Senior Project: Photop App Design and Prototype
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GRC 462: Senior Project
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March 15, 2023

Link to Finished Project
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Introduction and Abstract

Even with social media, it can be difficult for people to find photographers and videographers for special events. I am a photographer myself, and I find it challenging to find work and connect with people besides friends and family to shoot for and collaborate with. LinkedIn and Handshake aren’t cutting it, nor are the platforms very portfolio friendly. I also noticed many ads for personal portfolio websites on google when you search for photographers, telling me many other photographers are having the same issue. My app Photop will directly solve this problem, providing a platform for artists to be easily discovered, manage their bookings and payments with clients and overall calendar, and help them display their portfolio in a simple way that captures the eye of a visitor. Photop is an app that enables anyone to quickly locate and connect with photographers and videographers near you or where you want to shoot. You can search for the kind of photography/ videography you need, the dates you require them, or if you’re hiring for your company. Photographers and videographers who sign up can showcase their portfolios, have a headline and summary about themselves and their work, speak on their experience, and connect with each other. A few seconds is all it takes to capture a client’s attention when they view your portfolio/profile. An appealing presentation is crucial to keep them interested and seeking more information (Ragaine, 2022), and Photop does the display work for you. The app also organizes your business, from client messages to bookings, calendars, rates, and payments. A freelance artist’s ability to be well organized and keep on top of those dreary administrative duties will be paramount to their success (Burke, 2008), and this app will greatly help organize and do those dreary administrative duties for you. Lastly, anyone can sign up as a creative on this app, and anyone can utilize its social media aspects of being able to I’m passionate about creating an app that simplifies the process of connecting photographers and videographers with clients for any event. By offering a one-stop shop for communication, booking, financial management, and photo sharing, we can help both parties connect and collaborate with ease. This app will also help artists showcase their skills and personalities to further their careers while providing clients with a user-friendly platform to find the perfect artist for their needs. I believe this project will bring immense value to the camera community and beyond.
Literature and Synthesis

_Uncertainty Reduction Theory (URT) Definition_

Good app design should be easy to use, understand, and user-friendly, without unnecessary features or content. The Uncertainty Reduction Theory (URT) helps us understand and explain how we can enhance the user experience when interacting with something for the first time, such as an app. URT states we experience uncertainty when we interact with strangers because we don’t know them and hence don’t know what to expect, and it’s an uncomfortable psychological state that people seek to reduce through communication in all forms (Berger and Calabrese, 1975). Good app design should reduce uncertainty and create a comfortable introduction for users, with visual hints, cues, and explicit instructions. With this theory and its principles in mind, I included instructions on the sign-up and main pages in the app so that people know what to do, many illustrations and icons to serve as visual cues, and titles at the top of every page to help understandability. These will help to drastically improve the user’s first impression, decreasing their uncertainty, and increasing the likelihood of them having positive feelings towards this app and continuing to use it. URT provides explanations for different interaction situations and behaviors, with its underlying principles applying to most, if not all, human interaction and communication (Berger, 1986), including their interactions and communications with and within apps.

_URT Types and Reduction_

The primary major elements of Uncertainty Reduction Theory are the different types of uncertainty and the reduction of uncertainty. Berger and Calabrese (1975) additionally define uncertainty as having numerous possible alternative predictions or explanations. In other words, the degree to which individuals feel unsure or lack information about a person, situation, or object and don’t know what to expect, leading to less understanding of it. There are also several different types of uncertainty, including partner, relational, and self, but perhaps the biggest ones are behavioral and cognitive uncertainty. Behavioral uncertainty relates to not being able to predict or explain how someone will behave, or not knowing what behavior is expected of us or how we will react in a given situation. Cognitive uncertainty, on the other hand, relates to being uncertain about what another person is thinking or uncertain about our own thoughts. This relates to why keeping app design as simple as possible and having wireframing that most people recognize from previous experience with apps can reduce uncertainty and confusion among users because we want them to be able to predict how to navigate and use it and never be left guessing. For Photop, I
stuck to what people know and are used to for the design, with your classic bottom navigation with icons, and all of your usual pages such as home, messages inbox, calendar, payments wallet, and settings. If anything is possibly not easily understood, then there are provided descriptions or instructions. There is nowhere in this app where you will be left confused.

