Student**

Personality

Introvert		Extrovert
Thinking		Feeling
Sensing		Intuition
Judging		Perceiving

Goals

- Stay within budget.
- Plan everything in one place.
- Ensuring a memorable event.

Frustrations

- Most venues are expensive.
- Not having transportation to see everything in person.
- Misleading venue pictures.

Bio

Sara is an 18 year old who studies marketing in Princess Nourah University. she loves planning events and has a creative sense. Sara was excited to host an amazing party for her friends as her 19th birthday approaches. There was a problem, though: she didn't have access to transportation and had to stick to a strict budget, as a result she need an app to help her stay within budget and book everything in one place.

Motivation

- Incentive
- Fear
- Growth
- Power
- Social

Preferred Channels
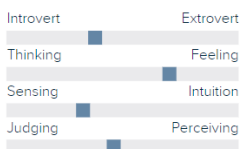
- Traditional Ads
- Online & Social Media
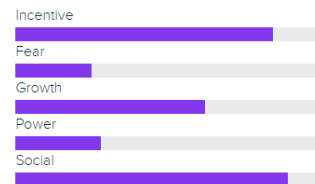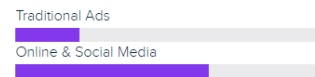
Khalid Omar

"Forget the mistake, remember the lesson."

Gender: **Male**
Age: **31**
Location: **Khobar, KSA**
Martial status: **Married**
Family: **Wife, 1 child**
Work: **Project manager**

Personality

Introvert		Extrovert
Thinking		Feeling
Sensing		Intuition
Judging		Perceiving

Goals and needs

- Plan an event in a short time.
- Book a prestigious venue.
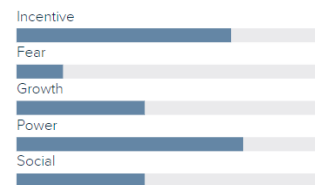- Impress his boss with this event.

Frustrations

- Not knowing where to find what he needs for his event.
- Planning takes time and might effect his job performance.
- Does not meet his boss's expectations about the event.

Bio

Khalid is a 31 year old project manager. He's a dedicated professional and very passionate about his work. He has been in this position for 2 years and he feels unappreciated, but with a major project milestone approaching he sees it as the perfect opportunity to impress his boss, so instead of a traditional presentation in the office he decided to organize a project showcase event to demonstrate the breakthroughs achieved by Khalid and his team so he can finally get the promotion he always wanted. The problem is Khalid is a very busy man and doesn't know where to begin searching that's why he needs an app to help him without taking too much time away from his job.

Motivation

- Incentive
- Fear
- Growth
- Power
- Social

Preferred Channels

- Traditional Ads
- Online & Social Media

20

User Stories:

1. As a user, I want to schedule my event aspects, so that I can efficiently manage my time and organize my events.
2. As a user, I want the capability to filter the options by price range within the app, so that I can easily find catering restaurants that fit my budget.
3. As a user, I want the option to send digital invitations through the app, so that I can simplify the RSVP process and enhance communication with attendees.
4. As a user, I want to collect feedback and comments from my guests, so that I can evaluate their experiences with my event.
5. As a user, I want to-do list in my events, so that I can make sure I don't forget anything.
6. As a user, I want to save my favorite venues and restaurants, so that I can easily find them later when I need them.
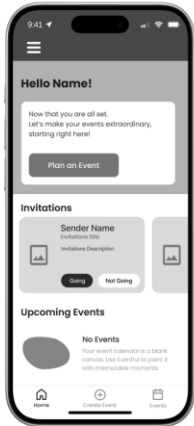
Sketches:
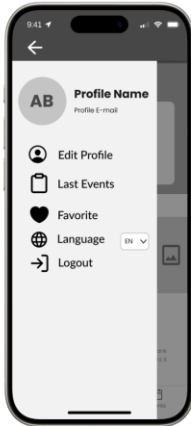

1

2

3

Login page
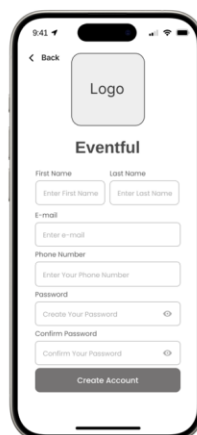
4
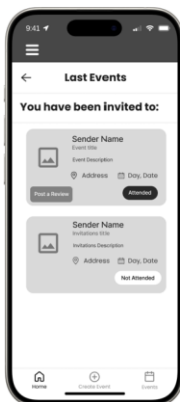
Create account page

5

Home page

6

Side bar the you acn view
you last visited events, profile,
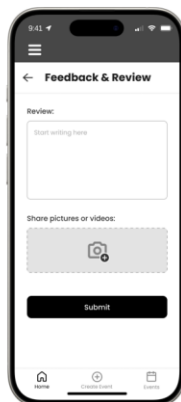change language and logout

7

Edit profile page

8

Last visited events page that
you can also share you experience
by posting a review that
will be shown to the host

9

posting a review page

Story Board:

Story Board 1;

1

Inside family home, Sara received a message to remind her about her son graduation .

2

She start thinking about doing a party to him and invite his frinds.

3

She asked his father to help her, but unfortunately he was very busy.

4

She looked for an app to help her, and she find eventful app and download it.

