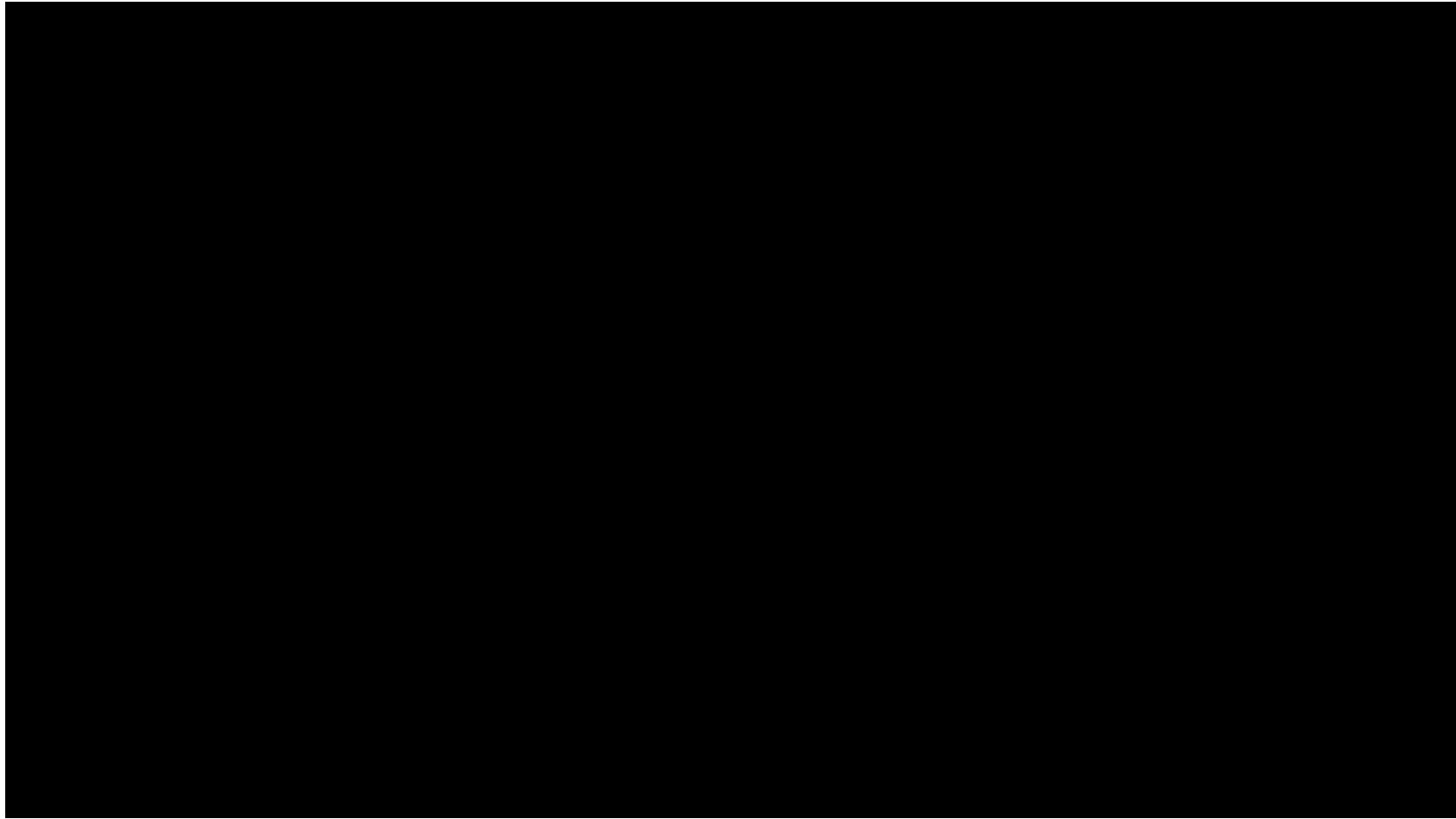

Mankato Computer Technology University

There is an app for that





App explanation

An app is just software.

Originally software that you installed on a computer as a program was labelled as an application - or the shortened name of app.

However, the common usage of "app" versus "application" now generally refers to the distribution through app stores where the download and installation happen with a single action.

While you were always able to download software, this method of distribution is a new development.

Apple's App Store and Google's Android Market are two examples of popular app stores.

The downside of apps installed this way is the app store all have the ability to remove or discontinue the use of the software remotely.

The user has no option and must just suffer the loss of data.

Exploring the World of Mobile Applications

*Understanding the impact and growth of
mobile apps*



What is an App?

- an application, especially as downloaded by a user to a mobile device.
- "I've just installed the app on my phone"
- The word **app** is a noun, and it's short for "**application.**" ...
- For most of us, it's sufficient to think of an **app** this way: an **app** is a software **program** that you use online or on mobile devices.
- **Apps** often have a specific narrow use, such as a "shopping **app**" for your smartphone.
- But that's not always the case...

What does App mean?

