MOBILE APPLICATION DEVELOPMENT

CLO 1

QUESTION 1:

Define positive impacts of mobile apps on an organization.

ANSWER:

Here are some of the key positive impacts of mobile apps on an organization:

1. Improved Customer Engagement:

- ❖ Mobile apps provide a direct channel for organizations to engage with their customers.
- Apps enable personalized content and notifications, fostering stronger customer relationships.

2. Enhanced Accessibility:

- ❖ Mobile apps are accessible 24/7, allowing customers to interact with an organization at their convenience.
- * This accessibility can lead to increased sales and improved customer satisfaction.

3. Increased Sales and Revenue:

- ❖ Mobile apps can facilitate mobile commerce (m-commerce) and in-app purchases, leading to higher sales and revenue streams.
- Push notifications and promotions within apps can drive sales and customer loyalty.

4. Streamlined Processes:

- ❖ Mobile apps can optimize internal processes, improving operational efficiency.
- * Employees can access data, manage tasks, and communicate more effectively, resulting in time and cost savings.

5. Data Collection and Analysis:

- Mobile apps can collect valuable user data, enabling organizations to better understand customer behavior.
- This data can be used for market research, customer segmentation, and targeted marketing campaigns.

6. Brand Visibility:

- ❖ Having a mobile app can enhance an organization's brand presence.
- ❖ A well-designed and functional app can make a strong impression on users and contribute to a positive brand image.

7. Competitive Advantage:

- ❖ In many industries, having a mobile app is now a standard expectation.
- An organization with a user-friendly app can gain a competitive edge by meeting customer demands.

8. Customer Loyalty:

- Mobile apps can include loyalty programs, reward systems, and exclusive content, encouraging repeat business.
- Providing value through an app can enhance customer loyalty.

9. Cost Savings:

- Over time, mobile apps can reduce operational costs, as they can replace traditional methods of communication and customer service.
- ❖ Automating processes can lead to efficiency gains and reduced administrative overhead.

10.Real-time Communication:

- ❖ Mobile apps enable real-time communication with customers, employees, and stakeholders.
- Organizations can respond to inquiries, provide updates, and address issues promptly.

11. Remote Work and Collaboration:

- ❖ In recent years, mobile apps have played a crucial role in enabling remote work and collaboration.
- Organizations can maintain productivity and team collaboration even when employees are not physically present.

12. Feedback and Improvement:

❖ Mobile apps can be used to gather feedback from users, which can help organizations make improvements and tailor their services to user needs.

13. Global Reach:

Mobile apps can be accessed by users worldwide, allowing organizations to expand their reach beyond geographic boundaries.

QUESTION 2:

What are the negative impacts of mobile apps.

ANSWER:

Some of the potential negative impacts of mobile apps include:

1. Privacy Concerns:

- Mobile apps often require access to various permissions, including location, camera, and contacts. This raises concerns about user privacy.
- Some apps may collect and misuse user data without proper consent, leading to privacy breaches and data leaks.

2. Security Vulnerabilities:

- Mobile apps can be vulnerable to hacking and malware attacks, leading to data theft, fraud, and other security issues.
- Users may download apps that contain malicious code or are susceptible to exploitation.

3. Addiction and Distraction:

- Mobile apps, particularly social media and gaming apps, can be addictive and lead to excessive screen time.
- This addiction can affect productivity, mental health, and relationships.

4. Physical Health Concerns:

❖ Excessive use of mobile apps, especially on small screens, can lead to physical health issues such as eye strain, text neck, and disrupted sleep patterns.

5. Mental Health Impact:

- * Cyberbullying, social comparison, and negative content on social media apps can negatively impact mental health.
- Constant notifications and the fear of missing out (FOMO) can lead to stress and anxiety.

6. Decline in Face-to-Face Communication:

• Overreliance on mobile messaging apps can lead to a decline in face-to-face communication and interpersonal skills.

7. Economic Costs:

In-app purchases and microtransactions in mobile games can lead to unexpected and excessive spending, causing financial strain for users.

8. Disruption of Work-Life Balance:

Mobile apps that facilitate remote work can blur the boundaries between work and personal life, making it difficult for employees to disconnect.

QUESTION 3:

What is a native app?

ANSWER:

A native application is a software program developers build for use on a particular platform or device.

The term native app refers to platforms such as Mac and PC, with examples such as the Photos, Mail or Contacts applications that are preinstalled and configured on every Apple computer. However, in the context of mobile web apps, the term native app means any application written to work on a specific device platform.

QUESTION 4:

Define hybrid apps.

ANSWER:

A hybrid app is one that can be downloaded and installed on multiple mobile platforms like Android and iOS. It's built in a way that allows developers to use the same code for all operating systems.

QUESTION 5:

Define swift programming language.

ANSWER:

Swift is a powerful and intuitive programming language for all Apple platforms. It's easy to get started using Swift, with a concise-yet-expressive syntax and modern features you'll love. Swift code is safe by design and produces software that runs lightning fast.

QUESTION 6:

Define flutter framework.

ANSWER:

Flutter is an open-source framework developed and supported by Google. Frontend and full-stack developers use Flutter to build an application's user interface (UI) for multiple platforms with a single codebase.

QUESTION 7:

Define Xamarin framework.

ANSWER:

Xamarin is a tool that helps in building native applications using .NET code for Android, iOS, and macOS platforms. Xamarin provides development environments and designs to help us build mobile applications on PC or Mac.

QUESTION 8:

What is react native framework?

ANSWER:

React Native is a JavaScript framework for writing real, natively rendering mobile applications for iOS and Android. It's based on React, Facebook's JavaScript library for building user interfaces, but instead of targeting the browser, it targets mobile platforms. In other words: web developers can now write mobile applications that look and feel truly "native," all from the comfort of a JavaScript library that we already know and love. Plus, because most of the code you write can be shared between platforms, React Native makes it easy to simultaneously develop for both Android and iOS.

QUESTION 9:

Discuss four benefits of react-native framework: (a) Live tracking, (b) Third-party plugins, (c) Shorter time to market, (d) Modular architecture.

ANSWER:

