# ACADEMIC PORTFOLIO

## APPLIED USER PSYCHOLOGY 25/26

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# HI, I'M MURAT

## ABOUT

My full name is Necmettin Murat Tenil. I am a product designer and I am currently studying MSc User Experience and Interaction Design in GCU. Design is one of passion of my life and I incorporated it into every aspect of my life. When creating simple, clean and creative designs, I aim to make design intuitive, usable and accessible. In my opinion, design is always more than appear.

*"Design is not just what it looks like and feels like. Design is how it works." - Steve Jobs*

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## SKILLS

🖥 Web Design

📱 Mobile Design

🎮 Game Design

✒ Vector Art

📐 Motion Design

## EDUCATION

◈ **Antalya Bilim University**
Computer Engineering

◈ **Glasgow Caledonian University**
MSc User Experience and Interaction Design

## TOOLS

◈ Figma

Ai Adobe Illustrator

Ps Adobe Photoshop

Ae Adobe After Effects

</> Codding

## INTEREST & HOBBIES

🥊 Fitness          🎵 Guitar

🥊 Wing Chun        🏀 Basketball

📖 Reading          ✒ Writing

🎞 Movie            🎮 Game

# ASSIGNMENT - 1

## WHAT IS PSYCHOLOGY?

Psychology is the study of mind, behavior, and human experience. This includes the mental processes we experience, from our fleeting thoughts and dreams to our sense of consciousness, including our decisions, personality, and social relationships. It explores the biological influences—such as brain chemistry and genetic predispositions—as well as the social pressures and environmental factors that affect how we think, act, and feel (Pérez-Álvarez M., 2018).

## WHAT IS APPLIED USER PSYCHOLOGY?

User psychology is a field of study that focuses on understanding the motivations, intentions, behaviors, and reactions of users when interacting with products, services, and other elements of their environment. It studies how people think, act, and feel while they use digital products, services, and systems. The goal is to make these products easier to use and more enjoyable, as well as to understand what factors can influence the user's decision-making process.

## WHY IS PSYCHOLOGY IMPORTANT TO DESIGN?

A knowledge of psychology helps designers understand their users and create designs that improve the users' experience. Visual elements evoke certain feelings in users. An understanding of psychological principles of design can influence how users receive information. It is necessary to know how to synthesize information that enables users to have a seamless experience and avoid information overload. Design principles are applied in UX design to help guide design decisions and help designers explain the meaning behind every decision. Understanding psychological design principles will help you discover what goes into creating intuitive and relevant user experiences.

Cognitive load refers to the mental processing power being used by our working memory. Our brains are similar to computer processors in that we have limited processing power: when the amount of information coming in exceeds the space available, cognitive load is incurred. Our performance suffers and tasks become more difficult, which results in missed details and even frustration.

## HICK'S LAW

Hick's Law states that the time it takes for a person to make a decision increases with the number and complexity of choices available. In UX design, too many options can overwhelm users, leading to slower decision-making and frustration. Named after British psychologist William Edmund Hick, this principle is based on research that shows a logarithmic relationship between the number of choices and decision time. The more options presented, the longer users take to choose, due to cognitive overload. Key takeaways are such as; fewer choices lead to faster decisions, organize options logically to avoid cognitive overload, use progressive disclosure to simplify complex interfaces.
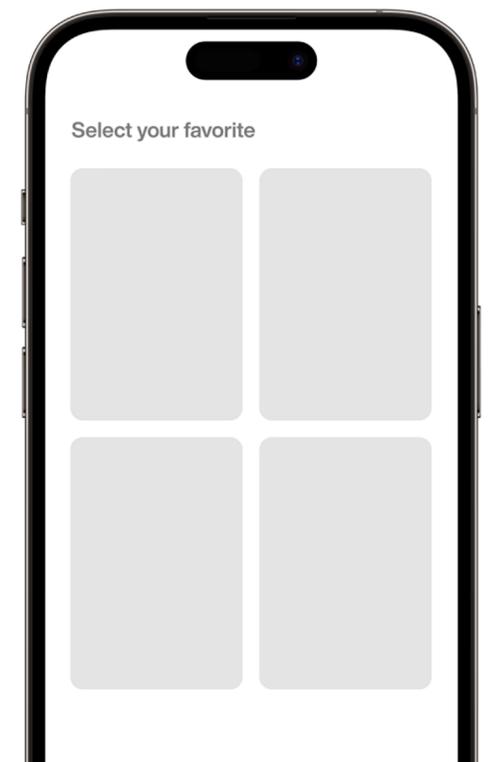
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# ASSIGNMENT - 2

## WHAT IS PERSUASION AND WHY IS UNDERSTANDING PERSUASION IMPORTANT FOR DESIGN?

Persuasion, a prevalent form of social influence in humans, refers to an active attempt to change a person's attitudes, beliefs, or behavior. (Cacioppo, J. T., Cacioppo, S., & Petty, R. E. 2017). Persuasion in design is often regarded as a subset of UX, but it goes beyond UX and the mechanics of traditional usability. It's about understanding the emotions that influence people's behavior and decision-making, and then acting on that information to design compelling user interactions. Persuasive design applies psychological principles of influence, decision-making in a consumer context, engagement strategy, and social psychology to every stage of the design process, and it identifies potential barriers and emotional triggers to elicit the desired actions. "Emotions shape all activity in adaptive ways. In the absence of emotional markers, decision making is virtually impossible." (Elisa del Galdo)

## WITH WHOM DOES RESPONSIBILITY FOR "DIGITAL WELLBEING" LIE?

The pervasiveness of technology and the increasing number of studies on technology misuse, high dependency and addiction in the last decade raised an intriguing question of where the responsibility of preserving users' wellbeing lies. Technology products and services are not neutral, rather, they play active mediating roles between humans and the real world, leading to both positive and negative consequences on their lives and wellbeing. Recently, and as the pandemic transformed people's lives and accelerated digital transition for many entities, more voices started to be raised on whether this shift contributes positively towards

human flourish. The continuous availability of digital devices and network connectivity make it challenging cognitively and emotionally to have self-control irrespective of the user's characteristics. The ease to switch focus and context while using digital devices and the advances in intelligent algorithms and adaptive interfaces are some factors contributing towards this easiness. believed that focusing on personal goals is difficult while using the internet, hence, a new set of digital skills related to critical thinking of the design and self-regulation might be needed. Strategic internet skills which is the capacity to use digital media to attain specific benefits is one example for effective usage suggested by, while cherry-picking contacts in our social network is another example suggested by.

## PERSUASIVE DESIGN IN APPLE FITNESS

A persuasive sample from Apple Fitness. One of the popular fitness application is using gamification to encourage users for motivation. Apple Fitness has several persuasive design techniques to take users in to the competition. Also, these features appeal to users need for recognition and social belonging while reinforcing consistent participation through visible rewards. By combining competition with community, Apple Fitness effectively uses persuasive design to sustain user involvement and trust in the platform.

*Image 1 - Apple Fitness Notification*
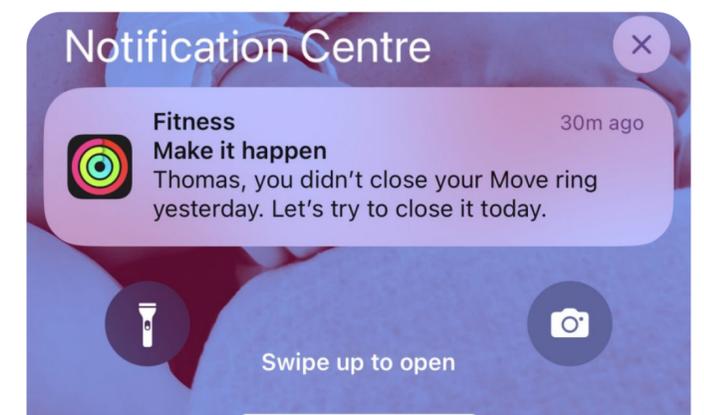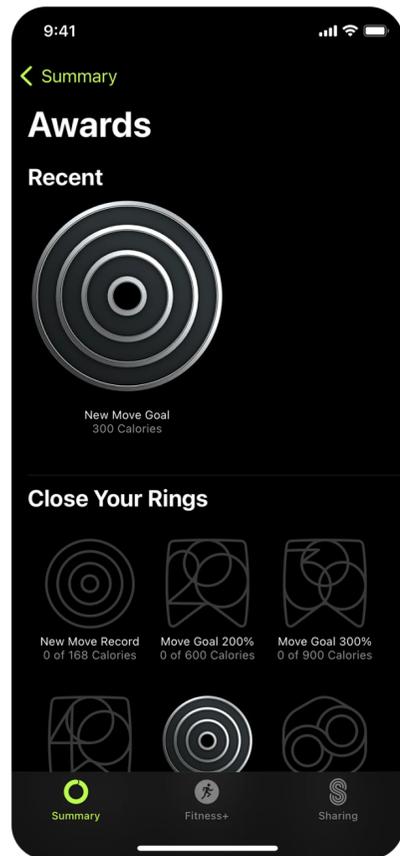
# ASSIGNMENT - 2

Image 2 - Apple Fitness Awards


Image 3 - Apple Fitness All Awards

Designers incorporated persuasive elements such as progress rings, rewards, and leaderboards to promote daily exercise habits. The clear visual feedback system helps users internalize fitness goals while rewards strengthen long-term engagement. By integrating social comparison through sharing and rankings, they effectively encourage commitment and accountability.