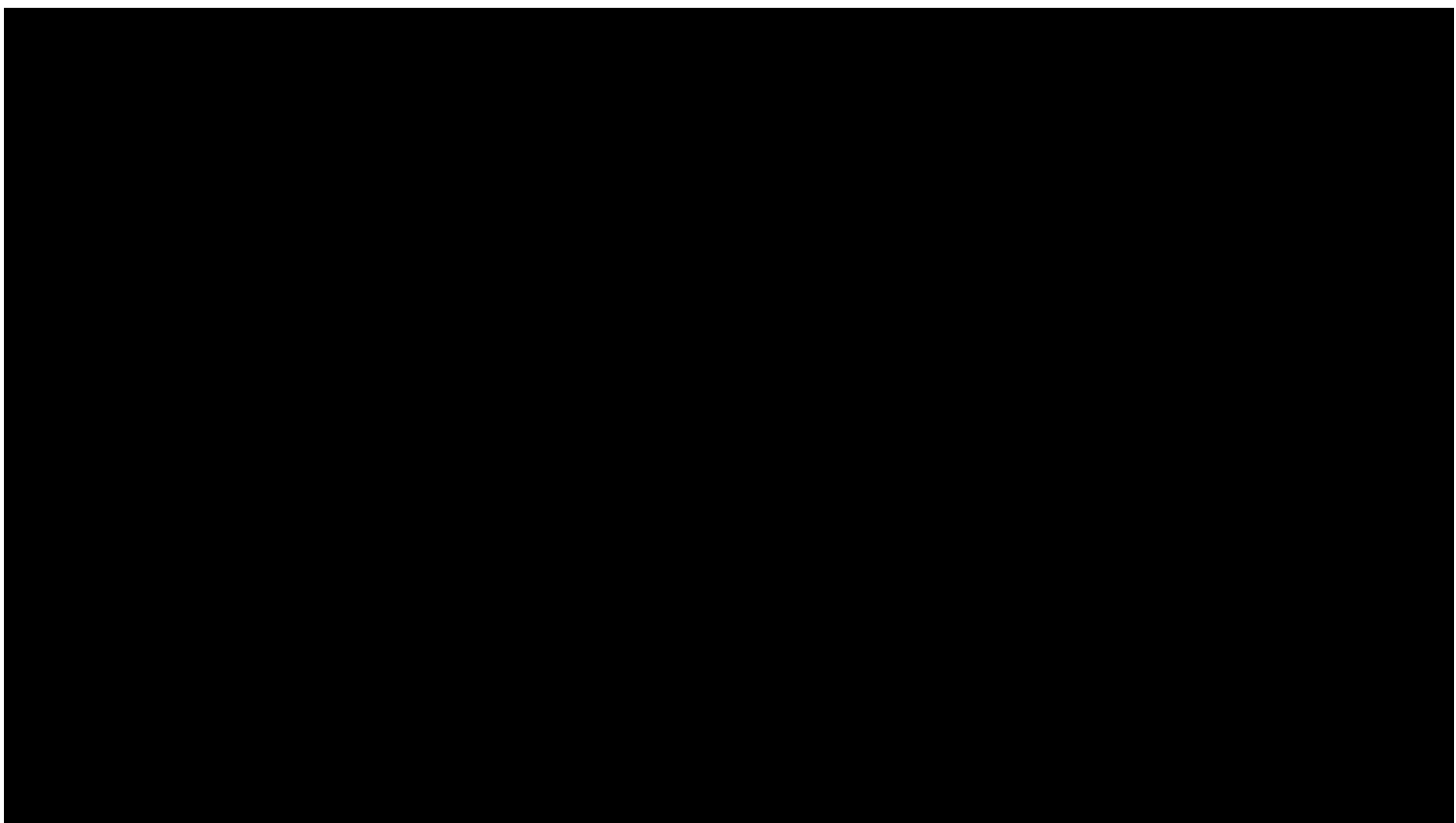
- An app is computer software, or a program, most commonly a small, specific one used for mobile devices.
- The term app originally referred to any mobile or desktop application, but as more app stores have emerged to sell mobile apps to smartphone and tablet users, the term has evolved to refer to small programs that can be downloaded and installed all at once.
- There are thousands of apps designed to run on today's smartphones and tablets.
- Some apps can be downloaded for free, while others must be purchased from an app store

Overview

- Most mobile devices are sold with several apps bundled as pre-installed software, such as a [web browser](#), [email client](#), [calendar](#), mapping program, and an app for [buying music](#), other media, or more apps.
- Some pre-installed apps can be removed by an ordinary uninstall process, thus leaving more storage space for desired ones.
- Where the software does not allow this, some devices can be [rooted](#) to eliminate the undesired apps.
- Apps that are not preinstalled are usually available through distribution platforms called [app stores](#).
- They began appearing in 2008 and are typically operated by the owner of the [mobile operating system](#), such as the Apple [App Store](#), [Google Play](#), [Windows Phone Store](#), and [BlackBerry App World](#).

Overview

- However, there are independent app stores, such as [Cydia](#), [GetJar](#) and [F-Droid](#).
- Some apps are free, while others must be bought.
- Usually, they are downloaded from the platform to a target device, but sometimes they can be downloaded to [laptops](#) or [desktop computers](#).
- For apps with a price, generally a percentage, 20-30%, goes to the distribution provider (such as [iTunes](#)), and the rest goes to the producer of the app.
- The same app can, therefore, cost a different price depending on the mobile platform.
- Apps can also be installed manually, for example by running an [Android application package](#) on Android devices.



Overview continued

- Mobile apps were originally offered for general productivity and information retrieval, including email, [calendar](#), contacts, the stock market and weather information.
- However, public demand and the availability of developer tools drove rapid expansion into other categories, such as those handled by desktop [application software](#) packages.
- As with other software, the explosion in number and variety of apps made discovery a challenge, which in turn led to the creation of a wide range of review, recommendation, and curation sources, including blogs, magazines, and dedicated online app-discovery services.

Types of Apps

- There are three main types of apps: desktop, mobile, and web.
- Desktop apps are usually much fuller than mobile apps and consist of all the features of a program, whereas the mobile equivalent is a simpler and easier-to-use version.
- This makes sense when you consider that most desktop and web apps are built to be used with a [mouse](#) and [keyboard](#) along with a large display, but [mobile apps](#) are intended to be accessed with a finger or stylus on a small screen.

Overview

- In 2014 government regulatory agencies began trying to regulate and curate apps, particularly medical apps.
- Some companies offer apps as an alternative method to deliver [content](#) with certain advantages over an official [website](#).
- Usage of mobile apps has become increasingly prevalent across mobile phone users.

Types of Apps

- Web apps might be full of features too, but they have to leverage the capabilities of the internet connection and web browser program, so while some are heavy duty and can perform well like mobile or desktop programs, most web apps are lightweight for a reason.
- If an app is a mix between a web app and desktop app, it might be called a hybrid app. These are apps that have an offline desktop interface and direct access to hardware and other connected devices, but also an always-on connection to the internet for quick updates and access to internet resources.

