Heuristic Analysis

User Interface Evaluation and Design

1. Target Audience

Target Audience Attributes and Persona

Serious Dater

Description	Common Attributes				
Person who is looking to find a serious relationship	 Looking for a committed relationship Generally older YSA Willing to put more effort into dates Picky about dates 				

Serious Dater Persona



Danny White, 23 years old, grew up in California. His parents live in the San Francisco Bay Area but are originally from Utah. Danny was born and raised very religious, and he served a mission for his church. He knows family is important and hopes to get married within the next few years.

Danny loves being outdoors, especially if he's doing something fun. He doesn't like being outside when it's too cold or stormy, though. He is very athletic and enjoys showing off his talent, especially in soccer. He was on his highschool basketball team too, and likes to play when he can. He also enjoys hiking and fishing in the summer.

Danny is studying physics and has lots of homework to do, but he knows it's important to keep an eye out for his soulmate. He has a part-time job and a lot of work, so he has little time to plan or attend activities. He wants to attend on-campus activities, but their schedules often conflict with his. To make matters worse, there aren't very many females in his classes, so he is

looking into dating apps and other ways to meet his special someone. A mentor had him make a list of what he wanted his wife to be like and Danny just recently found it again. Now he's looking for someone to spend his life with who wants to play soccer with him. Danny's ideal date would be to have a picnic by a waterfall and then followed by some soccer.

Serious Dater Insights

- Serious daters have the kind of person he wants to hang out with in mind the whole time.
- Serious daters are going on dates with the goal of finding their true loves. They don't want to waste their time with someone they could not see themselves being in a serious relationship with.
- Serious daters may not have much time on their hands as they are generally older and more independent.

Casual Dater

Description	Common Attributes		
Person who is looking to date multiple people and is focusing more on having fun and meeting people	 Interested in dating, but not committed relationship Interested in having fun and making friends 		

Casual Dater Persona



It is Hannah's second semester in college. She is 19 years old. She lived in Charleston, South Carolina most of her life until she moved to Rexburg for school. She enjoys hiking, skiing, snowboarding, snowmobiling, most outdoor activities, and crafts like cross-stitching and making paper flower bouquets. She also enjoys scrolling through Facebook and Instagram and sometimes she looks for fun crafts from the people she follows on social media. She is hesitant to initiate conversations with new people, but she is very talkative once she gets to know someone. She prefers group-friendly gatherings.

Hannah likes to keep busy as much as she can. She is a full-time student in Rexburg. She is starting to think she should get a job soon in order to pay for her time at college. She is hoping

to make friends with her coworkers since it is likely they will be close to her age and have similar interests.

Hannah wants to meet new people and make friends. She doesn't want a long-term relationship yet though. She wants to look around and see what she wants to find in a man before she commits to one. She just wants to get out of her comfort zone and make friends.

During her first semester at BYU-I, she tried the Mutual dating app as a joke and because all of her roommates downloaded it. She didn't really have a good experience, so she hasn't used any dating apps since.

On weekends, Hannah is either doing homework and studying, or going on trips with her roommates. She feels very comfortable around her roommates and everyone in the apartment has a unique personality and different interests.

Hannah loves spending time with her roommates, but she also wants to meet guys who she can go hiking with or enjoy outdoor activities with. The dating and activity app would help Hannah to find someone who enjoys outdoor activities like she does, or at least she would be able to find a friend group with activities posted for larger groups of people. She met one of her best female friends on a double date and still stays in touch with her.

Casual Dater Insights

- Casual daters are looking for an app that is easy to use. This is going to rank high on all users criteria
- Casual daters know about the activities they like more than the person they want to date.
- Casual daters would want to use an app to meet new people because it makes it easier than awkwardly introducing themselves or having to scout out people they might like.

Deal Chaser

Description	Common Attributes		
Someone who is using the app because they want to find activities/events that are inexpensive or have a special deal	 Interested in having fun, but not really dating More interested in the events than people Will usually pick the best deal there is Influenced by price/promotion 		

Deal Chaser Persona



Emily is 21 and has always been a social butterfly. She looks for opportunities to go to fun events with her friends almost every day. Making friends was easy for her in high school, where she was popular for being a cheerleader and throwing large parties, and she's not afraid of meeting new people now.

