



Republic of Rwanda
City of Kigali



MARKING GUIDE

TRADES: SOFTWARE DEVELOPMENT

RTQF LEVEL: 3

SUBJECT: UI/UX DESIGN

1. Differentiate Wireframe from Mockup (6 marks)

- Wireframe is a low-fidelity, simple, and abstract representation of a design or layout, while a mockup is a high-fidelity, detailed, and more realistic representation of a design or layout.
- Wireframes are typically used in the early stages of the design process to establish the basic layout and structure of a design, while mockups are used later in the process to refine the design and showcase its visual details.
- Wireframes focus on the functionality and structure of a design, while mockups focus on the visual appearance and user interface.

2. What is the first step in creating user personas? (3 marks)

- The first step in creating user personas is to conduct user research, which involves gathering information about the target audience's demographics, behaviors, preferences, goals, and pain points.
- This research can be done through various methods such as surveys, interviews, usability testing, and analytics.

3. What is the difference between UI and UX? (6 marks)

- UI (User Interface) refers to the visual design and layout of a product or service, including its graphics, typography, colors, and other visual elements.
- UX (User Experience) refers to the overall experience and satisfaction that a user has when interacting with a product or service, including its ease of use, functionality, and emotional response.
- While UI focuses on the appearance and aesthetics of a design, UX focuses on the usability and user satisfaction.

4. Clicking on an artboard's name will allow you to select the entire artboard. (True or false) (3 marks)

- True.

5. Explain 3 factors to consider before choosing a research method for creating a positive user journey (9 marks)

- The type of information needed: The research method should be chosen based on the type of information needed to create a positive user journey. For example, if the goal is to understand the user's motivations and preferences, qualitative research methods such as interviews and focus groups would be more appropriate.
- The budget and timeline: The research method chosen should fit within the budget and timeline constraints of the project. For example, if there is a limited budget and short timeline, quick and affordable research methods such as online surveys may be preferred.
- The target audience: The research method should be chosen based on the characteristics of the target audience. For example, if the target audience is more comfortable with technology, online research methods may be more appropriate.

6. Which principle of UI design is being described? “Good UI can comfort users by showing progress while the system is completing a task” (3 marks)

Comfort.

7. Consider this sentence: “As a user I want to type in a new username.” It is an example of.... (3 marks)

- User story.

8. Explain how Sunny could apply the 3-clicks rule to improve the usability of the e-commerce website she is designing for a clothing store (4 marks)

- The 3-clicks rule suggests that users should be able to find what they are looking for within three clicks or less. Sunny could apply this rule by organizing the website's navigation and content in a way that makes it easy for users to find what they are looking for quickly and easily. This could involve using clear labels and categories, minimizing the number of clicks required to reach a particular page, and optimizing the website's search functionality.

9. Explain the difference between Prototype and Testing as phases of creating user persona. (6 marks)

- Prototype is the process of creating a preliminary model or mockup of a product or service to test its functionality, design, and user experience. It involves creating a simplified version of the product or service that allows designers and developers to test and refine its features

10. Explain clearly the relationship between Canvas and Layers.

Canvas is the main working area in graphic design where designers create their design.

Layers are like transparent sheets that are placed over the canvas where designers can place different design elements.

Layers help to organize and manage complex designs, and make changes more efficiently.

11. Explain 4 Responsibilities of a UX Researcher in a company.

- Conduct user research to understand user needs, behaviors, and attitudes.
- Analyze and interpret data to identify insights and opportunities for improvement.
- Collaborate with designers, developers, and stakeholders to ensure that user needs are met.
- Communicate research findings and recommendations to the team and stakeholders.
- Advocate for the user and prioritize their needs in the design process.
- Stay up-to-date with the latest research methods, trends, and best practices in UX design.

12. You are designing a website for a fashion brand. What are the 5 key principles of user experience design that you should keep in mind? (10 marks)

- **Clarity:** A clear and straightforward user interface is important in creating a good user experience. Designers should aim to make everything easy to understand, with clear labels and simple instructions. This means using a simple language and avoiding jargon that might confuse the user.

- **Consistency:** Consistency is key in creating a predictable and reliable user experience. Users should be able to anticipate what will happen next and be familiar with the layout and design elements of the interface. This includes using consistent colors, fonts, and layout across all pages of the website or application.
- **User Control:** Giving users control over their experience is important to make them feel empowered and in charge. This means providing options for customization, such as settings to adjust font size or color, or the ability to customize the layout of the interface.
- **Comfort:** Comfort in UX design means designing interfaces that are pleasant to use and make the user feel at ease. This can include using calming colors and avoiding bright or flashing animations that could be overwhelming or irritating to some users.
- **Ease of Use:** An easy-to-use interface is essential to providing a good user experience. Designers should aim to make every aspect of the interface as intuitive as possible, with clear and simple instructions, and minimal learning curve.
- **Accessibility:** Accessibility in UX design means designing interfaces that can be used by as many people as possible, regardless of their abilities or disabilities. This means designing for users with visual, auditory, motor or cognitive impairments, and providing alternative ways to access content, such as captions, alt-text for images, and keyboard shortcuts.