The intended experience is to motivate users to exercise consistently and feel rewarded for progress. However, some users may experience pressure, guilt, or obsession when goals are not met. While it effectively builds routine for many, others might feel disappointed if streaks are lost, leading to decreased motivation.

Designers should ensure balance between motivation and pressure, emphasizing health over competition. They could introduce personalized goals that adapt to users' fitness levels and emotional well-being. Feedback should focus more on encouragement rather than loss, helping users view missed days as opportunities to improve rather than failure.

# ASSIGNMENT - 2

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Necmettin Murat Tenil - Applied User Psychology

# ASSIGNMENT - 3

## WHAT IS LEARNING AND WHY IS AN UNDERSTANDING OF LEARNING IMPORTANT FOR DESIGN?

Learning is a relatively permanent change in behavior that results from experience. During the first half of the 20th century, the school of thought known as behaviorism rose to dominate psychology and sought to explain the learning process. Behaviorism sought to measure only observable behaviors. There is three types of learning in psychology such as; classic conditioning, operant conditioning and observational learning.

Preventing users from becoming confused about how they got somewhere or what something does while exploring an interface is key to keeping them coming back. By designing interfaces that are highly learnable and easy to use, this understanding is increased. But how do we design for learnability? One way is with a better understanding of the role conditioning plays in this experience. While in gamified experiences, user behaviors like consistency, hard work, purchases, and social interactions are rewarded with points encouraging users to continue these actions, other experiences rely on cause and effect among other methods to establish a connection between a user action and a 'reward' or desired outcome. Users learn to seek these small wins.

## CHOOSE AN EXISTING DESIGN AND EXPLORE HOW THE DESIGNER HAS APPLIED THIS PRINCIPLE

The learning principle I have chosen classical conditioning learning method. Classical conditioning is a type of learning in which, when a neutral stimulus is paired with a natural stimulus, there comes a time when the neutral stimulus starts to elicit the same response as that of the natural stimulus.

**Instagram** primarily employs Classical and Operant Conditioning to achieve its goal of maximizing user engagement and retention. The app pairs notifications (a Neutral Stimulus) with the unpredictable social reward of likes, comments, or a new follower (the Unconditioned Stimulus). Through repeated exposure, the notification sound or the sight of the red badge becomes a Conditioned Stimulus, creating a reflexive urge to open the app. Furthermore, the act of scrolling is constantly rewarded with novel, relevant content on a Variable Ratio Schedule (Operant Conditioning), which is the most effective way to condition a persistent, high-frequency behavior like checking the feed.

The designer intended to create a fun, validating, and connected social space where users share content and experience positive social feedback. However, the actual user experience is often characterized by anxiety, social comparison, and compulsive checking. The unpredictability of rewards and the fear of missing out (FOMO) drive excessive use, leading to an unconscious habit where the user's primary motivation is no longer social connection, but rather satisfying the conditioned response. This compulsive engagement can negatively impact mental well-being, replacing mindful interaction with a reflexive checking habit.
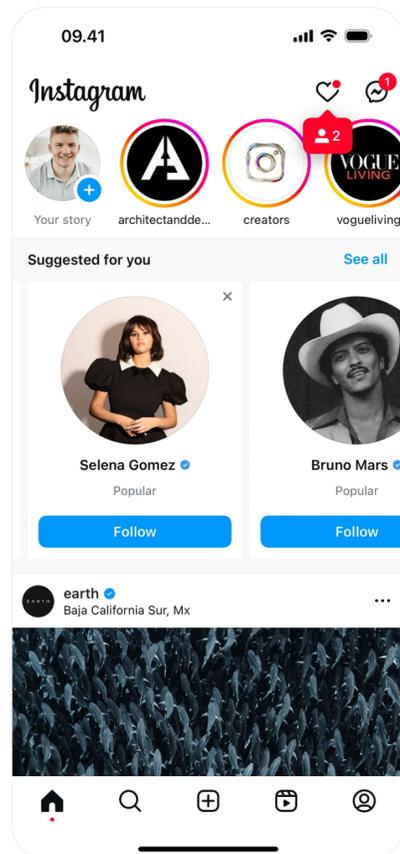
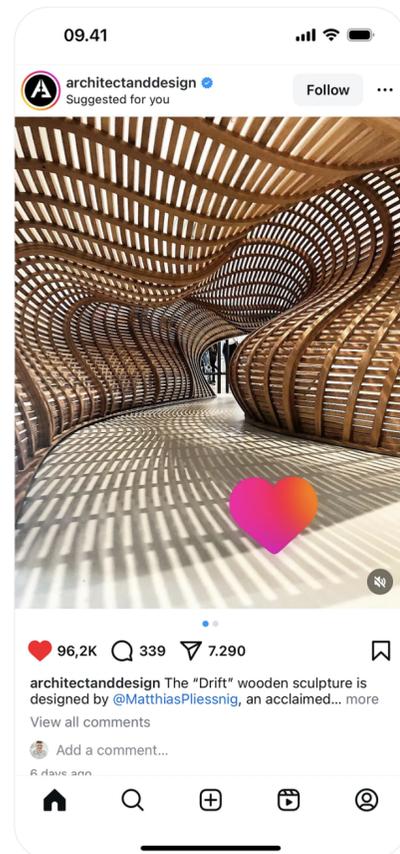# ASSIGNMENT - 3

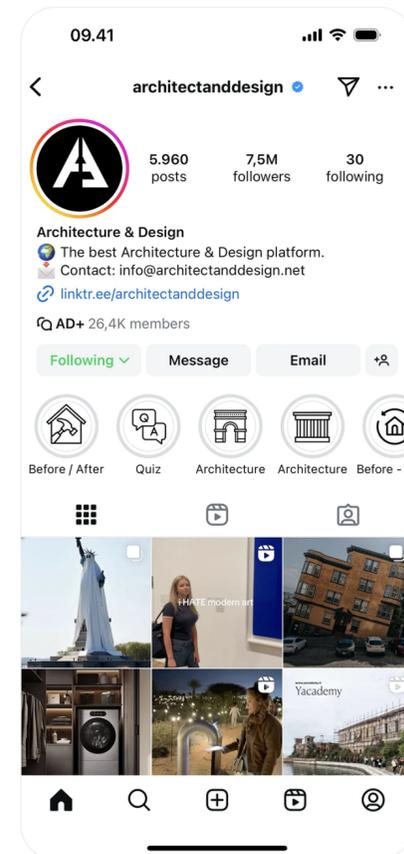*Image 1 - Instagram Notification*



*Image 2 - Instagram Like*



*Image 3 - Instagram Profile&Followers*

Designers must ethically prioritize user well-being by weakening the power of these conditioned cues. A key takeaway is that the most powerful reinforcement is often the most psychologically damaging. Designers should de-condition the notification response by making feedback less immediate and less distinct, perhaps by bundling notifications into one delivery per hour instead of continuous alerts. Additionally, introducing "intentional friction" (like a brief, non-skippable "You're all caught up" screen) can break the mindless scrolling habit and encourage users to consciously decide whether to keep consuming content.

# ASSIGNMENT - 3

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# ASSIGNMENT - 4

## DEFINE MEMORY AND FORMS OF MEMORY INCLUDING PROSPECTIVE MEMORY

In general terms, human memory is the natural storage for the data right in the human brain. It reacts to the outer stimuli, collects the data, processes it and organizes in different ways. Also, it enables a person to access the needed data collected in the memory when it's needed. However, it doesn't present the perfect mechanism as it's influenced by a big number of factors of physical and emotional nature (UX Planet).

Knowing how memory works, designers can create human-centered interfaces which correspond to the natural abilities of the users, save their effort and boost usability.

## SENSORY MEMORY

Sensory memory in psychology refers to the short-term retention of sensory information, like sights, sounds, and smells, immediately following stimuli input.
It's a crucial stage in memory processing that briefly stores vast amounts of sensory data before it's selectively filtered into conscious awareness as working memory.

## SHORT TERM MEMORY (WORKING MEMORY)

Short-term memory is a component of memory that holds a small amount of information in an active, readily available state for a brief period, typically a few seconds to a minute. The duration of STM seems to be between 15 and 30 seconds, and STM's capacity is limited, often thought to be about 7±2 items.

It's often likened to the brain's "working space," enabling tasks like reasoning and language comprehension. Information not rehearsed or processed can quickly be forgotten.

## LONG TERM MEMORY

Long-term memory is a nearly permanent storage space for learned information and experiences. It can hold memories for years. Long-term memory moves short-term memories to this larger space. Your memories may last a long time, but your ability to retrieve them may be more challenging with age, certain conditions or injuries.

## PROSPECTIVE MEMORY

Prospective memory refers to the ability to remember to perform delayed intentions, such as remembering to take medication, and is dissociable from other forms of memory by its future focus, the need for planning, and a reliance on self-initiated retrieval.

## CHOOSE A DESIGN EXAMPLE AND EXPLORE HOW IT HAS BEEN DESIGNED WITH PROSPECTIVE MEMORY IN MIND

The task management application such as Todoist is a very good example for prospective memory. Todoist is aid designed entirely to support and offload the two main types of prospective memory like time-based and event-based intentions.
Time-based prospective memory involves remembering to perform an action at a specific, scheduled time

Event-based prospective memory involves remembering to perform an action when a certain cue is encountered

Users can set a deadline and reminder notifications. Also other users who are team members can displays tasks. It is very helpful feature to manage tasks. By understanding how memory works and we are as a designer can design our applications for make users life easier.

On the other hand designers always remember the app purpose. For example; Todoist app we take remember responsibility from users. When designers doing that, we use clean and minimal language in application and also push-notifications. Users also pick a reminder time like 1 day before, 2 hours before, 30 minutes before etc.