Mobile App

- A **mobile app** or **mobile application** is a [computer program](#) designed to run on a [mobile device](#) such as a [phone/tablet](#) or [watch](#).
- Mobile applications often stand in contrast to [desktop applications](#) which run on [desktop computers](#), and with [web applications](#) which run in [mobile web browsers](#) rather than directly on the mobile device.
- In 2009, technology columnist [David Pogue](#) said that newer smartphones could be nicknamed "app phones" to distinguish them from earlier less-sophisticated smartphones.
- The term "app", which is short for "software application", has since become very popular; in 2010, it was listed as "[Word of the Year](#)" by the [American Dialect Society](#).^[2]

Microsoft Store Top Free Apps

-
- WhatsApp
 - Discord
 - Windows Scan
 - Itunes
 - Icloud
 - Spotify
 - Netflix
 - Zoom
 - Chat GPT
 - Microsoft Teams

Microsoft

“essential apps”

-
- Threads an Instagram ask
 - BreeZip Extractor
 - Animotica Movie Maker
 - SketchablePlus
 - Hot Spot Shield
 - Adobe Lightroom
 - Adobe Express
 - Norton Security Protection
 - Instagram

Microsoft Top Paid Apps

-
- HEVC Video Extensions
 - Adobe Photoshop
 - Norton360
 - Adobe Lightroom
 - Express VPN
 - 1Password Password Manager
 - CrosshairX
 - Clip Studio Paint and Draw
 - Sketchbook Pro
 - Movie Maker Video Editor Pro

iPhone Essentials

-
- My Fitness Pal
 - NikeRun Coach
 - Amazon Shopping
 - Zoom Workplace
 - Chat GPT

Apple Must Have Apps

-
- Tik Tok
 - Tinder
 - Duolingo

Incredible Iphone Apps

-
- All Trails Hike Bike and Run
 - Adobe Photoshop editor
 - Cap Cut Video Editor

Top Free Iphone Apps

-
- Chat GPT
 - Threads
 - Google

What is the difference between an app and a website?

- Both **apps** and mobile **websites** are accessed on handheld devices such as smartphones (e.g. iPhone, Android and Blackberry) and tablets. ...
- **Apps** are actual applications that are downloaded and installed on your mobile device, rather than being rendered within a browser.



Agenda Items

- The Rise of Mobile Applications
- Categories and Types of Mobile Apps
- From Everyday Challenges to App Solutions
- App Development: From Idea to Download
- The Future of Mobile Apps

The Rise of Mobile Applications

The Smartphone Revolution and App Ecosystems

Smartphone Launch Impact

The introduction of smartphones revolutionized mobile technology and user interaction worldwide.

App Ecosystem Development

App platforms created vast ecosystems enabling developers to innovate and expand functionalities.

User Functionality Expansion

App ecosystems provide users with diverse functionalities, enhancing daily productivity and entertainment.



Key Milestones in App Development

Launch of App Stores

App stores revolutionized software distribution, making mobile apps easily accessible to global users.

Native and Hybrid Frameworks

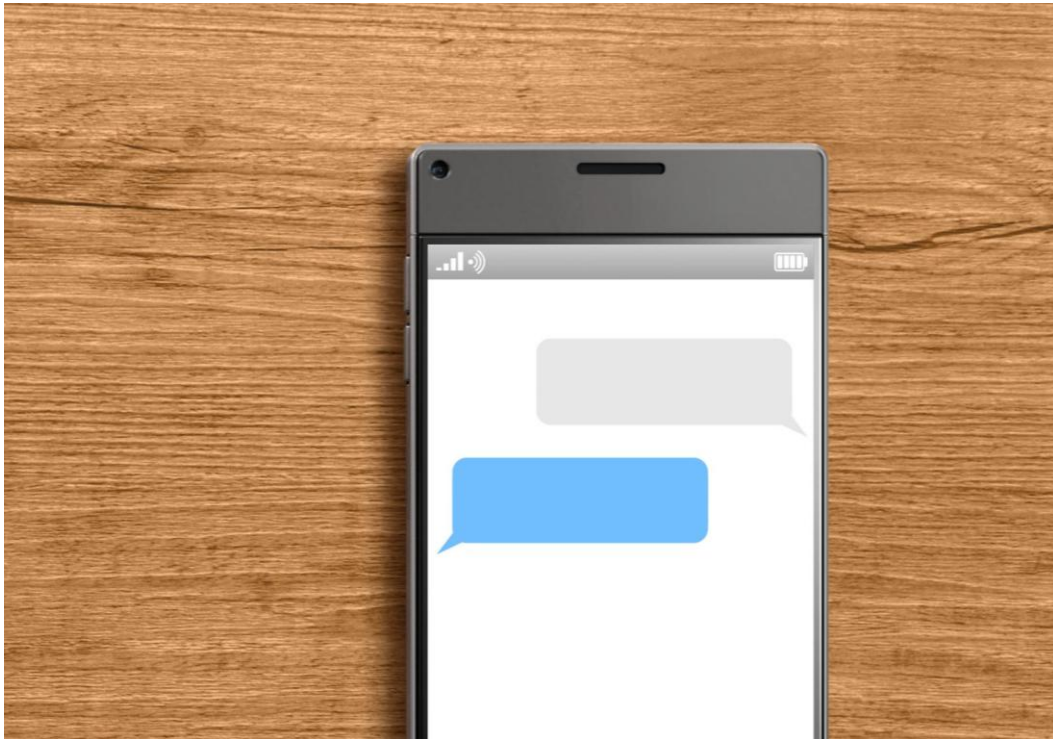
Native and hybrid frameworks enabled efficient and versatile app development across platforms.

Rise of Cloud Services

Cloud-based services enhanced app functionality and scalability, supporting rapid growth.



How Apps Changed Daily Life



Communication Transformation

Apps revolutionized communication by enabling instant messaging and video calls globally.