13. Laurine is designing a mobile game that targets the peoples ages 14-23. Discuss 5 research methods She can use to understand the preferences and motivations of those persons (10 marks

- **Surveys:** Surveys are a common research method used to collect information about user preferences, attitudes, and behaviors. Researchers can create a survey that includes questions about the target audience's gaming habits, likes and dislikes, and other relevant factors.
- **Interviews:** Interviews can provide researchers with a deeper understanding of user motivations, needs, and pain points. Conducting one-on-one interviews with members of the target audience can help researchers gather qualitative data and insights that can inform design decisions.
- **Focus Groups:** Focus groups are a type of research method that involves gathering a group of users together to discuss a product or service. Researchers can use focus groups to get feedback from a group of users on a mobile game, including their thoughts on the game's usability, design, and features.
- **User Testing:** User testing involves observing users as they use the mobile game and collecting feedback. Researchers can ask users to complete specific tasks within the game while they observe their behavior and gather data on their experience. This method can provide valuable insights into how users interact with the game.
- **Analytics:** Analyzing user data from the mobile game, such as behavior, demographics, and usage patterns can provide valuable insights into user preferences and motivations. Researchers can use analytics tools to gather quantitative data and track user behavior, which can inform design decisions and improvements to the game.
- **A/B Testing:** A/B testing involves testing two different versions of a design to determine which one performs better. Researchers can use A/B testing to test different game designs or features, such as different levels or game mechanics, and gather data on which version performs better with the target audience.

- **Card Sorting:** Card sorting is a research method that involves asking users to organize information into groups or categories. This method can be used to gather insights on how users think about and categorize game features or content. Researchers can use the results of the card sorting exercise to inform the design of the game and its interface.

14. Tabitha pays for a subscription to Netflix to stream her favorite TV series “Vagabond”. However, even though, she has used it for a long time, she still have to get advertisements periodically that annoys her.

a) Define the term End user pain point (4 marks)

b) What type of pain point experienced in the above scenario? Justify your answer (6 marks)

- a) Pain points are problems that occur at the different levels of the customer experience: interaction level, customer-journey level, or relationship level.
- b) Relationship level pain point: Relationship-level pain points can be discovered after a long period. This pain point examines users’ satisfaction or dissatisfaction with the product.

15. Naomi Gloria is designing a mobile app for a travel company.

a. Explain 4 UX research methods she would you use to understand user needs. (8 marks)

b. Choose the correct answer (2 marks)

She wants to check if people do see the company’s name easily the website. She conducts a research by asking them if they can find the name in a period of less than 5 seconds.

This type of research is ... a) Qualitative research b) Quantitative research

A. Here are four UX research methods that Naomi Gloria could use to understand user needs for her travel company mobile app:

- User interviews: Conducting one-on-one interviews with potential users can help Naomi understand their travel needs and preferences, as well as their experience with similar travel apps.
- Contextual inquiry: This research method involves observing and interviewing users in the context of their travel experiences to understand their needs, pain points, and opportunities for improvement.
- User testing: Testing a prototype of the travel app with users can provide valuable feedback on the usability and functionality of the app, as well as user satisfaction and preferences.
- Analytics: Analyzing user data from existing travel apps or websites can provide insights into user behavior, preferences, and pain points, which can inform the design and features of the new app.

b) The correct answer is b) Quantitative research.

Asking users if they can find the company's name in a period of less than 5 seconds is a quantitative research method because it involves collecting numerical data (i.e., the percentage of users who were able to find the name within the allotted time).

16. Differentiate user persona from brand persona. (5 marks)

b. What are the benefits of using user personas in the design process? Discuss 5 (10 marks)

a) User persona and brand persona are two different concepts in the context of design:

- User persona is a fictional representation of the ideal user of a product or service, based on research and data about the target audience. It includes demographic information, behavior patterns, goals, motivations, pain points, and other relevant details that help designers create a product that meets the needs and preferences of the users.
- Brand persona is a fictional representation of the personality and values of a brand. It includes attributes such as tone of voice, visual style, messaging, and brand promise, which help the brand communicate its identity and connect with its target audience.

In summary, user persona is focused on the needs and preferences of the user, while brand persona is focused on the personality and values of the brand.

b) Here are benefits of using user personas in the design process:

- User-centered design: User personas help designers focus on the needs and preferences of the target audience, rather than designing based on assumptions or personal preferences.
- Better understanding of users: User personas provide a comprehensive and detailed view of the target audience, which helps designers understand their behaviors, motivations, and pain points.
- Improved decision-making: User personas help designers make informed decisions about design features, content, and functionality, based on the needs and preferences of the target audience.
- Increased empathy: User personas help designers develop empathy for the target audience, which leads to more effective and meaningful design solutions.

- Consistency: User personas help ensure consistency across different parts of the design, such as content, layout, and functionality.
- Collaboration: User personas help designers communicate with stakeholders and team members about the needs and preferences of the target audience, which improves collaboration and alignment.
- Marketing and sales: User personas can be used to inform marketing and sales strategies, by providing insights into the preferences and behaviors of the target audience.
- Iterative design: User personas help designers iterate on the design, by providing feedback on how the design is meeting the needs and preferences of the target audience.