Other example for prospective memory is Greg app which is plant identifier & care. It is also related to time-based prospective memory. The app support what users need to grow a plant such as irrigation, tracking, snoozing etc.

Greg is helping to remind for irrigation time for related plant. It is low-effort steps, significantly improving the user's real-world PM performance in their home environment.
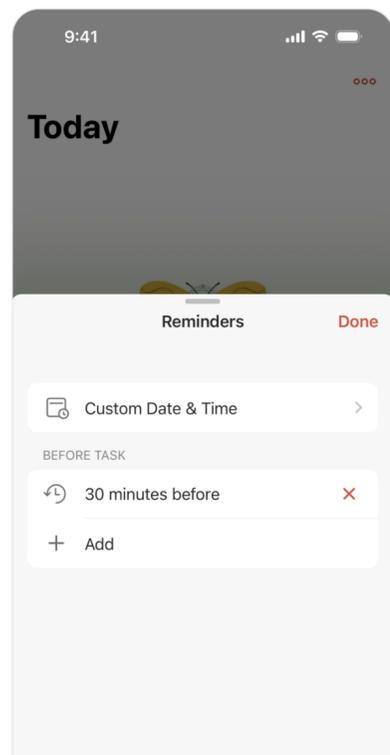
*Image 1 - Task Creating*
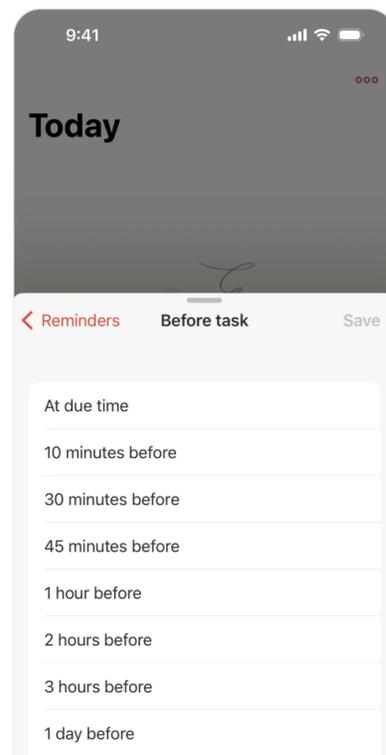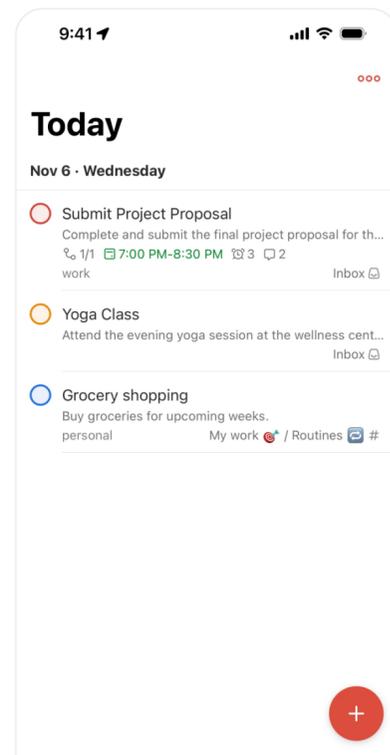
*Image 1.1 - Task Reminder*

*Image 1.2 - All Tasks*

*Image 2 - Upcoming Irrigation*
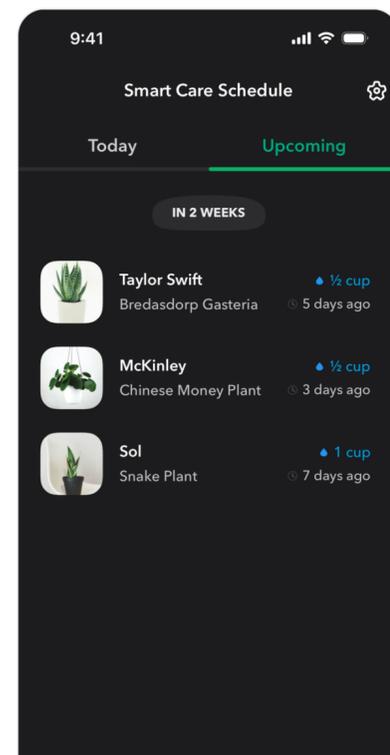
*Image 2.1 - Reminder Details*
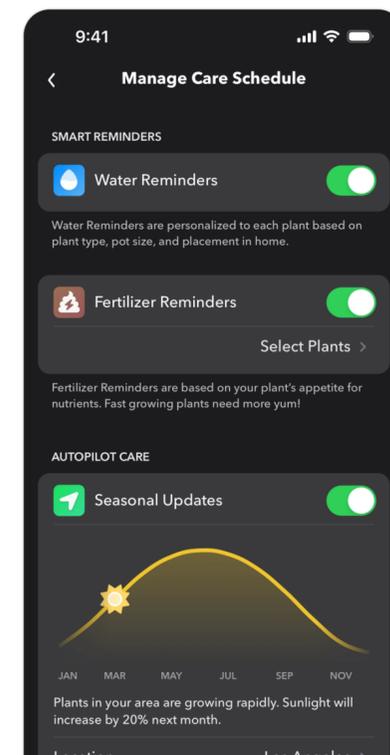
*Image 2.2 - Fertilizer Reminder*

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# ASSIGNMENT - 5

## WHAT IS GESTALT PSYCHOLOGY AND WHY IT IS IMPORTANT FOR DESIGN?

Gestalt psychology is a school of thought that looks at the human mind and behavior as a whole. Gestalt psychology suggests that humans don't focus on separate components but instead tend to perceive objects as elements of more complex systems. Gestalt grew from the field of psychology in the beginning of the 19th Century. Austrian and German psychologists started researching the human mind's tendency to try to make sense of the world around us through automatic grouping and association.

## GESTALT PRINCIPLE OF PROXIMITY

The Gestalt principle of proximity states that we naturally group objects that are close together, while visual elements spaced farther apart are seen as separate. It is also associate an icon with its text if they're placed close together. In UX design, the Proximity principle is often used to group multiple elements without the use of hard borders. On the other hand, proximity brings structure and clarity to designs. It guides the viewer's attention, highlights key elements and helps the design tell a cohesive story.

## PROXIMITY PRINCIPLE OF USE IN SPOTIFY

We can see one of the most important Gestalt principle on Spotify is the perfect idea. This principle is all about how things that are placed close together instantly look like they belong

in the same group. Also, users can recognise easily app contents such as albums, playlist, artist etc. When we look at any list of artists, Spotify applied this principle perfectly. Spotify uses shapes for this. For example circle shapes are represent artist and square shapes are represent albums and songs. Because all these details are so tightly grouped, our brain immediately connects them each other carefully. Moreover, layout makes it really quick and easy for us to spot artists while browsing through dozens of albums and songs. It is making the whole app feel simple, easy to use and organized.
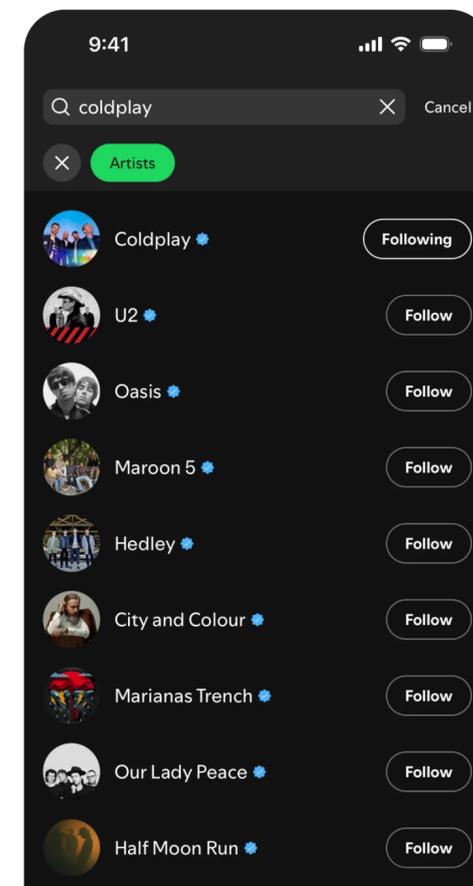
*Image 1 - Spotify Artists*
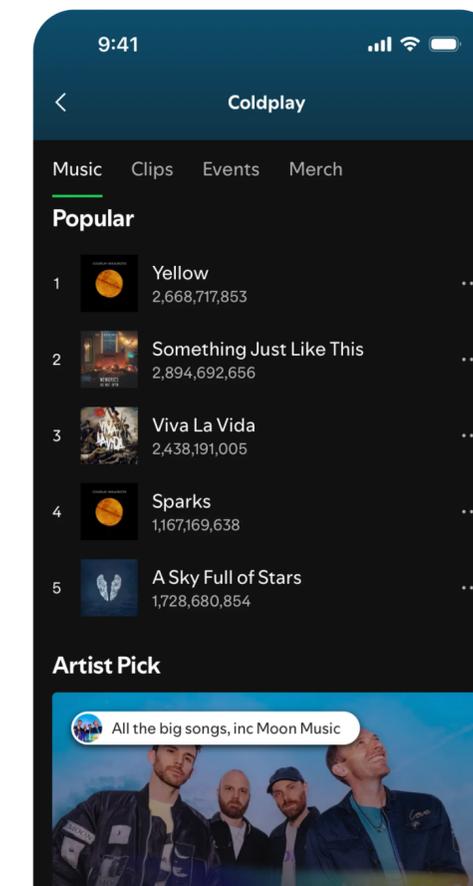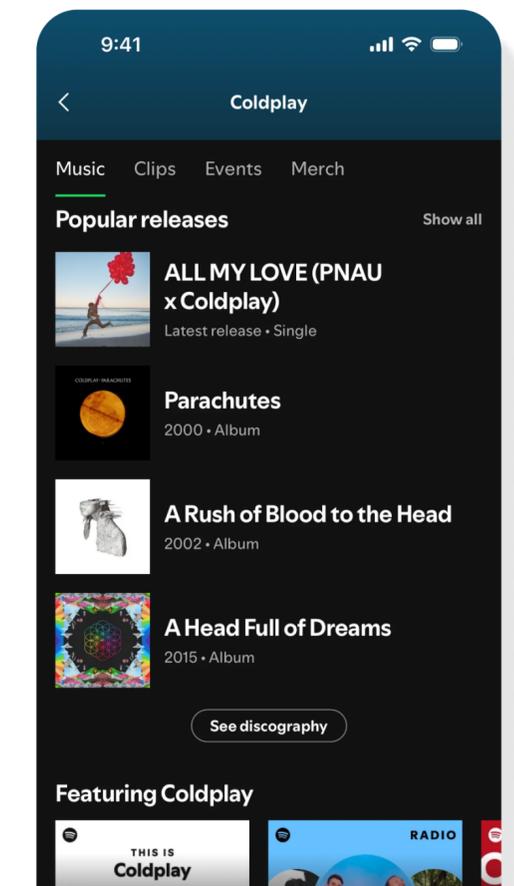
*Image 2 - Spotify Songs*