Emily has finished her second year attending BYU-Idaho and she is amazed with how much freedom she has away from home and as a college student. She loves all the activities going on! She makes sure

she has a lot of extra time to "play" after attending classes and doing homework. When bored, Emily uses online dating apps because she loves going out. She typically only chats with her matches briefly; she is usually swept up by her friends to go out for a spontaneous activity. When plans with her friends do not work out, Emily turns back to dating apps to get a quick date or find something fun to do. She feels totally comfortable asking a guy out and paying for the date.

Although, while Emily saved up a lot of money for college, she's been attending for two years now and is running low on funds. She recently took out a student loan to support herself while she is studying. She has realized that going out every night can get very expensive and she needs to budget more! But she doesn't want to stop going out!

Emily has become a frugal person while still having tons of fun with her friends and dates. One way she has done this is by looking for deals and discounts on the essential things she buys. This allows her to have money to spend for other things, like dates. She always looks through the newspapers that come in the mail for coupons to clip or information about sales. She is teased for "couponing" by her roommates, but Emily is grateful for opportunities to allow her to get the most value for her money.

Deal Chaser Insights

- Deal chasers' goals could be to find activities that they enjoy and meet new people.
- Deal chasers would use the application to search for dates while finding good deals on activities.
- Deal chasers would likely first check on dates in their area that interest them and then compare the value of the dates based on the costs.
- Deal chasers are looking for an efficient way to find inexpensive dates.
- Deal chasers may not have the time to beat around the bush and hope for someone to agree to a date on the weekend.

• Deal chasers have most likely used dating apps before and expect certain features such as a messaging service and viewable profiles.

2. Task Analysis

Use Cases and Scenarios

Serious Dater

Serious Dater Use Cases

Use Case	Description
Finding Dates	User browses available dates listed in the discovery portion of the app.
Posting a Date	A user posts an activity that they would like to go do with someone. They add their activity to "dates wanted."
Planning Dates	User browses activities they think will make for an enjoyable date. The user wants to come up with future date ideas, or perhaps plan dates they can create.

Serious Dater Scenario

Danny is a bit more serious about finding a lasting relationship that matters. Danny browses for activities that have a bit more depth to them than just going to the movies. Coming up with a few new ideas Danny decides to create his own date for a hike, followed by a homemade meal and a game night. Posting the date, Danny hopes to find someone who enjoys many things that he also enjoys and potentially would want to go on more dates.

Casual Dater

Casual Dater Use Cases

Use Case	Description

Finding a date	User browses available dates listed in the discovery portion of the app.
Posting a date	A user posts an activity that they would like to go to with someone. Adding their activity to "dates wanted."
Looking for something fun to do on weekends	User browses activities that they think will make for an enjoyable weekend.

Casual Dater Scenario

Hannah loves spending time with her roommates, but at some point, she wants to meet a nice guy who she can go hiking with or enjoy outdoor activities with. The dating and activity app would help Hannah to find someone who enjoys outdoor activities like she does, or at least she would be able to find a friend group with activities posted for larger groups of people.

Hannah decides to pull up the app and browses posted activities finding a nice guy who wants to hike the R-Mountain Butte she decides to accept the date. After messaging the nice guy and feeling good about the date she agrees to meet up this weekend to go hiking.

Deal Chaser

Deal Chaser Use Cases

Use Case	Description
Finding dates	User browses the available dates listed in the discovery portion of the app.
Posting a date	A user posts an activity that they would like to go to with someone. Adding their activity to "dates wanted."
Looking for something fun to do	User browses activities that they think will make for an enjoyable weekend.
Save money on dinner	A user plans a date based on what promotions are going on in town.

Deal Chaser Scenario

Emily recently met a guy on the app and they went on an awesome first date. Now she wants to ask him out! But, it's near the end of the month and she doesn't want to spend a lot of money on the date. Emily opens the app and is very excited to see that it has coupons and promotions! There are lots of activities listed for different dates, some of which she's never heard of. This is very encouraging. She picks an activity and asks her date to join.