5

She ordered everything for the party and sent a invitation card for his friends from eventful app.

6

Everything arrived and the party was pretty good.

7

Her son was so happy and she get happy from that.

Story Board 2:

1

Hi Sara, what are you thinking about?

??

Sara: I have just two weeks left, and I haven't started planning my birthday party. This is my first attempt at organizing such an event, and I'm completely inexperienced.

2

no, tell me about it!

Nora: have you ever heard about eventful application?

3

are you serious!

Nora: It enables you to reserve venues, hire staff, order a cake, and even send invitations to your guests, all within a single platform.

4
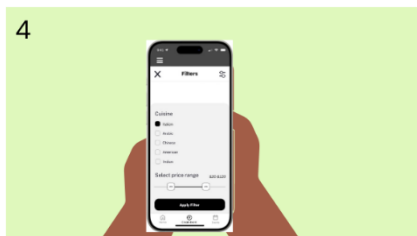
Nora: of course I am, and If you want to book catering services, you can apply filters based on pricing and select your preferred cuisine.
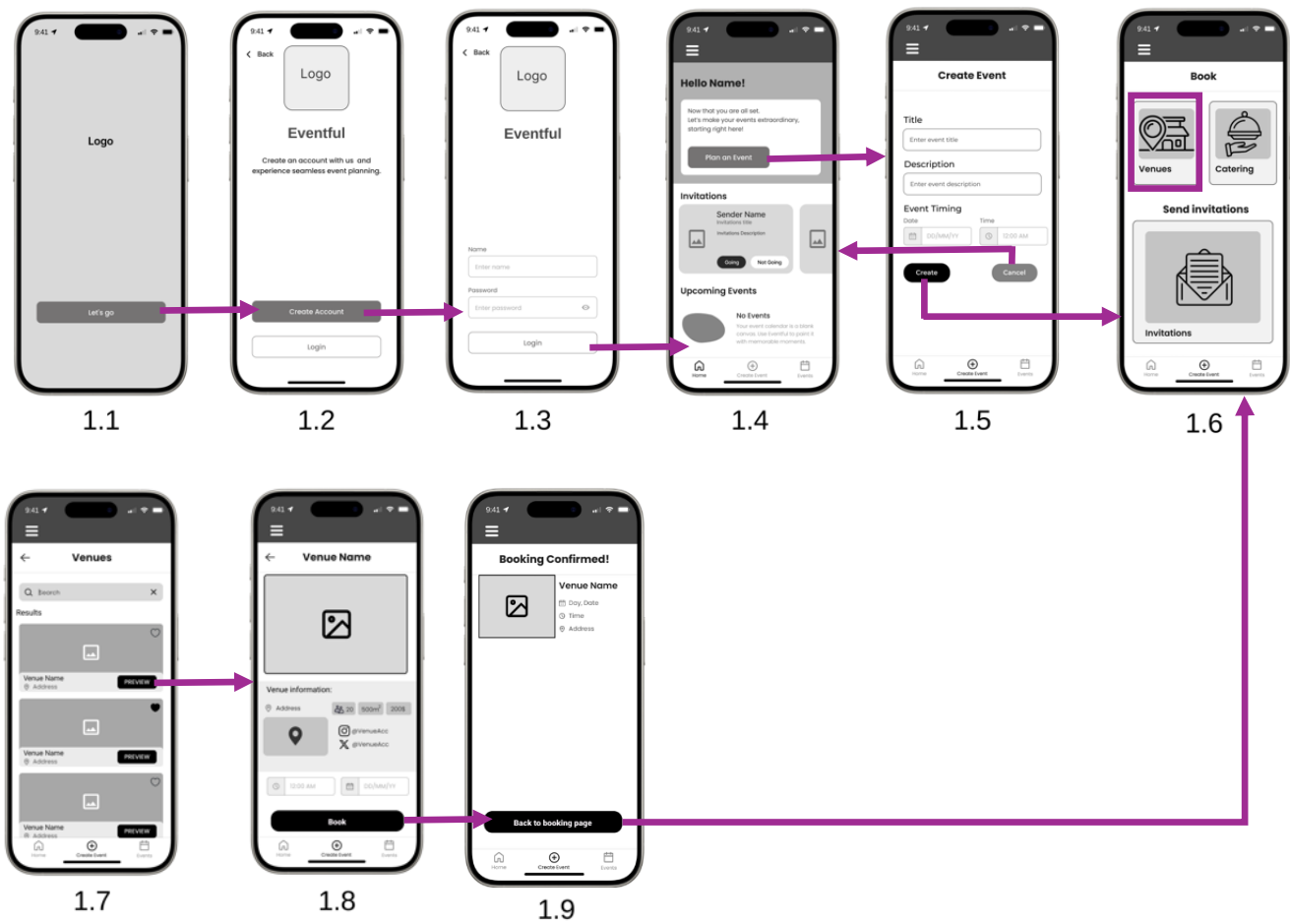
5

wow!!