Entertainment Evolution

Entertainment apps provide streaming, gaming, and social media experiences anytime and anywhere.

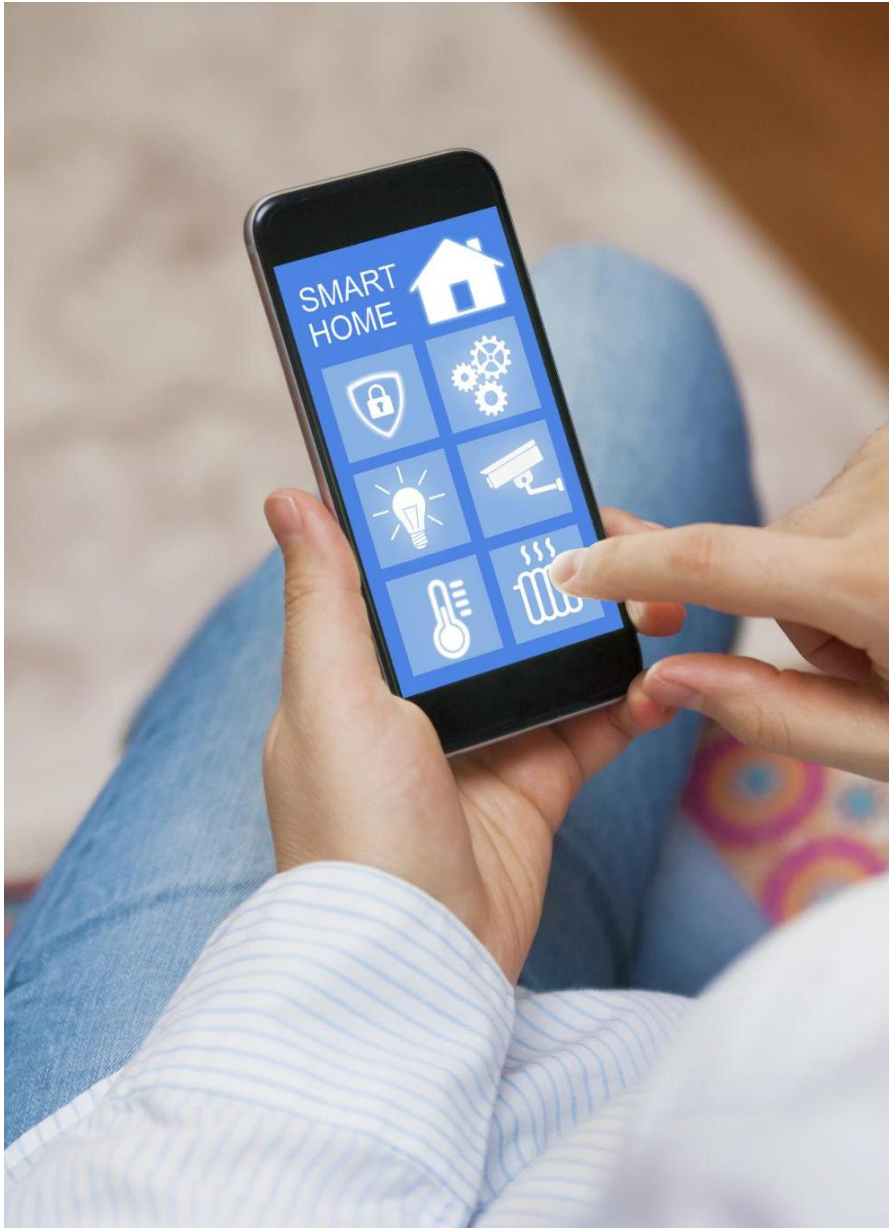
Work and Productivity

Work apps facilitate mobile banking, remote collaboration, and productivity on the go.

Health and Fitness Tracking

Health apps enable fitness tracking and wellness management, promoting healthier lifestyles.

Categories and Types of Mobile Apps



Popular App Categories: Productivity, Entertainment, Health, and More

Productivity Apps

Productivity apps assist users in managing tasks, schedules, and improving efficiency.

Entertainment Apps

Entertainment apps provide games, video streaming, and music for user enjoyment.

Health Apps

Health apps track physical activities and monitor mental well-being of users.



Specialized and Niche Applications

Community-Specific Apps

Niche applications serve specific communities, providing tailored features to meet unique needs and interests.

Hobbyist Tools

Apps designed for hobbyists help users engage deeply with their interests through specialized tools and resources.

Industry-Specific Software

Professionally tailored apps support industries with specialized functions enhancing workflow and productivity.

Emerging Trends in App Functionality

Augmented Reality Integration

Augmented reality enhances app interactivity by overlaying digital content on the real world, improving user experience.

Voice-Activated Controls

Voice commands allow hands-free control of apps, increasing accessibility and ease of use.

IoT Device Integration

Apps integrate with Internet of Things devices to extend functionality across multiple connected platforms.



