

# **CISC 3610 — Final Exam Practice: Scenario-Based Short Answer Questions**

**Instructions:** Answer each question in a short paragraph (about 4–6 sentences). Use details from the scenario to support your explanation. Some questions ask you to include a drawback/limitation or tradeoff—address that when requested.

## **Web Forms & User Interaction**

### **1) Checkout Form Confusion**

A checkout form uses only short hint text inside each field, and the hint disappears once the user starts typing. If the form fails, it shows a general message at the top but doesn't point to which field needs fixing.

Question: What are two usability/accessibility issues in this design? What are two improvements you would make related to clear input, feedback, and validation?

### **2) Password Rejections**

A sign-up form rejects many passwords only after the user presses Submit. The message is vague, and users keep retrying without understanding what's expected.

Question: Why does this interaction cause frustration? Describe two changes that would make expectations clearer and reduce repeated failures.

### **3) Long Survey Drop-Off**

A survey places many questions on one page and uses the same input style for almost every question. Many users stop mid-way.

Question: Give two reasons this survey is hard to complete. Then describe two redesign ideas that would likely increase completion.

### **4) Username Taken (Late Surprise)**

Users fill out an entire registration form. After clicking Submit, they learn the username is already taken.

Question: Why is this a poor interaction pattern? Describe two ways to improve the timing of this feedback. Include one drawback/limitation of giving earlier feedback.

## **5) Storing User Data Locally**

A web app stores personal progress information on the user's device so it works without an account. A classmate says this is always fine.

Question: Explain two benefits and two concerns of storing user data locally. Include one tradeoff between convenience and risk.

## **6) Input Format Conflicts**

A form asks for "Phone Number." Users enter values in different formats and the system rejects many of them.

Question: From a usability standpoint, what are two causes of this problem? What are two improvements you would make involving clearer expectations and validation feedback? Include one tradeoff of being strict versus flexible.

# **Responsive Design & Layout**

## **7) Mobile Navigation Problems**

A site looks fine on a laptop, but on a phone the header feels crowded and important links are difficult to use.

Question: What does responsive design mean in this situation? Describe two design/layout adjustments that would make the mobile experience easier.

## **8) Two Columns on Small Screens**

A page uses a two-column layout. On phones, the content becomes hard to read and requires awkward scrolling.

Question: Why does this happen? Describe two layout changes that would make the content readable across devices.

## **9) Fixed Layout Breakage**

A site design looks correct on the designer's monitor but gets cut off or cramped on smaller screens.

Question: What is the core issue with relying on fixed sizing? Describe two strategies that make layouts adapt better to different screens.

## **10) Rearranging Dashboard Cards**

A dashboard shows several info “cards.” On large screens, it should show many cards across; on smaller screens, fewer cards per row.

Question: How does grid-based layout thinking support this? Describe what a good layout would do as screen space changes. Include one tradeoff (for example, density vs readability, or speed vs detail).

## **11) Framework Discussion**

A team wants a layout framework to speed up development. Another student worries it reduces flexibility and makes designs look generic.

Question: What are two benefits and two limitations of layout frameworks? Include one tradeoff the team should consider before choosing one.

## **12) Mobile-First Planning**

A student argues there's no reason to design mobile-first because “people use computers.”

Question: Give two reasons mobile-first design is important and explain how it changes planning priorities. Include one limitation of mobile-first planning.

## **Progressive Web Apps (PWAs)**

### **13) “Make It Feel Like an App”**

A campus website is asked to feel more like a phone app and be usable in an app-like way.

Question: What defines a Progressive Web App (PWA)? Describe two behaviors/features that would support this goal, and include one limitation compared to a native app.

#### **14) Offline Use Case**

Students often use a study tool where internet access is unreliable. They want it to remain useful even without a connection.

Question: Why does offline reliability matter? At a high level, describe how a web experience can support offline use. Include one drawback/limitation of offline support.

