RESEARCH REPORT AND DESIGN PLANNING BRIEF

Web User Interface Design

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Group Project I – **20%**

Objective:

In this phase, your group will conduct in-depth research and design development for a website project based on a topic of your choice. The goal is to explore existing websites, evaluate their effectiveness, and outline your design plans. The focus will be on identifying best practices, user needs, creating preliminary designs to guide the development process, and innovative features that will inform the final website development.

As a group of three you will:

1. **Select a Topic and Research Existing Websites (Week 1)**
2. **Conduct Audience and Context Research (Week 2)**
3. **Define Project Goals and Objectives (Week 3)**
4. **Develop Preliminary Designs (Week 4)**
5. **Document Findings and Plans (Week 5)**

Submission Details:

- **Deliverables**:

  o Research Report (approximately 3,000 words):

    ▪ A comparative analysis of three websites.
    ▪ Audience personas and context analysis.
    ▪ Project goals and objectives for the website.

  o Design Plan:

    ▪ Wireframes, mood boards, a site map, and user flow diagrams as PDFs.

- **Deadline**: Week 5 (**14th of February**).

Marking Summary

Category	Weighting	Key Focus
Topic Selection and Research	20%	Evaluation of existing websites, analysis depth, comparisons.
Audience and Context Research	20%	Personas, context insights, peer feedback.
Project Goals and Objectives	20%	Clarity of purpose, actionable goals, and value proposition.
Preliminary Designs	20%	Wireframes, mood boards, site maps, creativity, and alignment.
Documentation and Presentation	20%	Organisation, integration of elements, and professionalism.

Select a Topic and Research Existing Websites

What to do?

- Choose a topic aligned with the group's interest (e.g., shopping, education, social media, booking platforms).

- Identify at least **three existing websites, but no more than five** within the chosen domain.

- Evaluate these websites using the provided principles, guided by the exemplar questions to ensure a thorough and structured analysis:

  o **Usability**: User-friendliness and ease of navigation.

    - Are menus easy to navigate, with logical categorisation and clear labels?
    - Are important actions (e.g., "Buy Now," "Sign Up") prominent and straightforward?
    - Is there visible feedback for user actions (e.g., loading indicators, success messages)?
    - Are error messages informative and user-friendly (e.g., guiding users to correct their input)?
    - Are search functionalities intuitive and effective?

  o **Responsiveness**: Determine how well the website adapts to various devices and screen sizes.

    - Does the website adjust seamlessly to various devices (e.g., mobile, tablet, desktop)?
    - Are touch targets (e.g., buttons, links) appropriately sized for mobile users?
    - Does the layout maintain clarity and readability across screen sizes?
    - Do images and videos resize properly without distortion or cropping?
    - Are navigation features (e.g., menus) optimised for smaller screens (e.g., hamburger menus)?

  o **Accessibility**: Assess the inclusiveness of the website for users with disabilities.

    - Are all images provided with descriptive alt text?
    - Can the website be navigated using only a keyboard (e.g., via the Tab key)?
    - Does the colour contrast meet accessibility standards for readability?
    - Are interactive elements accessible to assistive technologies, such as screen readers?

  o **Aesthetics**: Examine the visual design and consistency of the website.

    - Is the overall design clean, professional, and visually engaging?
    - Are colour schemes, typography, and spacing consistent across all pages?
    - Does the design align with the website's purpose or branding (e.g., playful for a gaming site, professional for a corporate site)?
    - Are images and multimedia elements of high quality and used effectively?
    - Is sufficient white space utilised to avoid visual clutter?

- **Content Quality:** Analyse the relevance and clarity of the website's content.

  - Is the content well-structured with headings and subheadings to improve readability?
  - Does the text convey information clearly, avoiding jargon or overly technical language?
  - Is the content relevant to the target audience's needs and interests?
  - Are there any spelling, grammar, or factual errors?
  - Are multimedia elements (e.g., images, videos) purposeful and complementary to the content?

- **Interactivity:** Evaluate the level of engagement provided by interactive elements.

  - Are interactive elements (e.g., forms, modals, quizzes) intuitive and functional?
  - Are transitions and animations smooth and purposeful, enhancing usability?
  - Do hover effects or visual cues provide feedback for interactive components (e.g., changing button colour)?
  - Are interactive features like forms validated effectively to guide user input?
  - Is interactive content, such as dynamic galleries or live data updates, engaging and responsive?

- **Consistency:** Assess the uniformity in design, functionality, and branding.

  - Are fonts, colours, and design elements applied consistently across all pages?
  - Do interactions (e.g., form submissions, navigation behaviours) work predictably and reliably?
  - Are branding elements (e.g., logos, taglines) displayed uniformly throughout the site?
  - Does the website maintain consistency in layout, ensuring familiarity across pages?

- Use a **comparison table** for clarity (e.g., features, pros, cons).

Examples

- For a shopping website, compare Amazon, Etsy, and eBay. Note differences in navigation, search features, and mobile responsiveness.

- For educational platforms, analyse Coursera, Khan Academy, and Udemy.