From Everyday Challenges to App Solutions

Task Management and Productivity Tools

Calendars for Scheduling

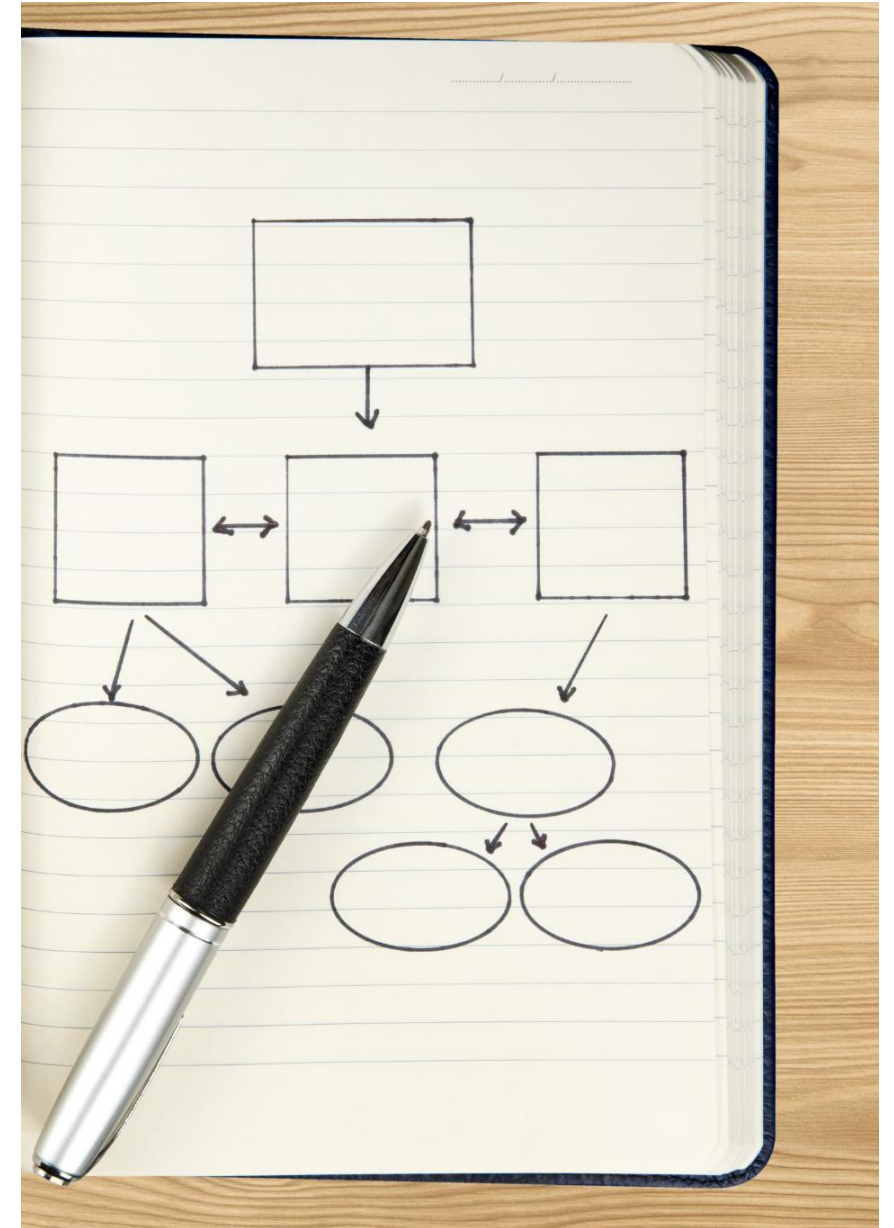
Digital calendars enable efficient scheduling and time management for individuals and teams.

To-Do Lists for Organization

To-do list apps help users prioritize tasks and track progress for better productivity.

Collaboration Platforms

Collaboration tools facilitate team communication and streamline project management.



Apps for Health, Fitness, and Well-Being

Physical Activity Tracking

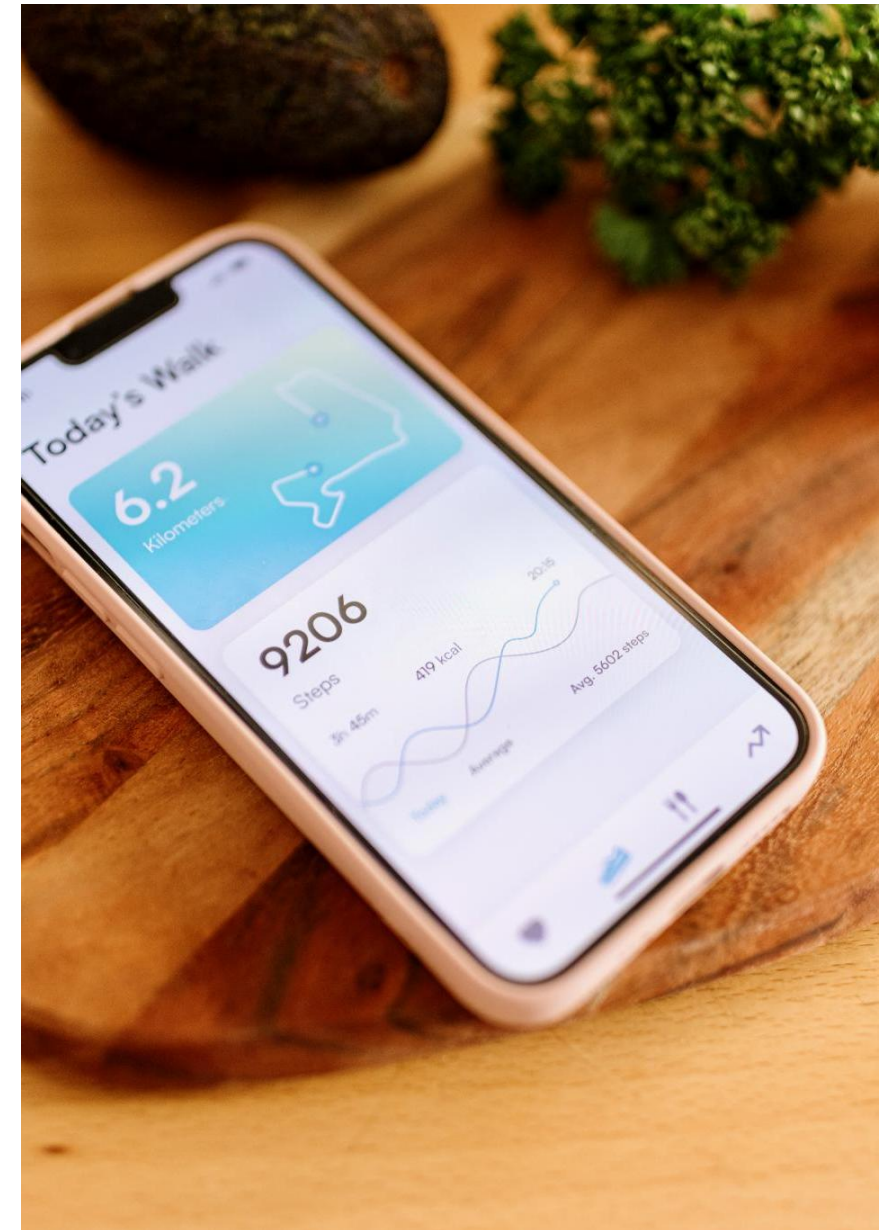
Health apps track users' physical activity, encouraging regular exercise to improve fitness and overall well-being.