Nora: and look at this, Isn't it fantastic that you can review comments and feedback from your guests about your party?
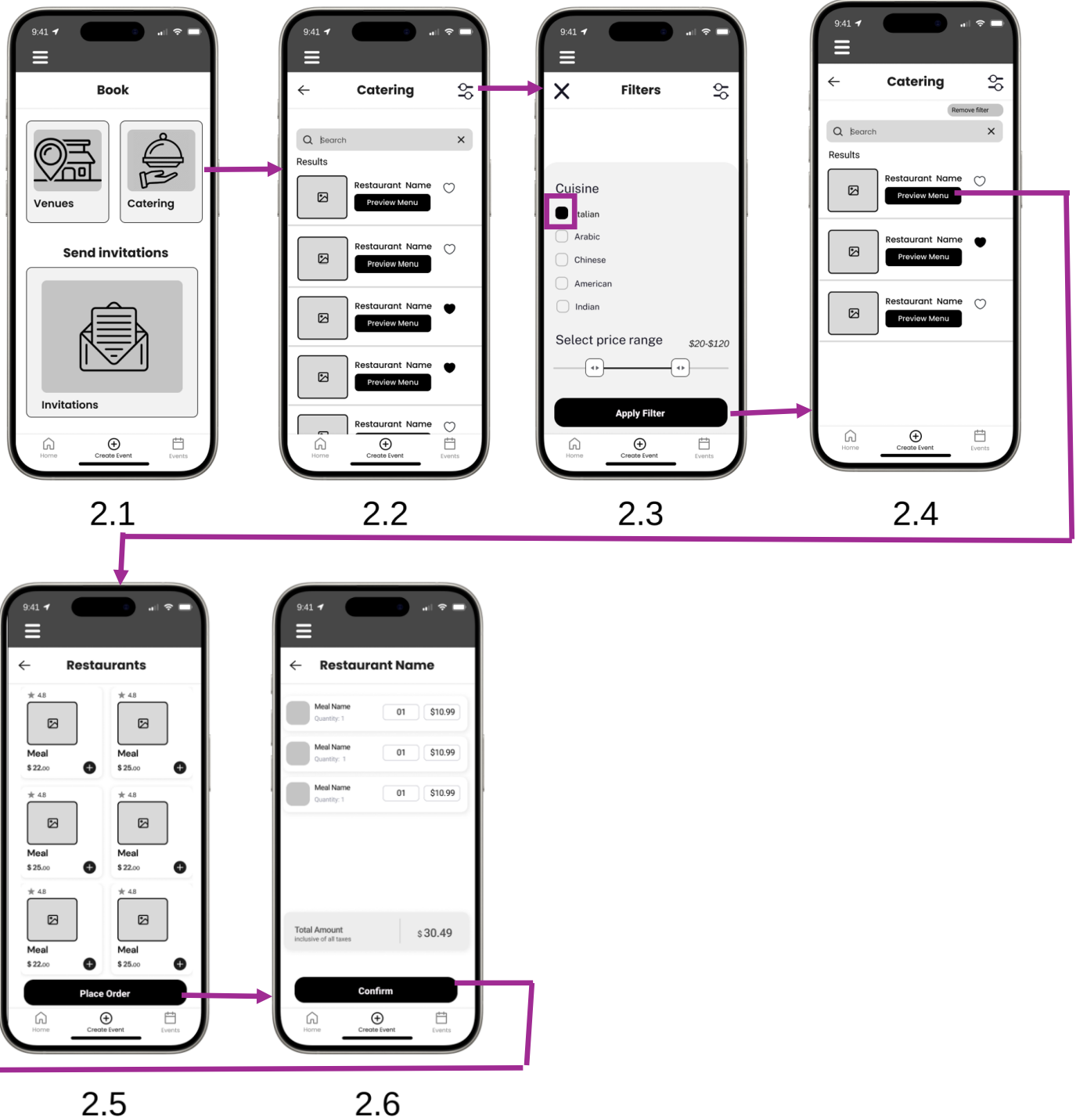
6

you are welcome

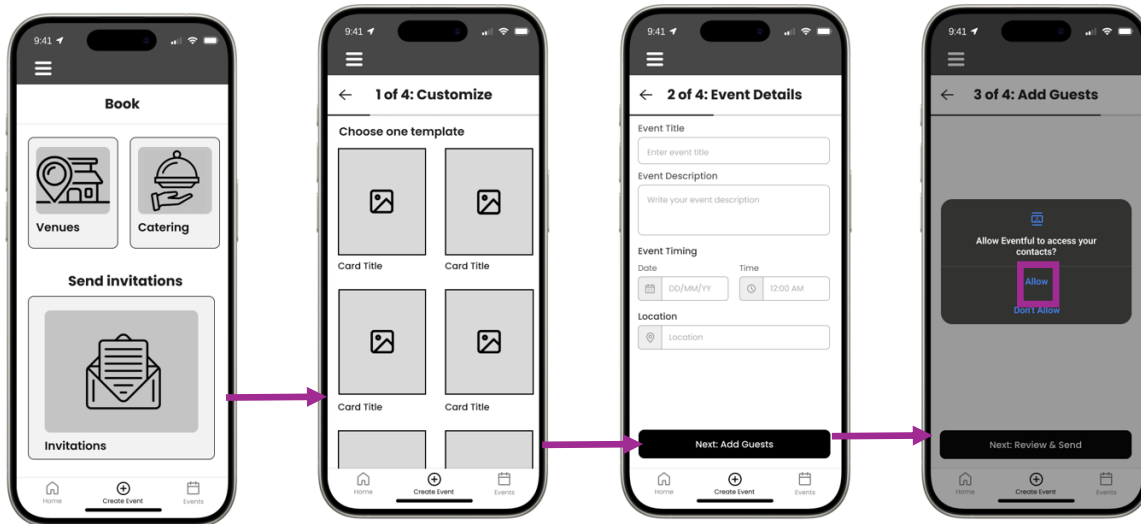Sara: Thanks a lot, Nora! I can't imagine what would I have done without your help.