Alternatives:

- If for some reason you cannot evaluate live websites, you can provide case studies or screenshots of popular websites for analysis.

Conduct Audience and Context Research

What to Do?

- Understand the target audience's needs and challenges.

- **Create user personas:**

  o Assign each other into a potential audience type for your website (e.g., students, working professionals, hobbyists).

  o Brainstorm characteristics for your assigned audience, including:

    ▪ **Demographics**: Age, occupation, education level, etc.
    ▪ **Preferences**: Design styles, preferred features, content interests.
    ▪ **Goals**: What does the audience want to achieve on the website? For instance:

      ▪ For a shopping website: *Find products quickly and easily, compare prices, and make secure purchases.*
      ▪ For a booking platform: *Easily search and book accommodations or tickets with clear pricing details.*

    ▪ **Frustrations**: Identify common pain points, such as:

      ▪ Poor mobile usability for on-the-go users.
      ▪ Confusing navigation or lack of search functionality.

  o Example Persona:

    ▪ **Name**: Sarah, 22, University Student
    ▪ **Goals**: Find affordable study materials quickly.
    ▪ **Frustrations**: Slow-loading pages, difficult search filters, and unclear pricing.

- **Role-play as target users:**

  o Ask peers to role-play as target users and simulate interactions with existing websites or your initial prototypes.

  o Provide a **scenario** for the activity:

    ▪ *You are a young professional looking for a co-working space. Navigate the website and try to book a space for tomorrow.*

  o During the session, observe:

    ▪ The steps peers take to complete their task.
    ▪ Where they encounter difficulties or confusion.
    ▪ Any additional features they suggest for ease of use.

- *How to Document Feedback?*
  - Use a simple feedback template, such as:
    - *What worked well?*
    - *What was confusing?*
    - *What improvements would make the process easier?*

- **Assess the access environment:**

  - Questions to consider:
    - *Where is the audience likely to use the website?* Examples include:
      - **On-the-go:** A mobile user browsing a travel website while commuting.
      - **At home:** A student using an educational platform on a desktop.
    - Will users rely on touchscreens (e.g., mobile phones or tablets) or traditional input devices (e.g., mouse and keyboard)?

  - Activity:
    - Ask peers to simulate accessing the website in different environments:
      - *Navigate the website on your smartphone while walking around the room. Does the layout and design make it easy to use?*
    - Document challenges, such as difficulty reading small text, buttons being too small, or menus being hard to access.

- **Evaluate the target audience's tech proficiency:**

  - Questions to consider:
    - *Are users tech-savvy and familiar with advanced navigation (e.g., search filters, dropdown menus)?*
    - *Do they need a simplified interface with large, clear buttons and minimal options?*

  - Activity:
    - Use class peers to simulate varying levels of proficiency:
      - **Tech-savvy user:** Ask them to complete advanced tasks like applying multiple search filters or customising settings.
      - **Beginner user:** Focus on basic tasks like finding the homepage or accessing help resources.

- Example Observations:

  - **For a beginner:** The navigation bar is too cluttered, and it is unclear where to start.
  - **For an advanced user:** The search filters are functional, but more sorting options (e.g., by price or category) would improve usability.

Examples:

- **Persona-Based Insights:**

  - *"Sarah finds it difficult to compare book prices due to the lack of side-by-side comparison features. She prefers a **'Wishlist'** feature to save items for later review."*

- **Context-Based Insights:**

  - *"Mobile users found the site challenging to navigate due to small menu icons and overlapping text on smaller screens."*

  - *"Beginners needed clear labels on buttons and a prominent 'Help' section to guide them through tasks."*

- For a social media platform, personas might include a college student wanting to share content quickly and a professional needing networking opportunities.

- For a booking website, context research could involve identifying challenges like searching for accommodation on mobile devices.

Define Project Goals and Objectives

- **Identify the project's purpose:**

  - *What to do?*

    - Write a clear and concise statement outlining the purpose of your website.

    - Answer these questions:

      - *What problem does your website aim to solve, or what need does it address?*
      - *Who is the primary audience for your website?*
      - *What experience should users have when interacting with your website?*

  - Example Purposes:

    - For a shopping website: *"This website will simplify the shopping experience for users by offering intuitive navigation, clear product categorisation, and an efficient checkout process."*

    - For an educational platform: *"This platform will provide free, easy-to-access learning resources for high school students preparing for exams."*

- **Define broad goals:**

  - *What to do?*

    - Break the website's purpose into broad goals that outline key features and functionality.
    - These goals should focus on what the website will offer, not necessarily measurable outcomes.

  - Guiding prompts:

    - What core pages and content will your website include? (e.g., homepage, about page, gallery).
    - How will users interact with your website? (e.g., search, submit forms, browse content).
    - What design elements will make the website appealing and user-friendly? (e.g., consistent styling, responsive layout).