Nutrition Monitoring

Apps help users monitor their nutrition intake, promoting balanced diets and healthy eating habits.

Sleep and Mental Health

Sleep and mental health monitoring features support users in managing stress and improving sleep quality.



Social, Travel, and Lifestyle Enhancements



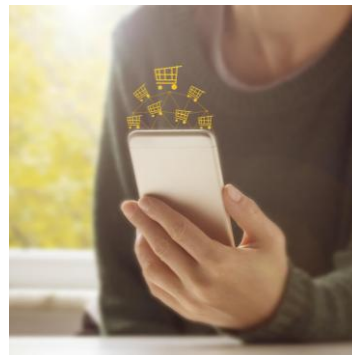
Social Networking Apps

Social networking apps connect people globally, enabling communication and sharing of experiences instantly.



Travel Apps

Travel apps facilitate exploration by providing booking, navigation, and local information services.



Lifestyle Apps

Lifestyle apps offer diverse services such as shopping, fitness tracking, and personal finance management.

App Development: From Idea to Download



How App Ideas Are Generated and Validated

Idea Generation Process

Developers brainstorm app ideas focusing on user needs, market gaps, and emerging technology trends.

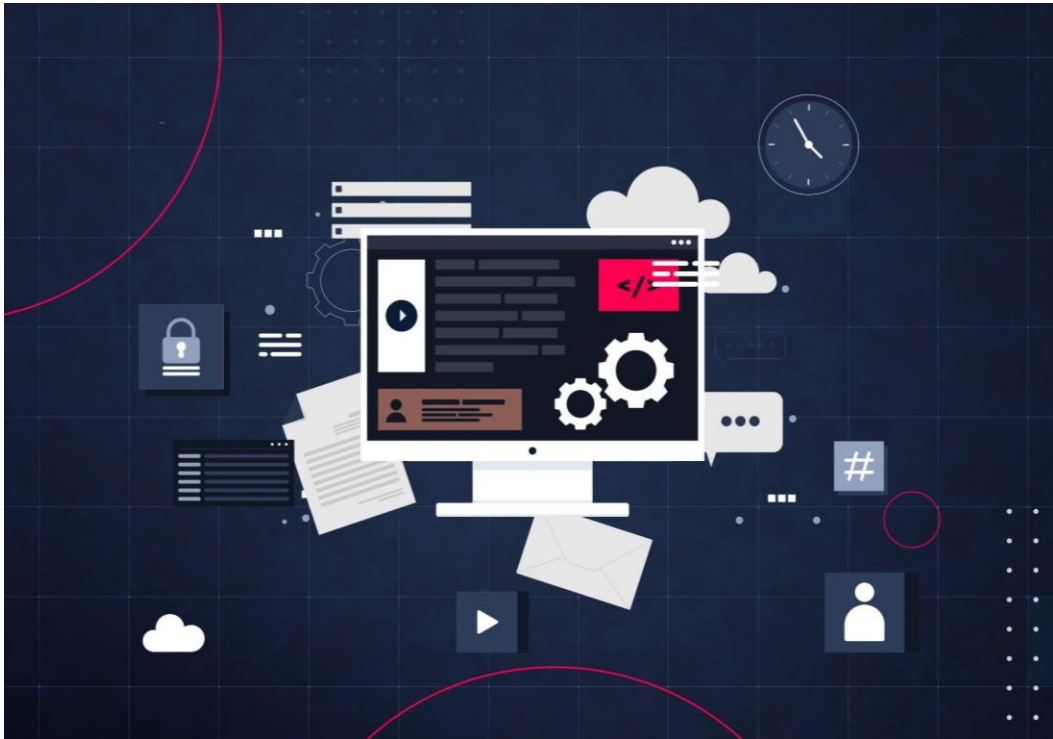
Validation Techniques

Ideas are validated through research, including market analysis and competitor review to ensure feasibility.

Prototyping and Feedback

Prototypes are created and tested with users to gather feedback for improvement before final development.

The Development and Design Process



User Interface Design

Designing intuitive user interfaces is crucial for enhancing user experience and engagement.

Coding Functionality

Developers write code to implement features and ensure the software operates as intended.

Iterative Testing

Repeated testing identifies bugs and usability issues to improve software quality.

Refinement for Quality

Continuous refinement ensures software reliability, performance, and user satisfaction.