User Flow:

1- Schedule event aspects

1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9

2- Capability to filter the options by price range

2.1

2.2

2.3

2.4

2.5

2.6

By Clicking in "Confirm" it will take you back to page 2.1

3- Collect feedback and comments from my guests

3.1

3.2

3.3

3.4
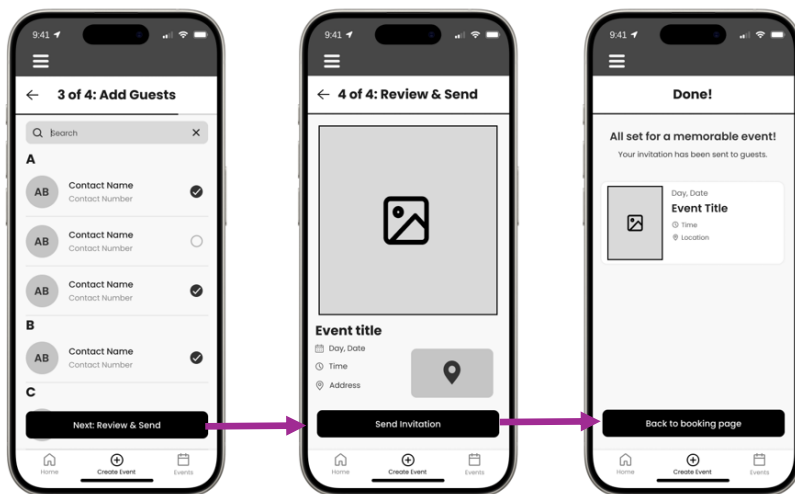
3.5

3.6

3.7

By Clicking in "Back to booking page" it will take you back to page 3.1

4- Send digital invitations

4.1

4.2

4.3

4.4

5-   To-do list

5.1

5.2

5.3

5.4

5.5

5.6
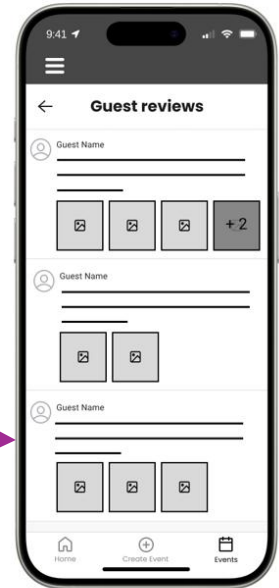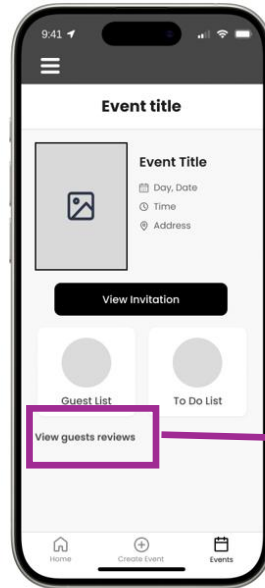
6- Save my favorite venues and restaurants

6.1
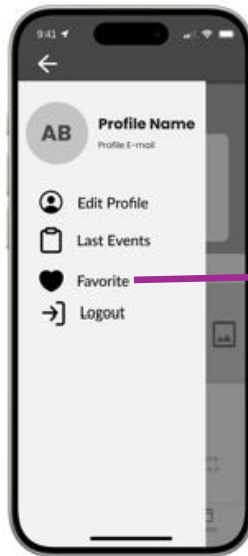
6.2
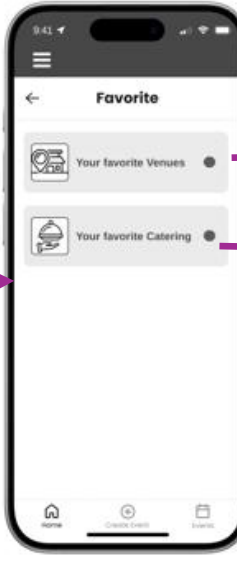
6.3

6.4
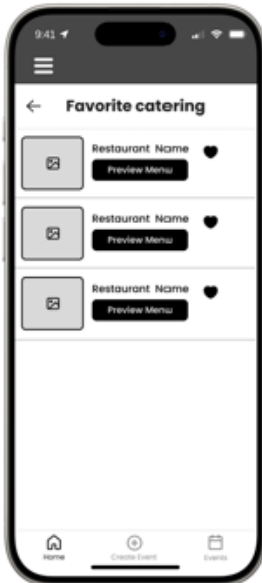
6.5

Design Rules:

Learnability Principles

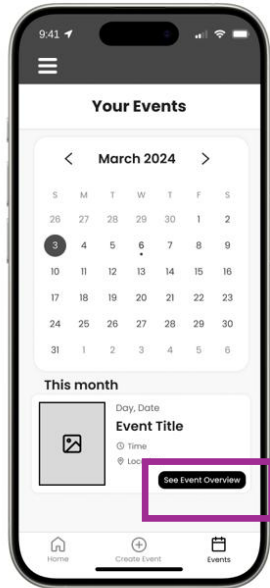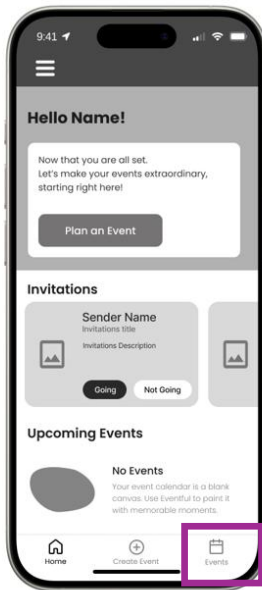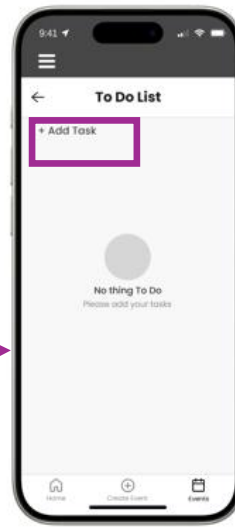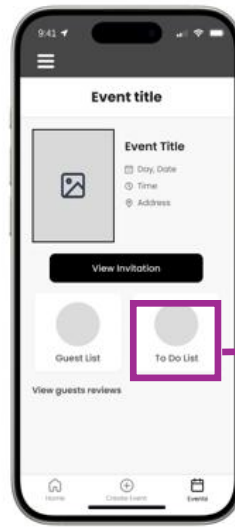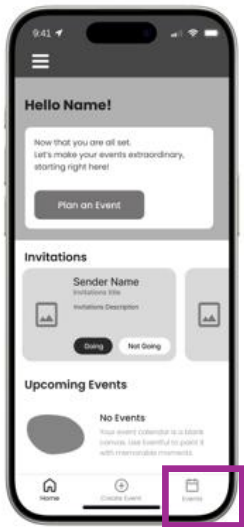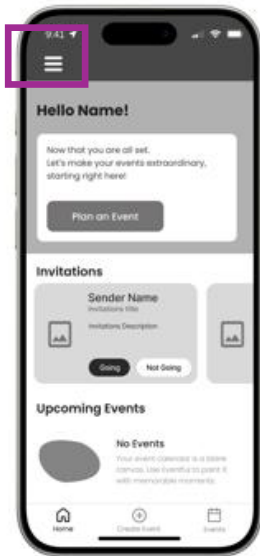| Rule#	Principle		Sketch No/ User Flow No	Describe how you applied this principle
1 2	Predictability		6.5	Clear placement of navigation elements like home across different pages.
		Operation visibility	6.1-6.2	When opening "more" you can see possible actions.
3	Synthesizability		2.6	Immediately shows a summary of orders before placing it.
4	Familiarity		1.6	Familiar icons for each section.
5	Generalizability		User flow 2	Ability to filter results.
6	Consistency		2.2 3.5	Search bar appearing in different in catering and venues.

Flexibility Principles

Rule#	Principle	Sketch No/ User Flow No	Describe how you applied this principle
7	Dialog initiative	3.4	Permission to access contacts.
8	Multi-threading (*if applicable*)	----------------------	Not applicable.
9	Task migratability (*if applicable*)	User flow 3	Automated invitation system that'll send the invitations for selected guests and send back their RSVP.
10	Substitutivity	1.8	Output for venue capacity either by squared meters or by number of guests.
11	Customizability	User flow 6	Users can favorite results they like to customize it to their liking.

Robustness Principles

Rule#	Principle		Sketch No/ User Flow No	Describe how you applied this principle
12 13 14 15	Observability	Browsability	6.1	Home page shows possible tasks and current state of the system (time, battery, Wi-Fi, etc...).
		Defaults	3.8	The calendar shows the current month and year by default.
		Reachability	1.7	The interface clearly shows where he is and what he is doing.
		Persistence	6.1	When receiving an invitation, it'll stay on the home page until you RSVP.
16	Recoverability		User flow 1	Ability to go back when booking at any point.
17	Responsiveness		User flow 4	When the user clicks the events button, the button gets highlighted.
18	Task Conformance		User flow 5	The system is clear and helps the user understand how to add a task.

Prototype:

Core Purpose: This event planning app prototype streamlines the planning process by allowing users to manage everything remotely in one place.

Essential User Actions:
- Booking venues
- Securing catering services
- Sending event invitations
- Make to-do's list for each event
- View guest's reviews about the event

Unique Features:

- Comprehensive event planning suite: Users can manage all aspects of their event from a single platform, eliminating the need for juggling various services.
- Remote management: The app facilitates remote booking and coordination, saving users valuable time and effort.
- Invitation management: Users can design and send invitations directly through the app.

Prototype Tools:

- Figma was used to create the interactive prototype, allowing users to experience the core functionalities of the app.
- Canva was used to design the logo.
- Pinterest was used for reference pictures to complete the prototype.

Figma Link:
https://www.figma.com/proto/HY9o1k7gzhUv9Ok34mQV9y/UX-Project?type=design&node-id=167-6379&t=Ng82eYyHLNTMYfmV-1&scaling=scale-down&page-id=167%3A5996&starting-point-node-id=167%3A6379&mode=design

Video Link:
https://youtu.be/M6oPs-VEIF8

Step 1: Participants

Participant Profiles

We conducted our usability testing with 6 participants of ages 19-34, 4 of them were females, and 2 were males. Our participants Reema, Deem, and Khaled are students at king Saud university, while Abdullah, Rana, and Rawan are employees at different companies.