**URT Behaviors**

Different behaviors come as a result of these different uncertainties. When it comes to reducing uncertainty, the theory highlights information-seeking strategies as the primary way to reduce it in interpersonal communication situations (Berger & Bradac, 1982). Information-seeking behavior refers to the actions that individuals take to acquire information and reduce uncertainty (Knobloch & Solomon, 1999). This information-seeking behavior comes in three strategies: passive, active, and interactive. The passive strategy is watching the individual you are uncertain about interacting with others and learning without interacting with them yourself. Using an active strategy is similar in that you are still not directly interacting with the individual, but you are actively googling them or asking other people about them. Lastly, interactive strategy is directly communicating with the person and learning about them firsthand. These different strategies relate to the design of my app because thinking about these strategies and allowing space for all of them will help reduce uncertainty among my users. Requiring certain information to be displayed on creators’ profiles for potential clients to view such as reviews about them, as well as the ability to directly message creators with any questions allows for all three of these strategies for reducing uncertainty to be utilized by the user, creating a stress-free and positive app experience.

Furthermore, when we interact with someone directly for the first time, people typically follow the same pattern of asking each other questions at first and then moving the conversation to some common topics, also known as small talk (Douglas, 1991). But it’s important to not ask too many questions during an initial interaction because that can have a negative effect of causing a person to feel interrogated (Berger & Bradac, 1982). This was useful when writing the sign-up/account creation questions because while basic information needs to be provided to successfully categorize the user and give them the experience they’re looking for, knowing I shouldn’t ask too many questions to not create that negative experience of feeling interrogated and turn them away from the app was very valuable information and made the process more efficient. As you can see on my sign-up pages for photographers and clients, only necessary information is asked of them, and they don’t have to go into too much detail to find what they’re looking for.
Benefits of Reducing Uncertainty

The second major element of Uncertainty Reduction Theory (URT) is the benefits of knowing how to reduce uncertainty. Researchers Dale Brashers and his team (2001) have expanded the theory to include uncertainty management theory, emphasizing the importance of managing emotional responses to uncertainty. Brashers claims emotional reactions towards uncertainty stimulate actions aimed at its management. Since individuals possess distinct emotional responses, their responses toward uncertainty will also vary. Evaluating the uncertainty and associated emotions while making rational decisions on how to respond can provide us with better tools to tackle uncertainty in our lives, thus being better suited to foster good relationships and enhance our social skills. Brashers (2007) goes on to state that "learning to manage uncertainty is an essential life skill that communication researchers can help people develop" (p. 214). Furthermore, reducing uncertainty is about making sense out of something (Berger & Calabrese 1975), which translates to improving your capacity to predict or explain something with precision by reducing the number of potential explanations or outcomes until there is only one. URT can help individuals organize their confusions, leading people to become more self-aware and better equipped to interact with unfamiliar people or objects. Understanding URT and its benefits also applies to app design by predicting user expectations and reducing uncertainty through consistency. Honing my skills in understanding this theory and the strategies it presents helped me better recognize how users might predict how this app will work and what they are expecting out of it to help them not experience any uncertainty or help them know how to reduce it.

URT Weaknesses and Criticism

The third and final major element of URT is its weaknesses and criticism. The original theory has been criticized for oversimplifying human behavior and ignoring intervening variables such as emotions and anxiety. According to a theory by Affi and Weiner (2004), uncertainty does not necessarily drive motivation as URT proposes, but rather it induces anxiety, which in turn motivates individuals to find more details. Additionally, URT does not account for individual differences in uncertainty tolerance and how not all information has the same impact on everyone. Overall, the theory fails to capture the intricacies of human interactions. For example, the original Uncertainty Reduction Theory had seven axioms, with the seventh axiom stating that increases in uncertainty level produce a decrease in liking and vice versa. A study by Mark V. Redmond and Denise A. Vrchota (1997) about changes in attraction during an initial interaction between strangers found no support for axiom 7, in turn putting the theorems extracted from this axiom in
question as well. Other axioms and theorems under those axioms have also not held up well under scientific investigation. URT contains many falsifiable predictions, and those kinds of predictions lend themselves to refutation by nature (Knoblach, 2015). All in all, while the theory may have failed to capture all of the complexities of human interaction and assumed one too many things, it still provides a lot of helpful guidance to interactions and reduces that uncertainty.

