

File Types

Textbook

File Types



Digital information is stored in **file formats**, each with unique characteristics. Selecting the best format means understanding the trade-offs between size, quality, and accessibility. Often, you can't maximize all three. For instance, high quality usually means a larger file, and smaller files might compromise quality. A **.JPG** offers good quality and smaller size for photos, while a **.PNG** supports transparency and lossless quality but results in larger files.

Selecting and Using the Correct File Type for Specific Tasks

Understanding these trade-offs helps you choose the right file type.

Document Files

For editable documents, **.DOCX** or **.ODT** are best for rich formatting and compatibility. For unchangeable, consistent documents, **.PDF** is ideal. For plain text, **.TXT** is smallest and universally accessible.

Image Files

For photos, **.JPG** balances quality and size. For images with transparency or sharp lines, **.PNG** is preferred for its lossless quality. For scalable graphics like logos, **.SVG** maintains sharpness at any size.

Audio and Video Files

For general audio, **.MP3** is widely compatible and compressed. For high-quality audio, **.WAV** or **.FLAC** preserve original quality but are larger. For video streaming, **.MP4** offers good quality and efficient compression. For high-quality video editing, **.MOV** or uncompressed formats preserve more data but are very large.

Other Common File Types

For tabular data, `.XLSX` offers features, while `.CSV` is plain text and highly compatible. For presentations, `.PPTX` or `.ODP` support rich media. The key is to consider the file's purpose and audience to guide your choice.

This document has provided you with an understanding of file formats and the critical trade-offs in selecting them, helping you make informed decisions for effective digital work.

Critical Thinking Questions

Here are 3 critical thinking questions for the "File Types" textbook section:

1. Imagine you're creating a school website that needs to display a lot of high-quality photos. If you prioritize making the website load very quickly for users with slower internet connections, what type of image file would you likely choose, and what might be the trade-off you accept?
2. Your teacher asks you to submit a research paper that should look exactly the same on everyone's computer and should not be easily edited. If you were deciding between a `.DOCX` and a `.PDF` file, which one would you choose and why, based on the characteristics of each file type?
3. You're designing a new logo for your school's robotics club. Why would selecting a file type that maintains sharpness at any size be particularly important for a logo, rather than a file type commonly used for photographs? What problem would it prevent when the logo is used in different places?

Questions (5)

1. A student needs to submit a research paper to their teacher. The teacher emphasizes that the document must look identical on any computer and should not be easily changed by others. Which file type from the passage would be the best choice for this task?

MULTIPLE CHOICE

Choose the correct answer:

- A. `.DOCX`
- B. `.TXT`
- C. `.PDF`
- D. `.ODT`

2. You are creating a school website that needs to display a lot of high-quality photos. If your main goal is to make the website load very quickly for users with slower internet connections, which image file type would you likely choose?

MULTIPLE CHOICE

Choose the correct answer:

- A. `.PNG`
- B. `.JPG`
- C. `.SVG`
- D. Uncompressed image format

3. A graphic designer is creating a new logo for a local business. This logo will be used on everything from small business cards to large billboards. Which image file type would be the most suitable to ensure the logo maintains sharpness at any size?

MULTIPLE CHOICE

Choose the correct answer:

- A. .JPG
- B. .PNG
- C. .SVG
- D. .GIF

4. You need to share a very simple shopping list with a friend via email. The list contains only text, and you want to ensure it's the smallest possible file size and universally accessible on any device. Which document file type is ideal for this purpose?

MULTIPLE CHOICE

Choose the correct answer:

- A. .DOCX
- B. .PDF
- C. .TXT
- D. .ODT

5. A web developer is creating an animation with a transparent background for a website. Which image file type should they use to support transparency and maintain lossless quality?

MULTIPLE CHOICE

Choose the correct answer:

- A. .JPG
- B. .BMP
- C. .PNG
- D. .GIF

Answer Keys & Solutions

Questions

1. A student needs to submit a research paper to their teacher. The teacher emphasizes that the document must look identical on any computer and should not be easily changed by others. Which file type from the passage would be the best choice for this task?

MULTIPLE CHOICE

Correct Answer:

- | | |
|----------|-------------|
| A. .DOCX | ✗ Incorrect |
| B. .TXT | ✗ Incorrect |
| C. .PDF | ✓ Correct |
| D. .ODT | ✗ Incorrect |

Explanation:

Consider which file type is described as unchangeable and consistent across different systems.

2. You are creating a school website that needs to display a lot of high-quality photos. If your main goal is to make the website load very quickly for users with slower internet connections, which image file type would you likely choose?

MULTIPLE CHOICE

Correct Answer:

- | | |
|------------------------------|-------------|
| A. .PNG | ✗ Incorrect |
| B. .JPG | ✓ Correct |
| C. .SVG | ✗ Incorrect |
| D. Uncompressed image format | ✗ Incorrect |

3. A graphic designer is creating a new logo for a local business. This logo will be used on everything from small business cards to large billboards. Which

image file type would be the most suitable to ensure the logo maintains sharpness at any size?

MULTIPLE CHOICE

Correct Answer:

- | | |
|---------|-------------|
| A. .JPG | ✗ Incorrect |
| B. .PNG | ✗ Incorrect |
| C. .SVG | ✓ Correct |
| D. .GIF | ✗ Incorrect |

Explanation:

Think about the file type specifically designed for scalable graphics.

4. You need to share a very simple shopping list with a friend via email. The list contains only text, and you want to ensure it's the smallest possible file size and universally accessible on any device. Which document file type is ideal for this purpose?

MULTIPLE CHOICE

Correct Answer:

- | | |
|----------|-------------|
| A. .DOCX | ✗ Incorrect |
| B. .PDF | ✗ Incorrect |
| C. .TXT | ✓ Correct |
| D. .ODT | ✗ Incorrect |

Explanation:

Recall the file type described as smallest and universally accessible for plain text.

5. A web developer is creating an animation with a transparent background for a website. Which image file type should they use to support transparency and maintain lossless quality?

MULTIPLE CHOICE

Correct Answer:

- | | |
|---------|-------------|
| A. .JPG | ✗ Incorrect |
|---------|-------------|

B. .BMP

✗ Incorrect

C. .PNG

✓ Correct

D. .GIF

✗ Incorrect

Explanation:

Think about which image file type is highlighted for transparency and lossless quality.