3. Identifying Criteria

Variables of Usability

Variables of Usability	Criteria
Efficiency	Users want to put in the least amount of effort to find a good deal. Users should be able to quickly create and post a date.
Learnability	Users should find it easy to use different aspects in the app such as posting a new date. Navigation should be intuitive and easy to use and not require a rigorous proficiency.
Familiarity	The interface is meant to be different from other dating apps, yet seems like something they have used before or can understand, including symbols, words, and images.
Simplicity	Users should not be confused by the overall design and should not require a vast amount of knowledge to utilize the dating app.
Mapping	Users should be able create a consistent mental model of where everything can be accessed in the app. The app's UI and functionality should not be constantly changed.
Motivation	Users should feel satisfied and excited about the dates they plan or find. Users should not get bored or frustrated by their experience with the app.

	Getting a good deal makes the user feel great and that their time was well spent in the program.
Trust	Users should be confident that their date requests will stay posted and be visible to other users of the app. Users should want to use the program again, as it is reliable and dependable.
Visibility	Users should be able to see when their date has been created. Users should know when people are interested in the date they created.

Criteria and Priorities

Criteria	Priority
The user should be able to quickly create and post a date, or find a date.	Priority 1
The user should find it easy to use different utilities in the app, such as posting a new date.	Priority 1
The user should not be confused by the overall design and should not require a vast amount of knowledge to utilize the dating app.	Priority 1
The user should be able create a consistent mental model of where everything can be accessed in the app. The app's UI and functionality should not be constantly changed.	Priority 2
Users should feel satisfied and excited about the dates they plan or find. Users should not get bored or frustrated by their experience with the app.	Priority 1
The user should be confident that his date requests will stay posted and be visible to other users of the app.	Priority 1
The user should be able to see when their date has been created and know when people are interested in the date they created.	Priority 2

Weighted Rubric

Criteria	Exceptional-2	Good-1	Acceptable-0	Flawed-11	Horrible-2
Efficiency (Priority 1) 25%	The user is able to create and post a date, browse dates, and select a date with very little effort.	The user is able to create and post a date, browse dates, and select a date with minimal effort.	The user can create and post a date, browse dates, and select a date in the same amount of time as other dating apps.	The user finds the app less efficient at posting, browsing, and selecting dates than other apps.	The user is required to put a lot of time into creating and posting a date, browsing, or selecting a date.
Learnability (Priority 1) 20%	All will easily become an expert at using the app to post dates and find posts about activities.	Most users will be able to learn how to access all app functionalit y without trouble.	Some users will learn and understand the app's functionality entirely, and most will be able to access the most important functionalities.	Some important functionality is hard to learn to use.	No one will figure out how to post or accept dating activities.
Simplicity (Priority 1) 20%	The app is straightforwar d and users can easily form a mental model.	Users can quickly form a mental model, but the app could be simplified.	Given some time, users can come to understand the app, but there are other apps which are more simple.	Users have a hard time understandin g the app.	The app is overly complicated and difficult for the users to form a mental model.
Mapping (Priority 2) 5%	The user is able to understand	The user's mental model of	The user's mental model is neither	The user's mental model is	The user's mental model will likely

	what the interface is trying to tell him, and it helps him accomplish what he is trying to do.	the dating app is encouraged through the use of the dating app.	encouraged or discouraged by using the app.	discouraged through the use of the dating app.	never be formed through the use of the dating app.
Motivation (Priority 1) 10%	The app's layout is attractive and the app is overall useful, causing the user to want to use it.	The app appearances and functionalit y are better than average.	The app is average in appearance and functionality.	The app does not have the best layout or functionality.	The app looks disgusting to the user or completely useless. He immediately deletes it from his phone.
Trust (Priority 1) 15%	The user's date-request posts will be seen by other users who are searching keywords included in the post.	The user's posts are more likely to be seen by other users who are searching keywords included in the post.	The user's posts can be seen by everyone.	Some users cannot see the user's posts for whatever reasons.	The user's date-request posts have a bad habit of disappearing into the void.
Visibility (Priority 2) 5%	The user can easily find information about his postings, such as when someone has	The user has to click a few buttons to see information about his	The user has to find, and click on the date post in order to see any updates/notific	The user has trouble locating the information because it is in an obscure location	The user is unable to find the information about the status of date posts.

agreed	to go postings	ations	
on a da	te with		
him.			