*Image 3 - Spotify Albums*

# ASSIGNMENT - 5

## GESTALT PRINCIPLE OF CONTINUITY

This principle, humans perceive objects arranged in continuous lines or curves as more related than individual elements on a jagged or broken line. Our eyes are better at following smooth, continuous lines or paths. If you design multiple elements along curves or lines to guide the user's eye through the image or layout, the continuity principle is at work. A classic use of the continuity principle is a progress bar or timeline that visually leads the user's eye smoothly from left to right or top to bottom through each step or phase. Continuity helps maintain flow and keeps users engaged by creating a clear, unbroken visual journey through information or actions.

rows from one category to the next, creating a sense of unbroken flow down the page. This continuous vertical alignment easily encourages the user to keep scrolling indefinitely, engaging with new content sections without encountering a any sharp or stop.

## CONTINUITY PRINCIPLE OF USE IN NETFLIX

The Netflix is a very good example for principle of continuity. It has unbroken lines like horizontal and vertical. For horizontal using the movie and show categories are presented in rows of visually aligned content cards (movie thumbnails). Our eye is drawn from the title of the category such us "For You", "Trending Now" etc. Also, then smoothly across the entire row, leading you naturally from one movie card to the next. On the other hand, Netflix has guiding scroll direction. Because the rows are perfectly straight and align seamlessly across the screen, our eye receives a strong visual cue to continue scrolling horizontally within that category. This smooth visual flow encourages deep exploration of all items in the row, making it easy to browse a high volume of content without feeling overwhelmed. Lastly, it has encouraging vertical scrolls. As we scroll down the main page, our eye follows the path of the

*Image 1 - Netflix Horizontal*
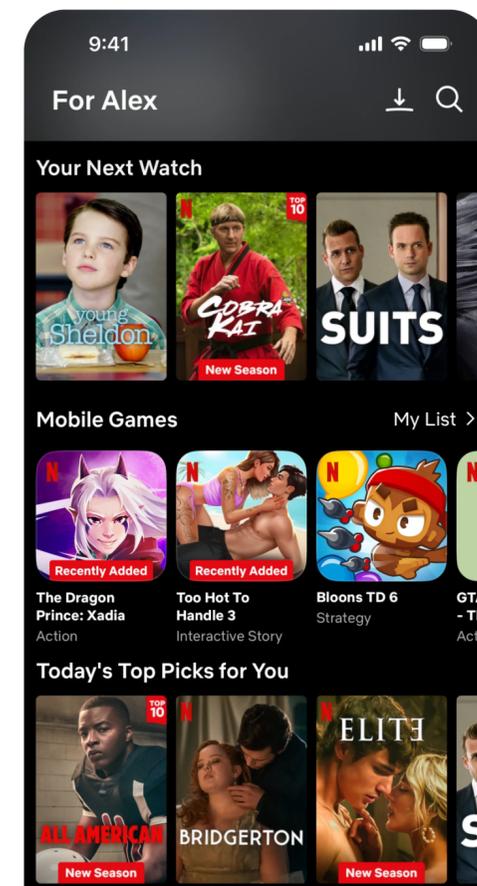
*Image 2 - Netflix Vertical*
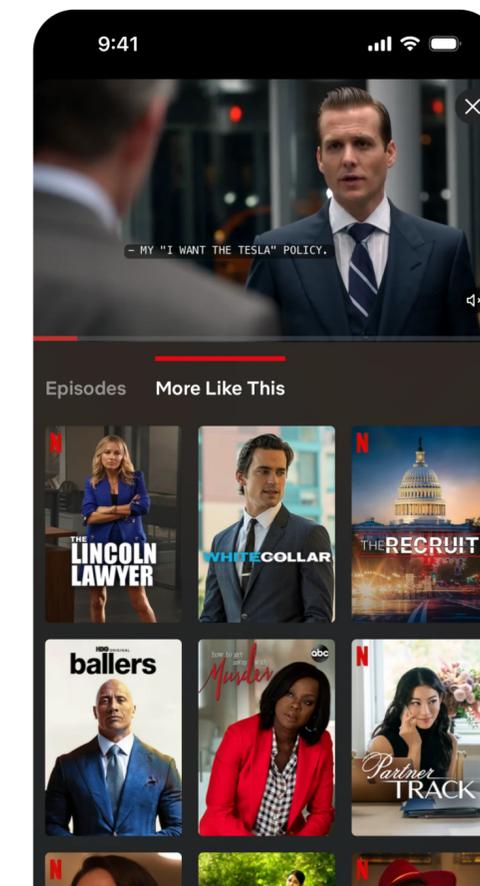
*Image 3 - Netflix Vertical*

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## WHAT IS CYBERPSYCHOLOGY AND WHY IS IT IMPORTANT FOR DESIGNERS TO CONSIDER?

Cyberpsychology is the study of psychological processes related to, and underlying, all aspects and features of technologically interconnected human behavior. In other words, it's the psychology of cyberspace that focuses on the intersection of technology and human behavior. This field explains how humans interact with each other in a virtual environment and the potential complications that may arise from it.

Relatedness, competence, and autonomy. Considering these three factors while creating a product will help design experiences that motivate the users to engage with the product. Humans have an inherent need to be related to other humans. About relatedness, they like to associate themselves with groups, often to find a feeling of belonging. Secondly competence, people like to improve themselves by learning new skills. However, they only take up challenges they feel they can succeed in. Once they master a new skill, their interest in it reduces. Then they need a push to evoke their interest. Lastly, autonomy is the need for control over their environment is present in every human. When an action that they take results in a real change, it empowers and motivates them. People also need freedom of choice.

## AI: A CREATIVE TOOL OR AN EXISTENTIAL THREAT TO THE CREATIVE INDUSTRIES?

The release of ChatGPT has sparked quite a bit of interest about creativity in the context of

artificial intelligence (AI), with theorizing and empirical research asking questions about the nature of creativity (both human and artificially-produced) and the valuing of work produced by humans and artificial means. AI has either advantages and disadvantages. For advantages: reduction in human error, enhances decision-making, works 24/7 without fatigue, increases efficiency and automation, improves personalization in user experiences. On the other hand disadvantages are: lack of human creativity and emotional intelligence, risk of job displacement, privacy and security concerns, ethical concerns and AI bias, potential for misuse in deepfakes and misinformation.

## AI AS A CREATIVE TOOL

The emergence of artificial intelligence (AI) has brought a new dimension to the creative process, allowing artists to explore uncharted territories and push the boundaries of their imagination. For example it helps like inspiration and idea generation, visual exploration, textual creativity.

## SAMPLE OF AI CREATIVE TOOL

Adobe Firefly. Firefly fuels your creativity with powerful tools to generate, edit and design images, videos, audio and more. Access the top AI models in one place for free. It helps unify your entire creative process into one powerful space. Use AI to seamlessly generate and edit video, images, audio and designs.

# ASSIGNMENT - 6

*Image 1 - Adobe Firefly*

## AI AS AN EXISTENTIAL THREAT

The Cursor is a threat in software area to coding the whole process. Cursor is an AI-powered code editor built on Visual Studio Code that integrates large language models into the IDE to accelerate coding through automation, intelligent suggestions, and agent-driven actions. It allows developers to generate, refactor, and execute code directly from natural language prompts, often without leaving the editor.