All our test participants have prior Knowledge of experiencing mobile and website interfaces. Rana have experienced products like our product, while the rest have not.

Participant name	Age	Gender	Experience with similar products (1-5)	Use of mobile/website interface (1-5)
1 Abdullah Mohammad	34	Male	1	5
2 Reema Abdulaziz	23	Female	3	5
3 Khaled Omar	19	Male	2	5
4 Rana Ibrahim	24	Female	5	5
5 Rawan Faisal	27	Female	3	5
6 Deem Ahmed	21	Female	2	5

Step 2: Procedure

Outline of the procedure

After finishing the design of EVENTFUL application, we selected 6 random participants from our research sample to conduct our usability test. We prepared the consent form, the questionnaire, the scenario and the tasks that participants will perform during the sessions.

We arranged one-to-one sessions with our participants at the date and time they preferred. At the Beginning of each session, we welcomed our participants and provided them with the consent form to take their confirmation for video and audio recording. Before we read the facilitator script, we asked them to think aloud while performing the task to tell us what they were doing and why they were doing it this way. Then we read the scenario and gave them the 5 tasks that they will test using the application.

After the participants finished the tasks, we gave them a questionnaire and interviewed them. Finally, we thanked the participants for their cooperation with us.

Timeline

The test was conducted from April 19th to 22nd of April 2024. Rana finished the test in 3 minutes which is the least test time, while Khaled finished the test in 20 minutes. The session's time varied between 3-20 minutes.

Participant name	Day	Date	Start session time	Finish session time	Duration of session
1 Abdullah	Friday	19/4/2024	10:00 AM	10:09 AM	9 m
2 Reema	Friday	19/4/2024	10:30 AM	10:44 AM	14 m
3 Khaled	Saturday	20/4/2024	10:00 AM	10:20 AM	20 m
4 Rana	Sunday	21/4/2024	10:00 AM	10:03 AM	3 m
5 Rawan	Monday	22/4/2024	10:00 AM	10:08AM	8 m
6 Deem	Sunday	21/4/2024	11:00 AM	11:07 AM	7 m

Tasks

We tested 5 tasks on our EVENTFUL application to measure the ease of interfaces, navigation, and readability.

Task #	Task	Objective of the task
1	Book a venue	Check the clarity of booking a schedule venue function, and check if the user can complete the task successfully
2	Order catering within a limited budget	Check if the user can navigate easily through the app, and he/she can place an order easily
3	Send digital invitations	Check if the user can send invitations
4	Collect event feedback from guests	Check if the user can view feedback and comments from guests easily
5	Make a to-do list for the event	Check if the user can use to-do list function easily

Performance Measures and Feedback

The metrics we used to measure performance are effectiveness, efficiency, and satisfaction. We measured the effectiveness by counting the number of tasks completed successfully and the number of errors per task. We also measured the efficiency by calculating the time to finish the task, and then calculate the average. To measure satisfaction, we conducted a survey to collect the participants' feedback about the tasks.

Metric	How was it measured?	How was the data created/captured?
Effectiveness	Task success	By counting the number of tasks completed successfully
	Number of Errors	By counting the number of errors per task
Efficiency	Time on Task	By setting a timer for every participant each task and then calculating the average
Satisfaction	User surveys	By making Google forms surveys and share it with the participant to fill it, then we gather the participant's opinion about their experience with Eventful

Step 3: Usability Results and Discussion

Results:

1- Task Completion Success Rate and Time on Task

All participants successfully completed four tasks which are task 1 (Book a venue), task 2 (Order catering within a limited budget), task 3 (Send digital invitations). task 5 (Make a to-do list for the event), However, half of the participants (50%) completed task 4 which is (Collect event feedback from guests). Task 2, which is Order catering within a limited budget took the longest time to complete (average = 114.5 seconds). Task 4 requires the participants to Collect event feedback from guests and it took on average approximately 39 seconds and it is the shortest time to complete a task. Furthermore, task 1 and task 5 ranged from 15 seconds to 112 seconds (less than 2 minutes for each). Finally, task 3 ranged from 32 seconds to 90 seconds (from less than half minutes to 1.5 minute). To sum up, the completion time for all tasks ranged on average from 39.33 seconds to 114.5 seconds.

| Participant	Task 1		Task 2		Task 3		Task 4		Task 5	
	complete task	Time on Task	complete task	Time on Task	complete task	Time on Task	complete task	Time on Task	complete task	Time on Task
P1	√	56s	√	132s	√	85s	-	-	√	35s
P2	√	130s	√	120s	√	90s	-	-	√	30s
P3	√	20s	√	170s	√	80s	√	55s	√	35s
P4	√	30s	√	35s	√	32s	√	20s	√	15s
P5	√	47s	√	191s	√	70s	-	-	√	58s
P6	√	23s	√	39s	√	69s	√	43s	√	112s
Completion Rates	6/6 100%		5/6 83.3%		6/6 100%		3/6 50%		6/6 100%	
AVG. Time on Task		51s		114.5s		71s		39.33s		47.5s

2- Errors

***

*A non-critical error is an error that does not prevent successful completion of the scenario.