Key criteria

- It doesn't take long for user to find deals [Efficiency]
- User can successfully navigate through the program [Learnability]
- User can infer obvious controls in the program [Mapping]
- User is able to find what they are looking for [Motivation]
- User sees program as worth using and not a waste of time [Trust]

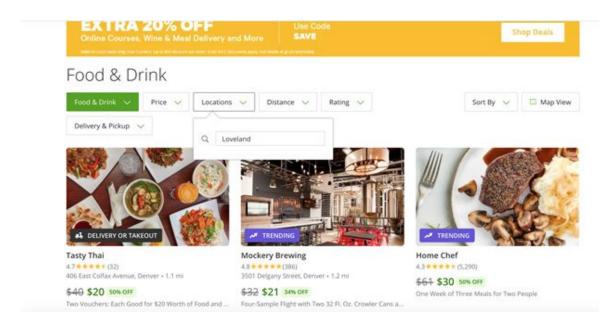
4. Individual Analysis

Groupon

Variable	Criteria	Score	Summary
Efficiency	It doesn't take long for user to find deals	2	The app is well organized in a way that the user can easily find deals.
Learnability	User can master using this app	2	The app is very straight forward, so it doesn't require the user much effort to master it.
Familiarity	User is familiar with the app's design	1	The app is designed a bit different from its 'competition'. The layout is not as familiar as some other apps.
Simplicity	User can successfully navigate through the app	-1	The app is well organized, making it easy for the user to be able to traverse the app. Even though it is organized, there is a lot of information and it could overwhelm some users.

Mapping	User can infer obvious controls in the program	2	The app uses icons and filters that most all people are accustomed to. They are essential for the user to navigate the app.
Motivation	User is able to find what they are looking for and has a pleasant experience	-1	While there are a lot of deals for the user to look at, it is possible that the user won't be able to get any deals based off of their current location. If their location is not a densely populated area, there is less business and there are fewer deals. There is no reward system for using the app frequently.
Trust	User sees program as worth using and not a waste of time	1	The app appears to be helpful to the user, and most users will benefit from the app.
Visibility	User is able to see all the necessary components of the app	2	The menus and buttons make it very clear how to operate the app.

Groupon Screenshots



This is a screenshot of the settings menu within the Groupon app. The area that was lacking in Groupon was the motivation category because they had no reward system in place. A reward system would encourage people to continue using Groupon to find good deals for activities and save money.

Groupon Analysis Summary

Groupon is very well organized. It has deals that will interest the user. The filters and other controls help the user to find the best deals. Groupon will most likely work well for users in bigger cities, since there are more businesses with more deals and promotions. The user will most likely never get lost trying to use and navigate the app.

Overall, Groupon was pretty successful in designing criteria they set in place for their users. When you first visit the Groupon app, by default you are placed on the "Featured" page. This could be very useful. If users do not know what they are looking for, they can see popular picks that are in their local area.

In regards to efficiency, the time it takes to search for a coupon is very minimal. Groupon implemented a tab on the menu that allows users to search for an activity or item that interests them. A user with a specific goal can accomplish their intention efficiently.

When it comes to learnability, the app has a very simple and familiar design with very few novel features. Even a new user would not have trouble learning to implement or access a feature.

The Groupon app did a surprisingly good job of leveraging familiarity with shopping apps in order to make finding and purchasing coupons easy to figure out. Even though shopping for coupons on experiences has some major differences from standard online shopping, Groupon succeeded in making their interface work.

Simplicity in the Groupon app keeps its UI simple by sorting the large amount of coupons and related utilities they have into a few different tabs. There are only five tabs in total, and four of them are devoted to the everyday user who will be looking for coupons and saving them to their account. Each tab is clearly labeled and represented by familiar symbols which makes it easy for users to navigate.