## SAMPLE OF AI THREAT

The Cursor has some threat for security and developers job opportunities such as adversarial attacks, data leakage etc. Adversarial attacks occur when threat actors manipulate inputs to cause the AI systems to misinterpret or misclassigy them. For example, adding noise to an image might cause a facial recognition system to misidentify someone. Data leaks commonly occur when sensitive data is inadvertently exposed by the model's output, behavior, APIs, or logs. These leaks can occur during training, deployment, or usage and are prime targets for threat actors. On the other hand, AI can generate code like human. So, developers to become less familiar with the underlying architecture of the solution, making future debugging, refactoring, or scaling much more difficult.
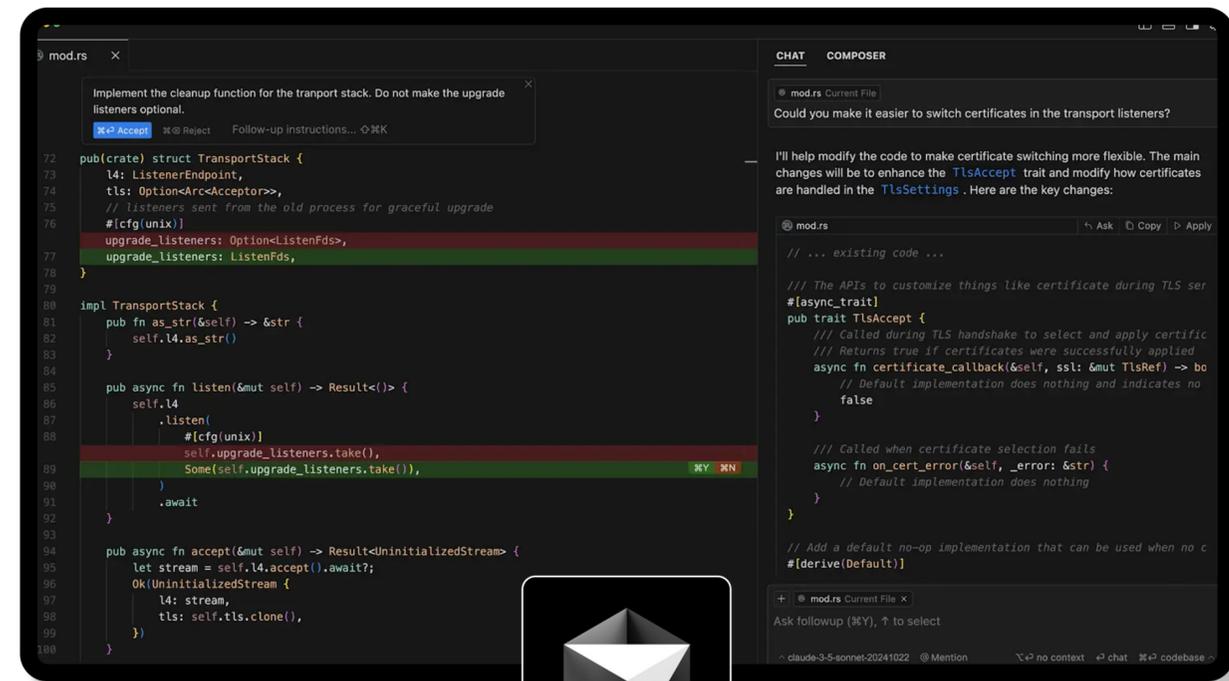


*Image 2 - Cursor AI*

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https://brandfetch.com/cursor.com

Necmettin Murat Tenil - Applied User Psychology

## WHAT IS SYNESTHESIA AND WHY IS IT IMPORTANT FOR DESIGNERS TO CONSIDER?

Synesthesia is when your brain routes sensory information through multiple unrelated senses, causing you to experience more than one sense simultaneously. Some examples include tasting words or linking colours to numbers and letters. It's not a medical condition, and many people find it useful to help them learn and remember information.

Synesthesia is a neurological phenomenon in which the stimulation of one sense triggers an automatic, involuntary response in another. For Emma, this means that something as simple as hearing a day of the week evokes a specific colour — Monday is bright red, the number seven is cobalt blue, and February is lush grass green. While this may sound abstract, it gives Emma an extraordinary ability to connect colour with emotion. And in the world of interiors and paint, that emotional sensitivity is incredibly powerful.

## ROLE OF COLORS AND SHAPES IN SYNESTHESIA?

Intuitively perceiving emotions in other people can be a stimulus that triggers synesthetic concurrents such as colour (possibly also with shape and movement direction), smell, taste or tactile sensations. When the colours are seen physically, it is a case of "aura synesthesia". The coloured halos seen around people are more frequently triggered by another type of synesthesia, involving perception of their personality in general, but for some synesthetes they are evoked by the emotions perceived. Sometimes both can trigger it – personality and emotions. This tends to give rise to more than one colour at the same time, with the

personality colour forming a base hue which is then tinted, modified or accompanied by colours representing the emotions they are feeling.

For example, my fiancée is purple. When she's sad, and I realize it, it becomes a hazy, kinda out-there purple. When she's happy, it's really bright. It only happens when I personally see people, or remember something about them, though."(Image 1)

Sample of perceived emotion-shape "I found myself feeling shapes toward people's condition, emotion, and human relationships as well as hearing the sound. It's like a soap bubble. I feel a kind of texture including clarity, size, weight, brightness and so on."(Image 2)
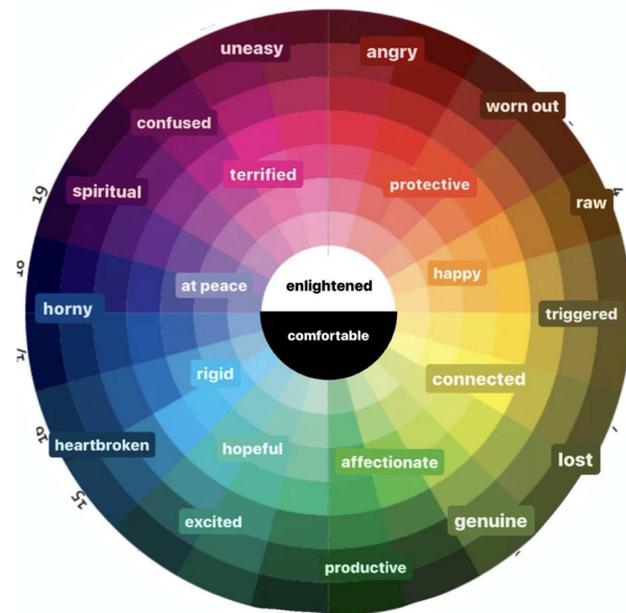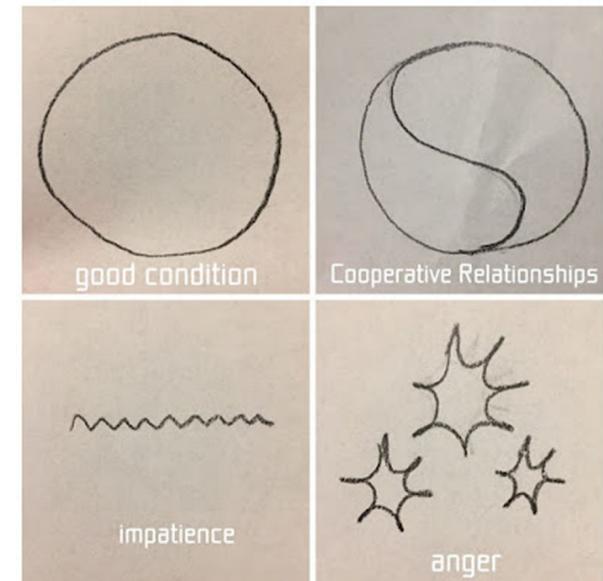




*Image 1 - Synesthesia Colour Meanings*

*Image 2 - Synesthesia Emotion-Shape*

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## THE PSYCHOLOGY OF COLORS AND SHAPES IMPORTANCE IN DESIGN

The psychology of color is a fascinating field that extends far beyond mere aesthetics in UX/UI Design. Each color has the power to evoke specific emotions and influence user behavior in subtle but profound ways. Also synesthesia in shape meaning is vital for designers because it highlights the necessity of multisensory congruence, moving beyond visual design to harmonize all sensory inputs. By understanding universal cross-modal correspondences (like linking pitch to brightness or roundness to safety), designers create products, like the softly shaped toast notification, that are more intuitive, psychologically satisfying, and cohesive, ultimately leading to richer and more effective user experiences.

The example of toast is feedback from system and it contains both colors and shapes to convey system status to user. In toast colors green represents success and growth, orange/yellow represents warning and triggered, blue represents information and reliability, red represents error and anger. Moreover, the colors always using with shapes and icons to reinforced message meaning. As I mentioned before shapes has emotion meanings such as rounded feels safe and calm, cornered shapes feels attention and anger.



*Image 3 - Toast UI Design*

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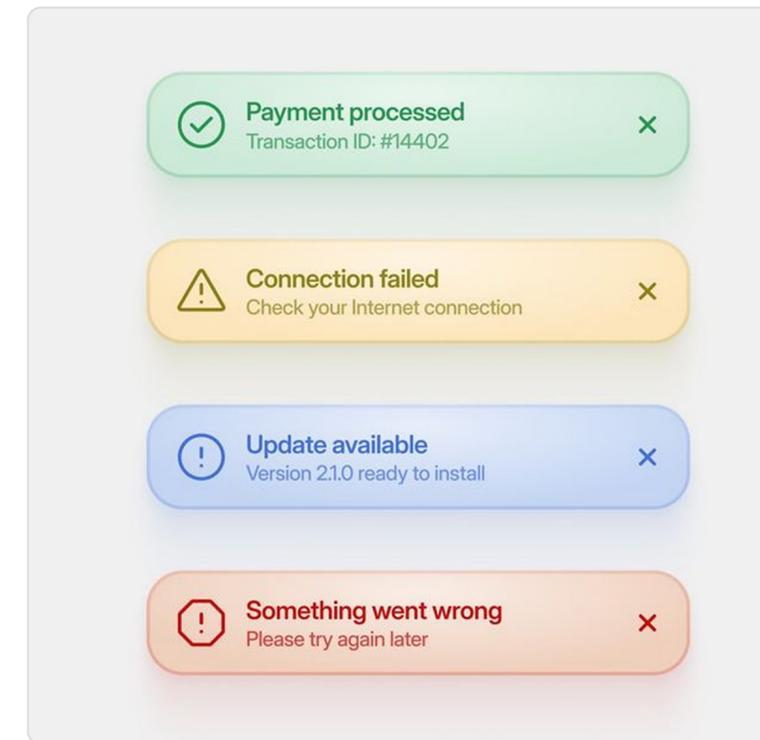
## WHAT IS EMOTIONAL DESIGN ?