Tasks	Number of errors	Errors description	Critical or non-critical (C,NC)
Task 1	0		
Task 2	0		
Task 3	3	The users could not review the guests before sending the invitation to them	**Critical**
Task 4	1		
		The users found difficulty noticing the guest reviews button because it didn't stand out	**Non-Critical**
Task 5	1		
		The users took a long time to find the to-do list button	**Non-Critical**

3- Satisfaction questionnaire

1) Is our system hard to use?

Is our system hard to use?
6 responses

- ● Strongly Agree
- ● Agree
- ● Neutral
- ● Disagree
- ● Strongly Disagree

50%

50%
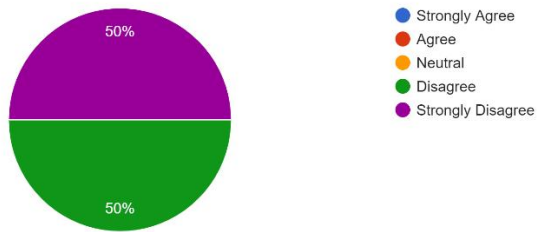
2) I understand every function in the system and how to use it.

I understand every function in the system and how to use it.
6 responses

- ● Strongly agree
- ● Agree
- ● Neutral
- ● Disagree
- ● Strongly Disagree

66.7%

33.3%
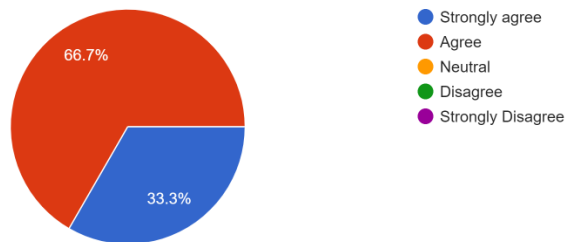
3) I found this application complex / awkward to use.

I found this application complex / awkward to use.
6 responses

- ● Strongly Agree
- ● Agree
- ● Neutral
- ● Disagree
- ● Strongly Disagree

66.7%

33.3%
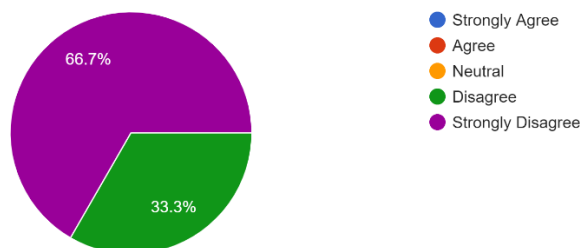
4) The interface is familiar and like other interfaces.

The interface is familiar and like other interfaces.
6 responses

- ● Strongly Agree
- ● Agree
- ● Neutral
- ● Disagree
- ● Strongly Disagree

16.7%

16.7%

66.7%
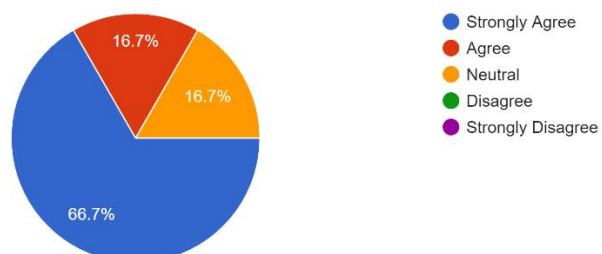
5) There's too much inconsistency in the application.

There's too much inconsistency in the application.
6 responses

66.7%

33.3%

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
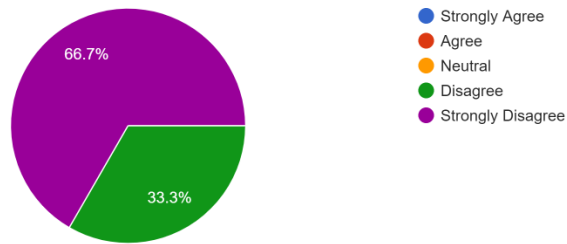
Satisfaction table

We asked our participants different questions to measure their satisfaction with each task. ***

Notes:

1- the average is out of 5.

2- The questions measure user's satisfaction. For example, Q#1: (Is our system hard to use?), "Strongly Disagree" have 5 points, "Disagree" 4 points, "Neutral" has 3 points, "Agree with" 1 point while "Strongly Agree" has 0 points because it means the user find the application hard, so he/she is not satisfied with it. On the other hand, it is the opposite for Q#2:(I understand every function in the system and how to use it.) "Strongly Agree" with 5 points and "Strongly Disagree" with 0 points.

Task	Question 1 Avg.	Question 2 Avg.	Question 3 Avg.	Question 4 Avg.	Question 5 Avg.	Overall
1	5	4.9	4.8	4.8	4.7	4.84
2	4.6	4.7	4.6	4.5	5	4.68
3	4.5	4.8	4.5	4.83	4.3	4.7
4	2.82	3.5	3.16	3.5	3.66	3.32
5	5	4.33	4.6	4.5	4.8	4.6

4- Summary of Data

The table below displays a summary of the test data. Low completion rates and satisfaction ratings and high errors and time on tasks are highlighted in red.