**URT and App Design Synthesis**

Although the Uncertainty Reduction Theory (URT) focuses on human interactions, it can be applied to app design for users encountering a new app for the first time as well. To improve user satisfaction, URT can provide direction for designing a simple and familiar wireframe to reduce uncertainty and increase understandability. Clear instructions and visual cues like illustrations and recognizable icons were incorporated into the design of Photop to enhance the users’ experience and confidence in using the app. First impressions are crucial for apps since this is when users are the most vulnerable to disengagement, so focusing on simplicity and ease of understanding for the initial sign-up pages for photographers/videographers and shoot information pages for potential clients was crucial. Instructions and example text for each question will prevent disengagement and negative feelings towards Photop due to uncertainty. Furthermore, only the important questions were asked and nothing unnecessary, so no one feels interrogated and gets turned away from the app. As I worked on my project, applying URT principles to guide my design decisions helped immensely to improve overall user satisfaction, and I believe I created a design that will be easily recognized and navigated by a diverse range of users.

**Background Research and Interviews**

Starting this project, I first researched similar services to see how their websites/apps worked, how they were designed, and what kind of information they were asking from their users. I first studied Snappr, a photography company that provides a similar service as Photop in that they connect people with photographers for events. They are different in that they have a hiring process to allow only professional photographers to be featured on their site. I took note of what kind of questions they were asking users about their shoots and took inspiration from them. Next, I looked at Rover, an app for people to buy and sell pet care services including pet sitting, dog boarding, and dog walking. You can search for a pet sitter for your dog/cat or sign up to be a pet sitter. Knowing that their app is very similar to mine in that people are buying/selling services from each other, I took inspiration from how their app is set up and what kind of features/pages it has.
Lastly, I asked a couple of photographers about what kind of features and pages they would want/need in an app like this. One photographer said “I would love a page with very straightforward payment and bank statements to help me track my earnings and total income from my bookings. That stuff can be a pain, so if it were easy to connect my bank to the app and have them keep track of everything for me, that would be huge.” I made sure to have all the necessary information on the wallet page so that the app is easily and conveniently doing all of the administration work for you, all you have to do is connect your bank so that all your earnings are being wired right into your account. The second photographer said “I understand that many photographers are very artsy and like to have fancy portfolio websites that they made themselves, but sometimes it can be too much for regular, non-creative people to look through. I think keeping the portfolio section on the portfolio as simple as possible would be best considering this app will be used by a wide range of people, not just those who are artistic.” There is a portfolio tab on a creator’s profile, and they can add as many sub-tabs as they want for different types of photography. You simply scroll down through the photos to look through them. It’s simple, it’s familiar, and it’s sure to not confuse anyone. With all of this background and user interview information, I believe I was successful in adding everything that everyone would possibly want out of this app, including some additional social media aspects to help creatives connect, but not have a ton of unnecessary features that cause uncertainty and confusion among users.

**Interactive Format**

To create the app prototype, I utilized a combination of two different software. Adobe Illustrator was used to design the logo for the app as well as a few graphical elements, while Figma was utilized for all other aspects of the prototype creation process, including the initial low-fidelity wireframes, the final high-fidelity prototype, and all graphical elements. The flexibility and ease of use offered by Figma allowed for a streamlined workflow and efficient creation of the final prototype, especially with features such as components so that I was able to copy and paste the same boxes and buttons I was constantly using to keep my design consistent. Overall, the combination of Adobe InDesign and Figma proved to be an effective toolset for developing the Photop app prototype.
Completed Project Description and Photos