Emotional design is the concept of how to create designs that evoke emotions which result in positive user experiences. Don Norman explores designers aim to reach users on three cognitive levels—visceral, behavioural and reflective—so users develop positive associations (sometimes including negative emotions) with products, brands, etc. It goes beyond aesthetics and functionality, aiming to connect with users on an emotional level.

Delight (enduring, lasting pleasure) is at the intersection of visceral, behavioral, and reflective emotional design (which we'll explore further). It is critical that designers understand that these emotional reactions are not accidental — they can be cultivated and crafted with a people-first design approach that truly delivers enduring and impressionable value. Before people can love an experience, they must first desire that experience. This could be through marketing or how you present the experience. people will love the product and tell others about it if the experience evokes positive behavioral, visceral, and reflective emotional reactions.



*Image 1 - 3 Levels of Emotion*

## WHAT IS PSYCHOLOGY OF EMOTION ?

Emotions are complex reactions that people experience in response to events or situations. They involve physiological changes, thoughts, and behaviors that help us respond to what is happening around us. For example, a person might feel joy after hearing good news or fear when facing danger. There are three key element of emotion such as subjective experience, physiological response and behavioral response.

Subjective experience: While experts believe that there are a number of basic, universal emotions experienced by people worldwide, regardless of background or culture, researchers also believe that experiencing emotions can be highly subjective. While we have broad labels for emotions, such as "angry," "sad," or "happy," your own experience of these emotions may be much more multi-dimensional, hence subjective.

Physiological response: If you've ever felt your stomach lurch from anxiety or your heart palpitate with fear, you've already experienced the strong physiological reactions that can occur with emotions. Many of these physiological responses are regulated by the sympathetic nervous system, a branch of the autonomic nervous system. When facing a threat, fight-or-flight responses automatically prepare your body to flee from danger or face the threat head-on. When facing a threat, fight-or-flight responses automatically prepare your body to flee from danger or face the threat head-on.

Behavioral response: The final component is perhaps one that you are most familiar with—the actual expression of emotion. We spend a significant amount of time interpreting the emotional expressions of the people around us. Our ability to accurately understand these

expressions is tied to what psychologists call emotional intelligence and these expressions play a major part in our overall body language. Some expressions are considered universal, such as a smile to indicate happiness or a frown to indicate sadness.
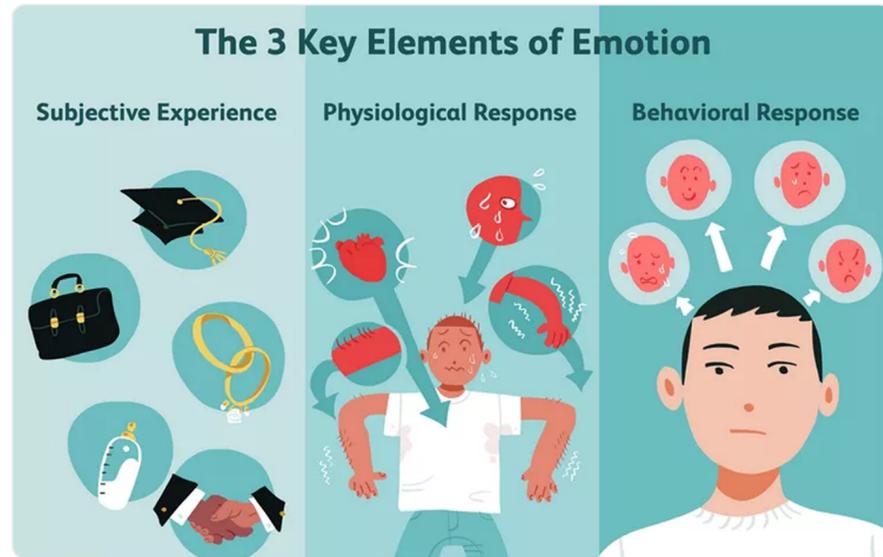


*Image 2 - Synesthesia Emotion-Shape*

## VOLVO EMOTIONAL DESIGN

Since its inception in 1927, Volvo has pursued a safety-focused approach, continually advancing automotive safety technology. Volvo's innovations include the three-point seat belt in 1959, which the company shared as open-source, setting a precedent for putting human life and safety above profit. Over the years, Volvo has embedded safety into its corporate ethos, advancing protective features in crash prevention, impact absorption, and driver assistance

systems. Volvo's safety-centric brand identity has consistently set it apart from competitors, enabling it to maintain a loyal consumer base that values the brand's promise of safety. Volvo does not create cars for quick profit or fashion. It creates them for people, to protect them and ensure safety in everyday life. The Volvo embodies Scandinavian values, which are reflected in simplicity, authenticity, and care for others

Volvo has three primary Goals such as:

Humanise the Brand's Safety Message: Transform safety features from technical specifics into relatable, real-world benefits.

Build Trust and Credibility: Real stories from real people lend authenticity, helping customers trust in Volvo's safety commitment.

Foster Emotional Engagement: By presenting stories of survival, the campaign appeals to customers on an emotional level, making safety a core value that resonates deeply.



*Image 3 - Volvo XC60*

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# MORE THAN A LISTING: THE ROLE OF GESTALT PSYCHOLOGY IN AIRBNB'S USABILITY?

## ABSTRACT

The global accommodation landscape is undergoing a rapid and irreversible transformation, shifting control to the consumer who can now secure lodging instantly through digital platforms and mobile applications. Within this modern ecosystem, Airbnb has fundamentally redefining how users search for and book temporary housing. The remarkable growth of digital platforms like Airbnb is fundamentally fueled by Gestalt Psychology principles applied to design, which enhance usability and appeal. This essay to analyze this relationship.

The introduction will first establish the necessary psychological foundation by defining general psychology, the function of applied user psychology, and the importance of ethical design. In the main body focuses on the Airbnb case study, detailing its market popularity and providing a critical analysis of how the Gestalt principles of figure-ground, similarity, and common region are effectively implemented in its interface, along with an evaluation of the resulting benefits and drawbacks.

## INTRODUCTION

### 1.0 WHAT IS PSYCHOLOGY?

Psychology is the scientific study of the mind and behavior, focusing on understanding human thought, feeling, and mental processes. This rigorous inquiry provides the foundational knowledge necessary to analyze and inform user interaction design *(Cherry, 2022)*.

### 1.1 WHAT IS APPLIED USER PSYCHOLOGY?

The discipline of applied user psychology focuses its research on understanding the complete spectrum of user engagement, specifically examining the motivations, intentions, behaviors, and emotional reactions displayed when individuals use digital products and systems. This comprehensive study of user thought and action serves a crucial purpose: to improve product usability and enjoyment while determining which factors can best optimize the user's cognitive and decision-making processes.

### 1.2 IMPORTANCE OF APPLYING PSYCHOLOGY TO DESIGN?

Psychology is significant for design because it equips designers to understand their users and create experiences that truly improve the user's experience. In addition, this understanding allows them to manage cognitive load and prevent information overload. By utilizing psychological principles, designers create systems where visual elements intentionally evoke certain feelings, leading to intuitive and seamless user experiences.

Moreover, the strategic union of psychology and technology lies at the core of user experience design, fundamentally because UX is centered on people. The best and most successful designs are invariably built for people as they truly are, not based on idealized or preferred user behavior. This philosophy is embraced by leaders in the field, such as Don Norman (co-founder of the Nielsen Norman Group), who refers to himself as a cognitive designer. Regardless of the product's type, the crucial factor remains the ability to design systems for how people think. Understanding these psychological principles for creating the best user experiences and achieving an organization's ultimate goals.

However, the other important concept is Gestalt Psychology as mentioned for Airbnb. Concept of Gestalt Psychology is meaning form or whole in German. Gestalt psychological framework is paramount to design because it provides practical laws of perceptual organization that predict how users will instinctively group and interpret visual information. By applying these laws, designers can intentionally organize complex data into coherent, easy-to-digest visual chunks, which ultimately serves to reduce cognitive load, ensure clarity, establish a clear visual hierarchy, and make the interface feel profoundly intuitive and harmonious, thereby driving user satisfaction and efficient decision-making *(Bustamante, 2023).*

## 1.3 ETHICAL DESIGN

Ethical design refers to the practice of designing products, services, and systems with a focus on ethical considerations and values. This approach involves taking into account the potential consequences and ethical implications of design decisions, aiming to minimise harm and maximise benefits for all stakeholders. Ethical design encompasses several key principles that guide the creation of products and systems such as usability, accessibility, inclusivity etc. *(Grzybek, 2024).*

## MAIN BODY

### 2.0 WHAT IS AIRBNB?

Airbnb, short form of 'Air Bed and Breakfast', is an online marketplace that facilitates peer-to-peer home sharing. This means individuals can list their properties, from apartments and cottages to castles and boats, for short-term stays. Airbnb has revolutionised the travel industry by offering a global network of unique accommodations. With listings in over 220

countries and territories, it allows travellers to experience a destination like a local, immersing themselves in the culture and way of life.