#### **15) “Why Not Just a Website?”**

A client says they don't understand why a PWA is different from a normal website.

Question: Describe two differences users would notice between a traditional website and a PWA. Include one tradeoff of choosing a PWA.

#### **16) PWA vs Native App Decision**

A small team must choose between building native mobile apps or building a PWA due to limited resources.

Question: Compare two advantages and two tradeoffs of PWAs versus native apps.

### **Audio in Multimedia Applications**

#### **17) Audio File Too Large**

A one-hour narration takes a long time to download. The creator wants a smaller file without a major quality loss.

Question: What is the relationship between digital audio quality and file size? Describe two ways file size can be reduced and explain what is lost or risked by doing so.

#### **18) Distracting Audio in a Game**

A puzzle game uses constant audio that many players find distracting or tiring.

Question: What makes audio effective versus ineffective in interactive media? Propose two design changes that would improve the experience, and include one tradeoff (such as immersion vs control).

## **19) Narration Is Hard to Access**

Students report that educational narration is difficult to use on phones in real-world situations (noise, sound off, shared spaces).

Question: Give two reasons audio-only information can be a barrier. Propose two inclusive design improvements that keep the content accessible without audio. Include one drawback/limitation of your improvements.

## **20) Sound-Only Confirmation**

An app confirms important actions only with a sound. Some users miss it and make mistakes.

Question: Why can relying on sound alone cause problems? Propose two alternative feedback methods, and include one tradeoff (such as simplicity vs screen clutter).

## **Video Concepts**

### **21) Video Makes the Site Sluggish**

A site uses multiple autoplay videos. Some users report stuttering, laggy scrolling, and high battery use.

Question: Why can video create performance problems on some devices? Propose two strategies to reduce negative impact, and include one tradeoff of your strategies.

### **22) Resolution vs Practical Use**

A student insists all project video should be very high resolution, but load time and data use become an issue.

Question: Explain the tradeoff between resolution, file size, and usability. How would you choose an appropriate quality level for the audience/devices?

### **23) Why Motion Works**

Someone asks how video creates motion if it is made of still images.

Question: Explain frames, frame rate, and perception in a short paragraph.

## **24) Interactive Video Lesson**

A lesson requires users to watch video, pause, rewind, and answer questions during playback.

Question: Describe three challenges of using video in interactive media. Briefly explain one way to address one challenge, and include one tradeoff/limitation of your solution.

## **Animation Fundamentals**

### **25) When Animation Helps (or Hurts)**

A teacher considers using animation to explain a process that changes over time.

Question: When does animation improve understanding, and when might it distract or confuse? Include one tradeoff of adding animation (such as attention vs clarity or time vs benefit).

### **26) Two Animation Approaches**

Two students animate the same action using different approaches: one creates every moment manually, the other focuses on major moments and lets transitions happen between them.

Question: What is the difference between these approaches? Give one situation where each is the better choice, and include one tradeoff for each approach.

### **27) 2D vs 3D Choice**

A team wants an animated walkthrough of a physical space. They must choose between 2D animation and 3D animation.

Question: What is the high-level difference between 2D and 3D animation? Describe two factors that influence the decision and one tradeoff between the options.

## **Data Visualization & Visual Representation**

### **28) Chart Doesn't Match the Goal**

A student chooses a visualization that makes it hard to see change across time. Viewers find it confusing.

Question: Why is this a poor fit for the message? Recommend a different visualization type and justify your choice. Include one limitation of your recommended visual.

## **29) Misleading Visual Impression**

A chart's design makes a small change look dramatic. Viewers walk away with the wrong conclusion.

Question: Describe two ways visuals can mislead even when the data is real. Then describe two redesign choices that improve clarity and honesty. Include one tradeoff (such as detail vs simplicity).

## **30) Static vs Interactive Communication**

A campus site shows data as a single static graphic, but users want to explore specific categories and time periods.

Question: Compare static versus interactive visualization. Give two benefits of interactivity for this case and one potential drawback that designers must manage.