With a time frame of just a couple of months, I was successfully able to wireframe, design, and prototype an app with over 60-page frames and around 200 connections between each of those. The app is very straightforward, with plenty of instructions, examples, and icons for max understandability and no room for uncertainty. Given the limited amount of time, I was able to create the majority of what the app would look like. You start on the welcome page, where you can sign in or create an account. From there, you can either choose to sign up as a photographer, videographer, or both, or as a potential client of either. If you choose the creator route, you go through the sign-up pages for a photographer/videographer which include talking about yourself and your experience, uploading portfolio photos/videos, and more. If you choose the potential client route, you’re taken through the shoot questionnaire and then can browse creators and click on an example photographer to check out their profile and message them about shooting. Both routes at the end take you to the home page, and you’re then logged in as if you are a photographer. From there, you can look at your bookings for today and tomorrow, your own profile and portfolio by clicking on the profile photo in the top right corner, notifications, and toggle between your bookings with clients and scrolling through your feed of other photographers you follow. At the bottom, you’ll see the master navigation, where you can click between your messages, calendar, wallet/payments, and settings. To watch how to navigate through the entire prototype, check out the youtube videos linked at the bottom, or click on the link to view the entire prototype yourself. It’s important to note that the prototype was sized for an iPhone 11 Pro, so it may look different if you are viewing it on a different mobile device. To see it in its best format, view the prototype on a desktop computer or laptop.
Example Prototype Photos
(not all pages included)
Are you looking for a creator for a shoot, or just wanting to browse creators?

I have a shoot
Browse

Choose a type of imagery
- Landscape
- Portrait
- Family
- Graduation
- Party
- Wedding
- Engagement
- Pet

When would you like to shoot?

*Note: calendar is not implemented*

March 9th, 2023

Bookings Feed

Today 1 Booking
Mark Smith
Photograph on Mar 9

Tomorrow 5 Bookings
Angela Monroe
Photograph on Mar 9

Emile
Thursday, Mar 9

Mark Smith
Booking on Mar 9

March 9th, 2023

Today

Mark Smith
Photograph on Mar 9

Angela Monroe
Photograph on Mar 9

Tomorrow

Mark Smith
Photograph on Mar 9

Yes, I am available and would love to let’s book!

OK sounds good! I was also wondering if you might be available for a permanent role?

Inbox Pending Upcoming

Jessica Lance
Photograph on Apr 13

Would you be available to shoot my...

Wallet

[Calendar]

[Settings]

General

Account Settings
Notifications
Log Out
About

Version
Senior Showcase W2023
Variant
PROTOTYPE:17946
Privacy Policy
Acknowledgements
Terms of Service
Digital Services Act
Withdrawal History by Year

Payment History

Withdrawal History by Year

Payment History

$0.00

Total

Upcoming $400.00

Manage Payout Methods
Add or Modify a Payment Method

[Photo Balance $0.00]
Reflection and Limitations

Considering a realistic scope of what I could accomplish in a quarter, there were only so many frames and interactive elements I could create. The prototype doesn’t allow users to type in any input fields since it is not a fully programmed app and cannot record user information. Because of this, as well as other restrictions of the software, most of the pages are just for looks and don’t have interactive content, such as any message pages, the calendar, wallet, settings, creator sign-up pages, and more. Another limitation was only being able to size it for one specific phone. This leads to the prototype looking poorly sized/designed if being viewed on any phone besides the iPhone 11 Pro. For anyone to view the prototype in its original form without having that specific phone, it’s best to view it on a desktop computer or laptop. Furthermore, when I started this project, I knew what administration pages and features it needed, but the social media elements were up in the air. I quickly came to realize that with social media comes a lot of features, especially ones that I didn’t feel were necessary. All I wanted was the ability for creatives to follow one another and have an easier time connecting, so I created a feed page to scroll through photographers you follow. I then realized that the app would probably need two feeds, one to discover new photographers to connect with, and one to scroll through photographers you follow. A lot comes with feeds and social media, so these aspects of the app are going to be my focal points moving forward with the design and usability of the app. Despite all these constraints, I was able to accomplish what the app would look like, how it would work and be navigated, and complete most of the features it would have. In the end, I believe I started a highly useful tool for all kinds of people to connect for professionally captured imagery. Moving forward, I plan to keep on developing the app and improving some of its pain points, such as the social media aspects. I truly believe this idea has the potential to bring immense value to the camera community and beyond, and I hope I am successful in executing it to its fullest potential so that I can one day launch it on the app store.
References