The mapping in the Groupon app is very well done. Groupon designed the menu to be very similar to how other apps would represent a menu format. As well as by using easy to understand symbols to represent some of the labelling in places where words would be hard to make legible.

In regards to motivation, Groupon does a good job of presenting a nice looking user interface. The responsiveness of the application and how it displays content in organized boxes feels really good to interact with. However, It does little to leverage the intrinsic motivation of saving money.

Groupon does a good job of presenting itself in a way that gains the user's trust. The app looks professionally done, and in general they are able to accurately represent saved coupons for each user's account. However, there have been some reports of Groupon losing track of user's previously purchased deals.

Groupon has found success at visibility by presenting a balanced amount of information to the user without overwhelming them. When you look at the app, there are sections that divide viewable information so that users know where to find the hidden information, but are not overwhelmed. This makes it easy for a user to navigate and find information that they are looking for.

Doorstep

Variable	Criteria	Score	Summary
Efficiency	Efficient	1	Users can buy deals and use them immediately in the store. In earlier versions, users could not skip matches and would have to wait for a time frame to expire before finding another date. In earlier versions, the user specified from a list of categories what type of person they were interested in and they would get set up on a date with those types of people.
Learnability	Learnable/Easy to Use	2	Users claimed the app is easy to use. The app guides the user through the sign up process.
Familiarity	Similar/Easy to Use	2	The app works similar to other apps the user might have come across before. The business portion (top-right) is similar to a Google review, which many users will have likely come across while searching for a location in Google. The app is stylistically consistent throughout.

Simplicity	Simple/Easy to Use	2	Screens only display what is necessary and the user can easily create a mental model of the app.
Mapping	Structure/Easy to Use	1	The mental model of the app is simple and can be learned in minutes. The icons at the bottom (top-left) help the user internalize this model.
Motivation	Fun	1	Users can only sign in with Google or Facebook (bottom-right). This is frustrating for users who do not use their accounts or even have accounts for these services. There are quite a few options of date deals. The activity page is appealing, with varying sizes for the different boxes of activities and their images.
Trust	Trust and Security of Information/Tr ansparency	-1	There is no way to turn off notifications in the app. The user must turn off notifications via his phone settings. Setup can be a big challenge. There are lots of great deals and smooth transactions. Users trust the financial aspect of the app.
Visibility	Navigation/Sec urity of Information and Visibility	1	Only the information and widgets necessary are presented on each screen.

Doorstep Screenshots

Discover Cool Dates



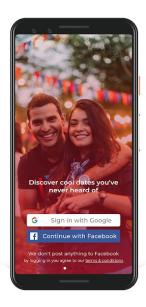
Save Money On Dating



Share Date Ideas



Date Night Planner



Doorstep Analysis Summary

Doorstep was previously a date-finding app, but it has been converted to a date-planning app in which users can find good deals in a given area for their dates. It launched with many issues, the biggest issue being that many users could not create an account or something was wrong with their account when they signed up. The app is no longer maintained or usable.

Using the rubric to calculate the score, Doorstep gets an overall score of 1.05. The app does not deliver as much in visibility and users are unable to turn off notifications, but it has many positive attributes that make it easy to use. It is efficient and fun, so users continue to use it. The app is a good example of how to incorporate businesses and discounts for activities into the app we are building, but perhaps not a good example of how to incorporate the dating aspect.

Tinder

Variable	Criteria	Scor e	Summary
Efficiency	Users want to put in the least amount of effort to find someone to date	-1	Creating accounts was not easy. There were problems loading pictures. Gives the option of swiping or tapping the "Nope" or "Like", letting the user choose whichever is faster for them.
Learnability	First time users easily learn how to use the app. Functions and buttons are explained.	-2	Tutorial is brief and is only presented once during the first interaction with the application. No explanation given for functions and buttons
Familiarity	Mechanics from past apps are utilized	0	Commonly used symbols and icons are used to denote functions. Swiping mechanic is universal among many other dating apps.
Simplicity	N/A		

Mapping	Users can navigate easily within the app. Users know how to execute all the commands such as view a profile or make a new activity.	5	Swiping controls show accepting or declining a profile using colors to help the user's mental model of the app structure. Buttons are not described or labeled, nor taught about in the tutorial leading to problems with mapping.
Motivation	The app is fun to use and encourages the user to come back	0	Layout and design is attractive and modern. The user receives a positive response when they get a match.
Trust	The user feels confident in what functions will do, and can control who they match with	0	Feedback is given to the user (either "like" or "nope") before they fully commit to submitting their approval for a match. There is a "undo swipe" function for users who mistakenly rejected a profile.
Visibility	Profiles are easily read, and buttons are easily seen	0	The profiles are clear, and the buttons are easy to see.