**Summary of Completion, Errors, Time on Task, Average Satisfaction**

Task	Task Completion	Errors	Time on Task	Satisfaction*
1	6	0	51	4.84
2	6	0	114.5	4.68
3	6	3	71	4.7
4	5	1	39.33	3.32
5	6	1	47.5	4.6

* Satisfaction = Average you got from the questionnaire for each task.

Discussion:

1- <u>A critical problem</u>

Most users took so much time trying to view guests' names before sending the invitation to them (task 2). Some of them took some more time trying to find the button for that. The errors were made because this function was not on the page, and there wasn't any indication that they had to complete the task and then they will view them later after sending the invitation. Because of that, it has the highest number of errors.
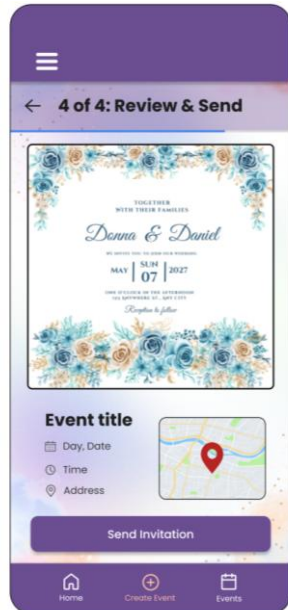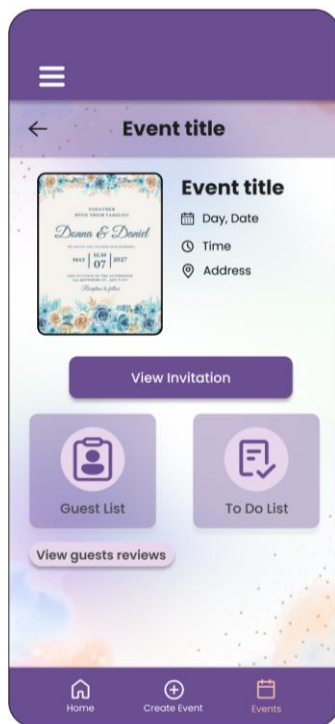

2- <u>A major problem</u>

Some users had difficulty noticing the guest reviews button because it didn't stand out.
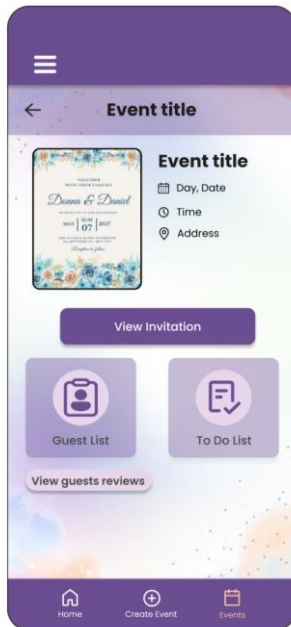
3- <u>A minor problem</u>

Some users got confused about task 5 that why the to-do list is in this page rather than the home page, this problem can be decreased by using the app over time.

Step 5: Recommendations

After interviewing the participants and testing the device, we collected the results, the problems that faced the participants and the errors. We can recommend changes and justifications for the application to help the improvement of the application and the useability. As shown in the discussion above, the critical problem is that some participants could not view guests' names before sending the invitation to them. We recommend adding a button for that. That's will help the user to review the guests' names clearly.

The major problem was that some participants didn't know how to view guests reviews because the button was not clear enough. We recommend redesigning the button for a better view. Finally, the minor problem m one of the participants suggest changing the to-do list place and putting it in the home page. So, the user can reach it at any time.

Appendix

1- Consent Form:

Evaluation Event Planning tool

Goal:

The goal of this evaluation is to test the usability of a SMART COFFEE tool prototype, to improve this tool in terms of user-friendliness.

Procedure:

You will carry out tasks with the prototype, which will be provided by the facilitator. While carrying out the Tasks you are asked to think aloud. After completing the tasks, you will fill in a short questionnaire and the facilitator will ask you some questions. The evaluation will take around 20 minutes.

You may stop, take a break, or ask a question at any moment.

Recording:

Participation doesn't have any risks or consequences for you.

• Your answers and details will be processed anonymously.

• We judge the quality of the prototype, not your performance.

•

Informed consent:

By signing this form, you acknowledge to have read and understood the information in this document and agree to this information.

Name: Do you agree with the recording?

Date: ☐ Yes, video, and sound recording.

Email: ☐ Yes, only sound recording.

Signature: ☐ No, rather not

2- Facilitator Script:

Scenario:

Imagine you're trying to plan a surprise graduation party for your best friend, but you're feeling overwhelmed. The party is getting closer, and you realize you forgot important things like confirming the venue and sending the invitations. After the party, determined to avoid this chaos next time, you see an ad for an event planning app. It promises to make things easier, so you give it a try and you decide to download the app. By following the instructions, you will be able to plan your party easily and you will save your time and effort.

Tasks:

1) Book a venue.
2) Order catering within a limited budget.
3) Send digital invitations.
4) Collect event feedback from guests.
5) Make a to-do list for the event.

3- Questionnaires Script:

1) Is our system hard to use?
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

2) I understand every function in the system and how to use it.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

3) I found this application complex / awkward to use.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

4) The interface is familiar and like other interfaces.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree

5) There's too much inconsistency in the application.
   - Strongly Agree
   - Agree
   - Neutral
   - Disagree
   - Strongly Disagree