App Stores, Marketing, and User Feedback

App Store Publishing

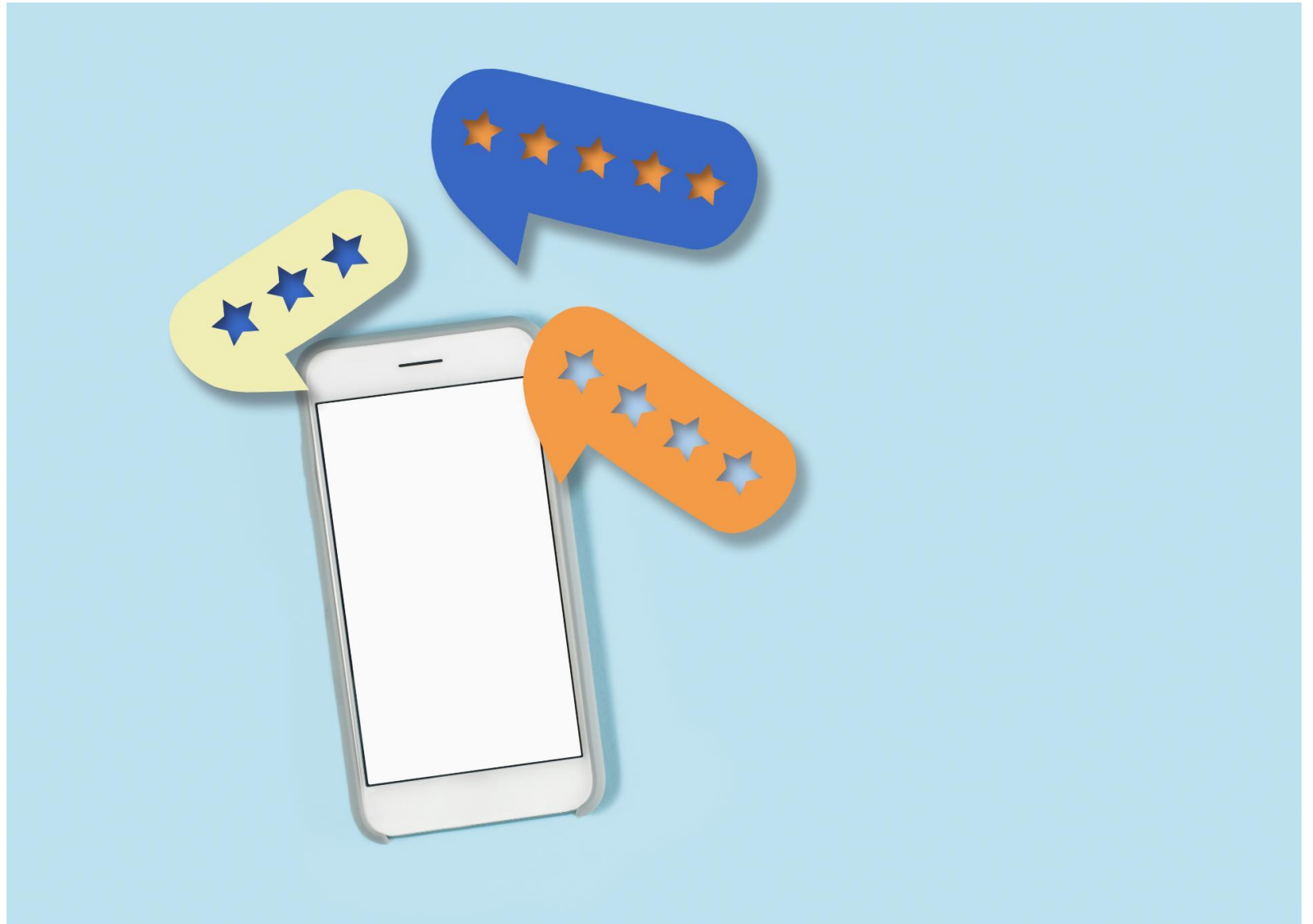
Apps are published on various app stores to reach a broad audience after development completion.

Marketing Promotion

Marketing strategies promote apps to increase visibility and user acquisition effectively.

User Feedback and Updates

Continuous user feedback leads to app updates and enhancements to better meet user expectations.



The Future of Mobile Apps

Cross-Platform and Wearable Integration

Seamless Device Connectivity

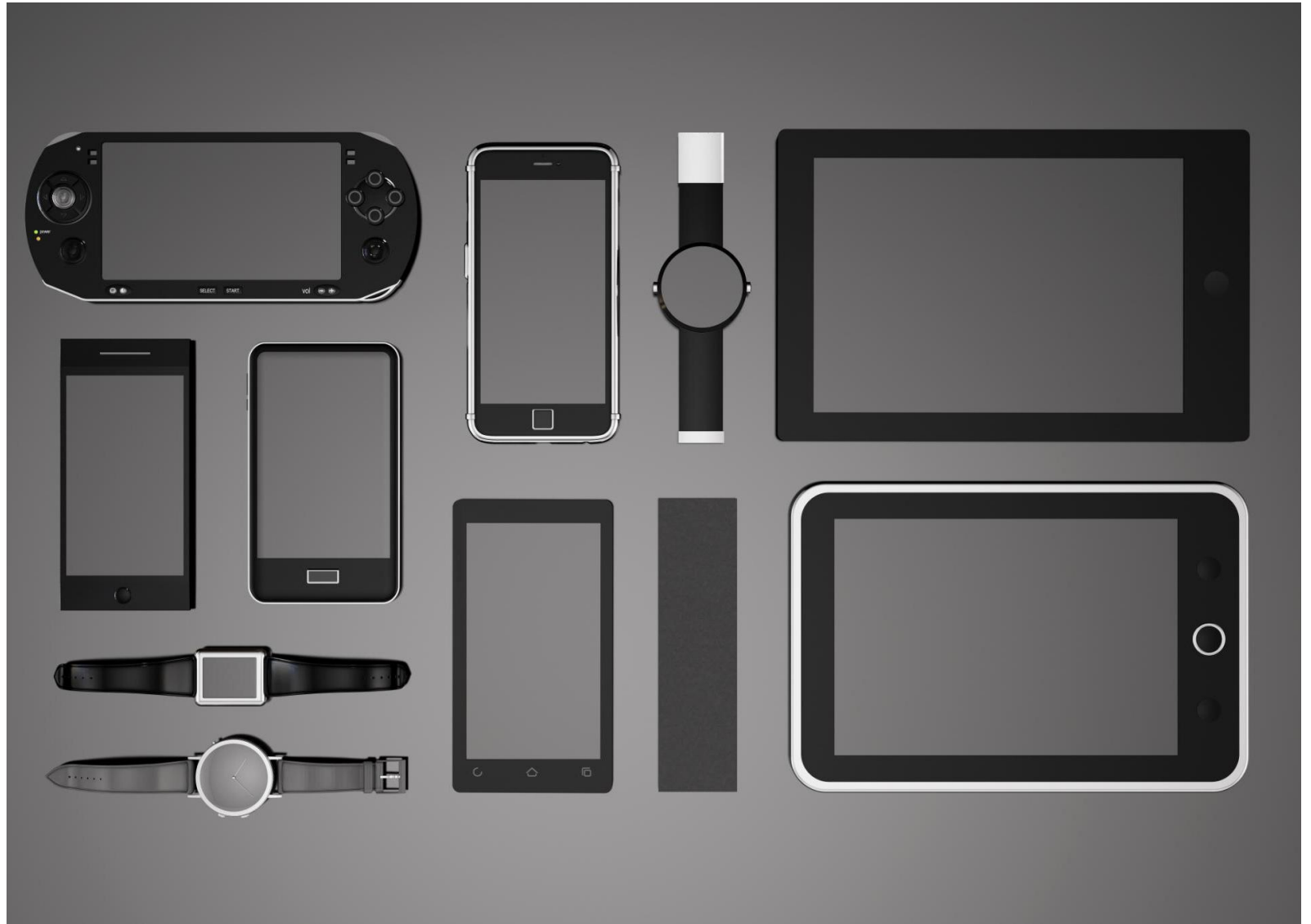
Apps now function smoothly across multiple devices, ensuring consistent user experiences.