Airbnb offers three core services such as hosting, booking and tours. Hosting means property owners, known as hosts can list their properties on the platform which includes spare rooms or entire homes. Booking unique stays for travellers and guests, can browse in wide range selection list. Also, Airbnb offers to user find tours and experiences which is hosted by locals to discover destination's culture.

## 2.1 AIR BNB'S USE OF GESTALT PSYCHOLOGY

Airbnb has the one the clean and simple UI in entire web and mobile app world. But no matter how different these interfaces may appear, they all have one thing in common: the clever use of Gestalt principles. This section will explore this crucial connection by examining how Airbnb tactically applies three well-known figure-ground, similarity and common region Gestalt principles within its interface. This analysis will demonstrate how the platform transforms a potentially overwhelming volume of travel data into an intuitive, harmonious, and delightful user experience that significantly reduces cognitive load and facilitates confident decision-making *(Interaction Design Foundation, n.d.).*

The first principle applied by Airbnb is figure-ground, which describes the fundamental human tendency to segment the visual field into a focused element which is the figure and its surrounding context which is the ground. Airbnb utilizes this principle in two distinct, yet equally important, ways to manage user attention.

First one is the figure represents the object or element that is the primary focus of the visual field.

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For example, the Airbnb logo itself serves as a memorable figure, which has been intentionally designed to encapsulate four distinct meanings: a location pin, human who made a house roof with their own hands, a heart signifying love/belonging, and the letter 'A' for the brand name *(Image 1)*. So that, this single, iconic element immediately captures attention and represents the brand's core values.
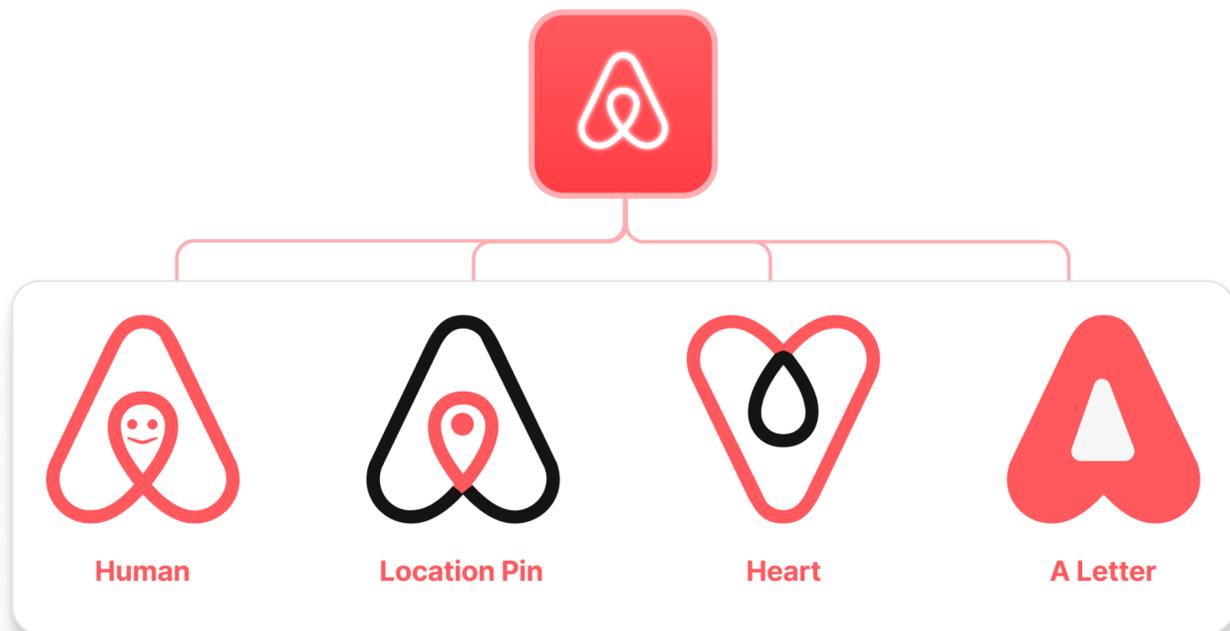


*Image 1 - Airbnb Logo(Figure)*

Furthermore, second one is the ground is the background against which the figure rests. Airbnb uses the ground dynamically to control the user's focus during key interactions. For instance, while selecting accommodations details in the search bar such as location, check in date, check out date and guests, the interface darkens the surrounding background. It means that, when the user clicks on the search field, a new menu opens for them to add or select details. At this point, the background darkens to highlight the selection menu *(Image 2)*.
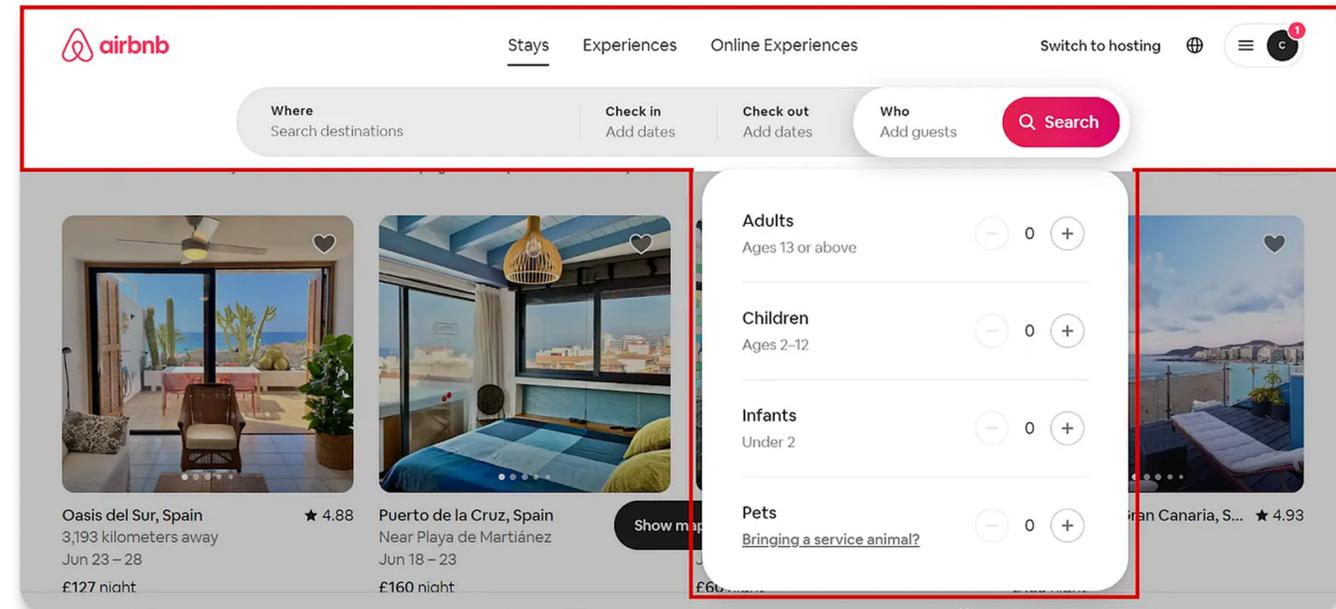