Tinder Analysis Summary

Tinder is simple to use, but requires experimentation to create the mental model. Buttons with obscure symbols are used and no explanation is given. Experimentation leads to accidental matches. The learnability leaves much to be desired.

Within Tinder, we noticed that the application only directly shares how to use the application once. This weakness impacts how efficient the user is, as they may struggle to navigate through the application. They may also forget how the swiping mechanic works and forget that they can access other functions. The buttons along the bottom are not clearly defined, nor are their functions explained.

5. Criteria Hierarchy

Groupon Key Problems

Key Problems	Reasoning
Possibly Excluded Audience (Motivation)	Since Groupon seems to be based around places with a large population, the users that do <i>not</i> live in the big cities will not get many deals, if any. This will not give these users confidence in the app. In turn, this affects 'Trust', since these user don't feel like there is anything to be gained from using the app
No Benefits to Certain Audiences (Trust)	Since motivation is a key problem, trust becomes a problem as well. There are some of the users that don't feel like they benefit from the app and they lose their trust in the app as well. Without trust, these users won't return to using Groupon.
Too Busy (Simplicity)	There is a lot going on in the Groupon app, and while they have tried to simplify it through separate categories and searching functions, it presents you with a lot of competing advertisements on a single page as you search. This lack of simplicity hampers learnability and lowers the motivation of users by causing confusion when a novice first logs onto the site.

Doorstep Key Problems

Key Problems	Reasoning
Notifications (Trust)	The notification settings for the user are difficult to switch on and off and require the user to do more than is desirable to change.
Inflexibility in Login (Motivation)	The user only has a limited choice of logins. This makes it difficult for a user if they don't want to login with their Facebook or Google account

Tinder Key Problems

Key Problems	Reasoning
Unexplained Buttons and Functions (Mapping)	Mapping is difficult due to buttons and functions that go unexplained. Because of this, the mental model is incomplete and the user can be surprised by certain actions.
Unable to Access Features (Efficiency)	Because the user doesn't know some of the functions, efficiency is decreased.
Unexpected Results (Trust)	When the user is surprised by the results of certain actions trust is negatively impacted.

6. Conclusions

Groupon Conclusions

Positive Aspects to Implement

- Well organized
- Clear filters for activities and easy searching capabilities
- Easy to read "teasers" that give user enough information to know whether they want to click or not

Negative Aspects to Avoid

- Being too central or too catered to a certain audience
- Presenting the user with too much information and photos all on one page

Doorstep Conclusions

Positive Aspects to Implement

• Guides user through the sign up process and is easy to use

- Similar to other apps and stylistically consistent
- Icons that are simple to understand and are universal

Negative Aspects to Avoid

- Presenting the user with too much information and making things too complicated
- Restricting access only to users who have accounts with certain platforms (such as Google or Facebook)
- Disallowing users to turn off notifications

Tinder Conclusions

Positive Aspects to Implement

- Presentation of the profiles, which are easy to read and have an attractive design.
- Possibility of allowing the user to give a positive or negative comment before committing to definitively send their approval to match.

Negative Aspects to Avoid

- Problems creating profiles. At the time of any problem, a clear notice should appear so that the user is aware of the error and, if possible, some guidance on how to proceed.
- Lack of information about icons and buttons.
- It would be convenient to present a small tutorial when starting the application, giving the user the opportunity to follow it (tutorial) or skip it, in case the user doesn't consider it necessary. The tutorial can be replayed from settings.

Overall Conclusion

This app should allow users to sign up and match with another user who is interested in a similar activity.