Wearable Technology Integration

Integration with wearables enhances accessibility and real-time data usage for users.

Enhanced User Experience

Cross-platform design creates cohesive and intuitive interactions for users.



Privacy, Security, and Ethical Considerations

User Privacy Importance

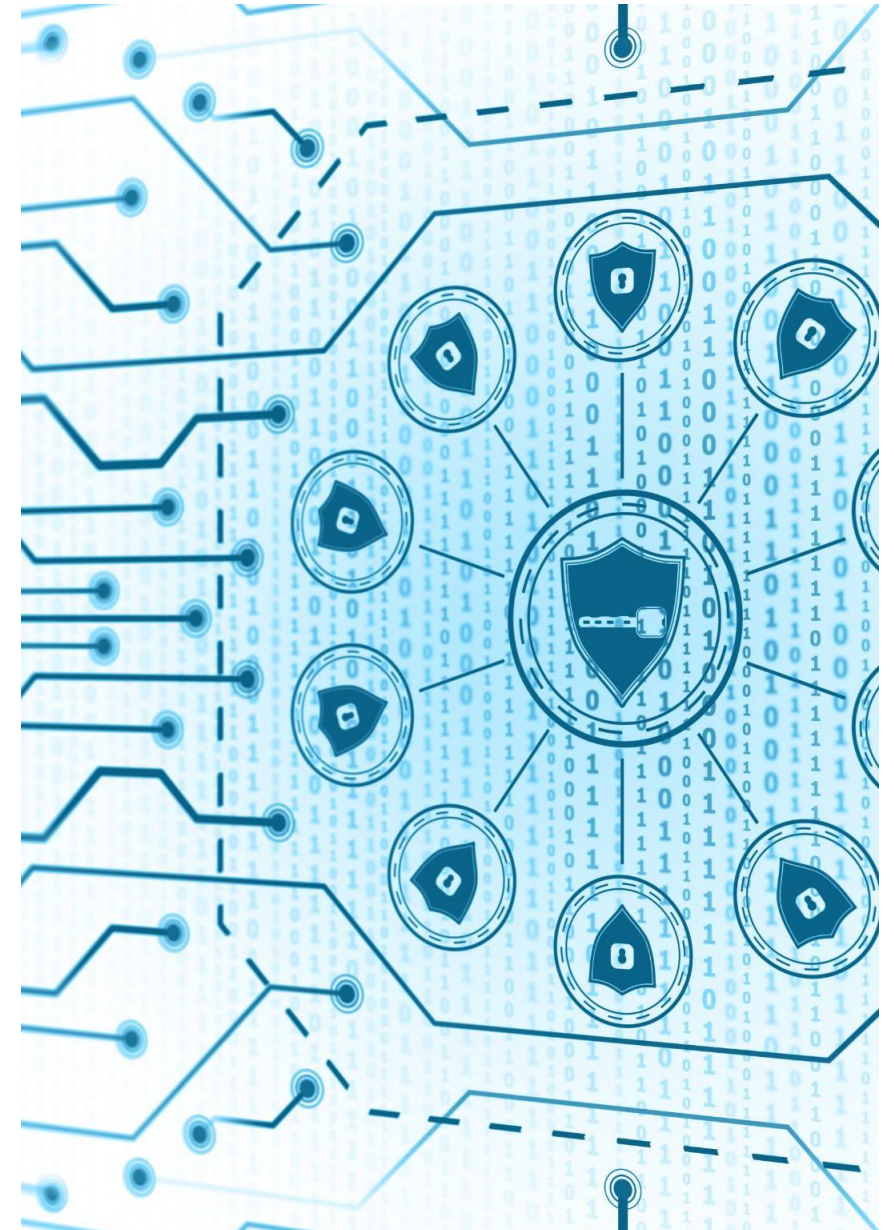
Prioritizing user privacy is essential for maintaining trust and safeguarding personal data in modern apps.

Security Measures

Implementing robust security measures protects data from breaches and unauthorized access.

Ethical Data Use

Addressing ethical considerations ensures responsible data usage and compliance with regulations.



There's an app for that

- Everyone makes the joke, but it's true. Here's a selection of interesting apps and the inspiration behind them.
- https://www.ted.com/playlists/629/there_s_an_app_for_that
- Get your next eye exam
- Happy Maps
- An app that knows how you feel from the look on your face
- Every piece of art you've ever wanted to see
- The awful logic of land mines and how to avoid them
- Make it fun to pick up litter

Conclusion

Impact on Modern Life

Mobile applications have transformed daily living by enhancing convenience and connectivity worldwide.

Innovation and Accessibility

Apps drive innovation by offering accessible solutions that cater to diverse user needs and environments.

Future Possibilities

Understanding app evolution helps anticipate emerging trends and new technological advancements.