*Image 2 - Airbnb Selection Menu(Ground)*

Secondly, applied Gestalt principle is similarity, which asserts that elements that share visual attributes are automatically perceived as belonging to a unified group. This psychological law suggests that the human eye tends to group shapes, objects, or design elements that possess likeness in terms of colour, shape, orientation, texture, or size. Airbnb expertly leverages this principle, particularly in its accommodation type categorizing structures, to establish immediate cohesion and functional predictability. For example, in header navigation used the same font, colour, and consistent icon style across all the elements in the highlighted section, conveying that they all perform a similar function navigating categories. The contrast between these similar functional elements and the distinct surrounding elements further strengthens the user's ability to quickly distinguish groups and understand the interface's hierarchy *(Image 3)*.
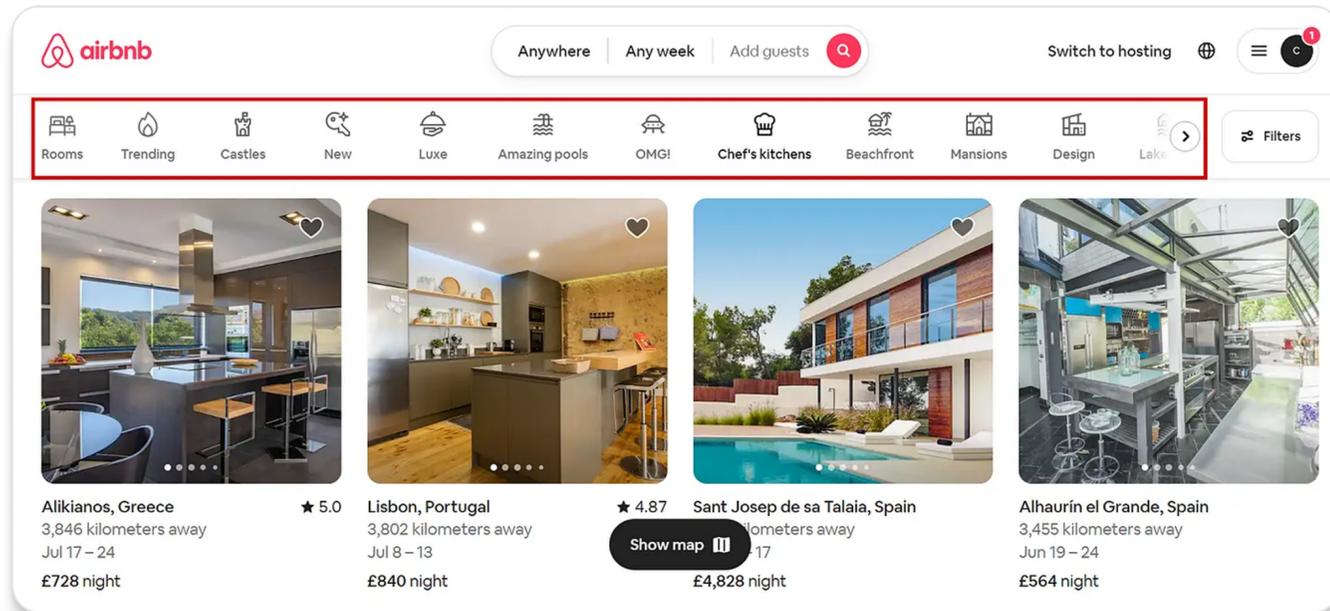
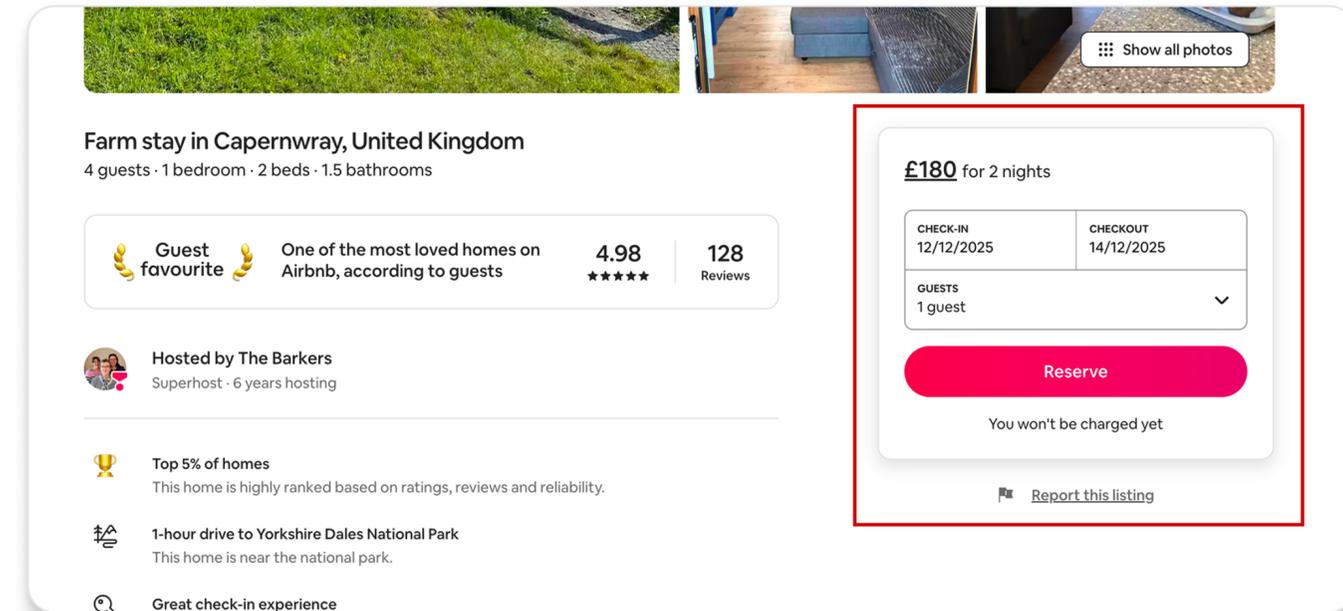*Image 3 - Airbnb Header Categoring(Similarity)*



*Image 4 - Airbnb Reservation(Common Region)*

Third one is common region. The principle of common region says that items within a boundary are perceived as a single unified group and assumed to share some common characteristic or functionality. Specifically, this principle explain how people decide whether several individual elements are part of the same group and thus, are related in some way. For instance, reservation section in Airbnb applied common region perfectly confirm dates, guest count and reserve button section. The border surrounding the Airbnb reservation form indicates that the elements within belong to a group. Moreover, the soft use of shadows with white background colour further sets this group apart from its surroundings, creating a strong sense of visual separation and immediately focusing the user's attention on the necessary actions, thus greatly reducing cognitive load at the point of decision.

## 2.2 WHY DO PEOPLE FIND AIRBNB DESIGN APPEAL?

The strong appeal of Airbnb's design is directly linked to its holistic, user-centric strategy, which was intentionally engineered to overcome the critical hurdle of establishing trust in the sharing economy. From its earliest days, the company demonstrated this commitment by investing in professional photography for listings, which immediately established visual credibility and reassured potential guests about the quality of the accommodation. Beyond mere aesthetics, Airbnb's platform is meticulously designed to foster this trust by implementing transparent review systems, detailed user profiles, and structured communication prompts, thereby normalizing the interaction between strangers. Ultimately, the design aims to deliver a

whole experience and a genuine sense of belonging, moving past transactional functionality to prioritize personalization and emotional connection through rich storytelling and unique local experiences. This comprehensive approach successfully transforms the booking platform into an intuitive, trusted travel companion.

As well as that, Airbnb's interface is carefully attention to design elements, which are deeply informed by cognitive psychology. For example, the platform excels in its intentional application of white space, which serves to reduce visual clutter and mitigate the user's cognitive load by giving the eyes restful areas and clearly separating elements. Furthermore, the use of colour is strictly controlled: a muted, natural colour palette dominates the background, ensuring that bright, high-contrast colours are reserved only for calls-to-action (CTAs) and notifications, thereby establishing a clear visual hierarchy *(Gasparyan, 2025).*

## 2.3 POSITIVES AND NEGATIVES SIDES OF AIRBNB

Since its establish, Airbnb has had both positive and negative aspects. Given its popularity and recognition, we can say that the positive aspects outweigh the negative. Now we will examine the positive aspects first, followed by the negative ones.

Firstly, the advantages of utilizing Airbnb are flexibility, passive income for house holders and less marketing is need. Hosting provides a powerful opportunity for generating passive income, allowing householders to earn money from not actively used places. Hosts maintain greater control over their property compared to traditional rentals, benefiting from a simplified operational process that minimizes the need for formal reception desks, lengthy check-in/check-out discussions, or dedicated staff. Also, house holder can earn money from not actively

using places. Lastly, hosts benefit from reduced marketing costs because the Airbnb platform itself serves as the primary advertising channel; high-rated properties are even prioritized by the platform, ensuring visibility and continuous bookings.

Nevertheless, the disadvantages sides of Airbnb are strict laws and regulations, difficult guests and more maintenance. Some cities have strict rules about renting properties for short-term stays. In addition, there is the inherent risk of accommodating difficult guests who may cause property damage or distress, adding both financial and emotional stress to the host's experience. Lastly, necessitates a substantial time commitment and increased responsibilities, requiring hosts to manage all cleaning, restocking, and maintenance tasks between guest stays *(iGMS, 2023).*

## CONCLUSION

To sum up, the success of Airbnb is business model with fundamentally combined of user psychology and design. This essay has demonstrated that by leveraging the universal principles of Gestalt Psychology, the platform transforms the potentially overwhelming task of searching for accommodation into a seamless, intuitive, and highly satisfying experience. The deliberate use of figure-ground ensures clear focus, the consistency established by similarity creates visual cohesion and predictability, and the application of common region effectively reduces the user's cognitive load by organizing complex data into understandable units. While the Airbnb hosting model presents a compelling economic opportunity through operational flexibility and passive income, it also demands significant host commitment due to legal complexities and maintenance needs. Ultimately, the appeal and dominance of the platform lie in its adherence to the principle that the best design is built for people as they truly are. By systematically aligning its interface with human perceptual laws, Airbnb has not only mastered usability but has solidified the critical link between psychological theory, design execution, and massive global market success.

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# ASSIGNMENT - 10

## SELF REFLECTION

Having been involved in design for over a year, I have become increasingly aware of the crucial role psychology plays in shaping user outcomes, learning how abstract principles directly affect user behavior and perception. I was aware of the general impact of psychology, but I realised it was even more than I had anticipated. I've also done all assignments at the time so I proud of my performance. I chose the design language in which I did my assignments and presented as modern and simple as possible.

**What most interested me was**, how psychology effect users behaviours applied an application. That the things people would do within the app without even realizing it were planned by the designers. That's insane, and it even influences my decisions while using apps as a designer. I've learnt that before starting a design, it is necessary to understand how those users think and what they expect, and then design accordingly. **I used to** believe that effective design was limited to appealing only to the visual sense, **but now I** recognize that understanding concepts like synesthesia allows me to design interfaces that subtly integrate and cross sensory boundaries, resulting in a richer, more dimensional user experience. **Two important things I have learned in the last eleven weeks are** user behaviours and psychological design methods like memory, Gestalt etc. I now understand what users think much better as a designer. This means that in future designs, I will apply everything I have learnt here. However, other thing is creating report with academic and formal language because when I design a project I need to submit a report for explaining my research. So, preparing a design report properly would be useful in future life. **A strategy that really helped me learn better is** definitely doing assignment each weeks and put stick notes on my table. Even when doing my psychology assignments, I approached it with a designer's mindset such as colour, text, white space etc. **One thing I really want to learn more about is** how to use psychology to sell premium and special features to the users in the mobile application. I really wonder user behaviour and decision making while buying premium. Also, user motivations, pain points and habits.

**Lastly**, as a designer I always aim to create simple design to provide the user with intuitive, usable and accessible experience. I am confident that applied user psychology will reinforce me achieve this goal more successfully.