  - Examples:

    - For a hotel booking website:

      - *"Provide a user-friendly booking interface with a search feature and detailed property listings."*
      - *"Ensure the website is fully responsive, allowing seamless access on mobile and desktop."*
      - "Incorporate a visually appealing design that reflects a modern and professional brand."

- For a portfolio website:

    - *"Showcase creative work with a dynamic gallery that allows users to filter projects by category."*
    - *"Include an about page that highlights the creator's skills, experience, and contact information."*

- **Translate goals into user-focused objectives:**

    - *What to do?*

        - Create objectives that focus on how the website will serve its users.
        - Use action-oriented language (e.g., "allow users to," "help users to").

    - Guiding prompts:

        - What will users be able to do on your website?
        - How will the website address user needs or challenges identified during research?
        - What features will enhance the user's experience?

    - Examples:

        - For a travel website:

            - *"Allow users to search for destinations based on budget and interests."*
            - *"Provide clear, high-quality images and descriptions of travel packages."*

        - For a community event platform:

            - *"Enable users to RSVP to events directly through the website."*
            - *"Help users discover events near them with an interactive map feature."*

- **Draft a value proposition:**

    - *What to do?*

        - Summarise what makes your website unique and why it will matter to your audience.
        - Use this as a guiding principle for design and development decisions.

    - Example value propositions:

        - *For an educational platform: "This website will stand out by offering concise, exam-focused study materials with interactive quizzes to reinforce learning."*
        - *For a social media platform: "Our platform will focus on fostering meaningful connections by prioritising privacy and authentic content sharing."*

Develop Preliminary Designs

- **Create Low-Fidelity Wireframes**

    o Draft simple wireframes for key pages using tools like **Figma** or **Canva**.
    o Focus on the layout and placement of core elements (e.g., headers, menus, buttons, content sections).

    o **Example**: *For a shopping website, include a homepage with a product grid, a search bar, and a navigation menu.*

- **Develop Mood Boards or Style Guides**

    o Use tools like **Pinterest** or **Adobe XD** to compile visual inspirations.
    o Define colour palettes, typography, and imagery to create a consistent and visually appealing design.

    o **Example**: *For an educational platform, choose calming colours (e.g., blue, green) and simple, readable fonts (e.g., Roboto, Arial).*

- **Sketch the Site Map**

    o Outline the structure of your website, showing the relationships between pages (e.g., homepage, about page, contact page).
    o Ensure the navigation paths are logical and user-friendly.

    o **Example**: *For a social media site, the map might include paths from the homepage to the user profile, settings, and messaging pages.*

- **Plan User Flows**

    o Visualise the steps users will take to complete specific actions (e.g., making a purchase, signing up for a newsletter).
    o Highlight potential pain points or areas that require clear guidance.

    o **Example**: *For a booking site, map the user flow from searching for accommodations to completing a reservation.*

- **Seek Peer Feedback**

    o Present your designs to peers or instructors and gather feedback.
    o Revise your designs based on suggestions to ensure usability and alignment with your goals.

Grading Criteria

Topic Selection and Research on Existing Websites (20%)

Key Areas Evaluated:
- Clarity and appropriateness of the selected topic.

- Depth and breadth of analysis for each chosen website.

- Use of evaluation principles (e.g., usability, responsiveness, accessibility, aesthetics, etc.) with clear, structured insights.

Expectations:
- Comprehensive comparison of 3–5 websites, clearly highlighting strengths, weaknesses, and opportunities for improvement.

- Logical and well-documented use of evaluation questions.

Audience and Context Research (20%)

Key Areas Evaluated:
- Quality and relevance of user personas.

- Depth of context analysis (e.g., access environment, tech proficiency).

- Use of in-class peer activities and documentation of feedback.

Expectations:
- Well-defined user personas with demographics, preferences, goals, and frustrations.

- Clear insights into user context, supported by examples or peer feedback.

- Creative and structured use of role-playing or simulations to extract user insights.

Project Goals and Objectives (20%)

Key Areas Evaluated:
- Clarity and relevance of the website's purpose.

- Articulation of broad goals and user-focused objectives.

- Development of a clear and compelling value proposition.

Expectations:
- Purpose statement aligns with user needs and project scope.

- Goals and objectives are actionable, relevant, and consistent with research insights.

- Value proposition is well-defined and highlights the website's unique appeal.

Preliminary Designs (20%)

Key Areas Evaluated:

- Quality of wireframes, mood boards, site maps, and user flow diagrams.

- Alignment of designs with project goals and objectives.

- Creativity and attention to visual and functional details.

Expectations:

- Wireframes provide a clear layout for key pages.

- Mood boards and style guides reflect the intended visual identity.

- Site maps and user flows are logical, detailed, and user-friendly.

Documentation and Presentation (20%)

Key Areas Evaluated:

- Organisation, clarity, and coherence of the research report.

- Integration of all required elements (e.g., comparative analysis, personas, goals).

- Professional presentation of design artifacts (e.g., PDFs of wireframes, mood boards).

Expectations:

- Report is well-structured, clear, and within the word limit.

- All required elements are included and cohesively presented.

- Professional formatting of visuals and written content.