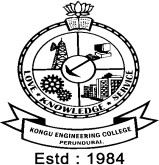
KONGU ENGINEERING COLLEGE

**(Autonomous)**

**Perundurai, Erode – 638 060.**



DEPARTMENT OF COMPUTER SCIENCE AND DESIGN LABORATORY RECORD

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **PRIYADHARSHINI K** | **SASHWATH P** | **SATHYAPRIYA M** |
| **Reg.No** | **23CDR129** | **23CDR152** | **23CDR153** |

Course Code : 22CDL32

Course Name : USER EXPERIENCE DESIGN

LABORATORY

Semester : II

Branch : B.E COMPUTER SCIENCE AND DESIGN

**KONGU ENGINEERING COLLEGE**

**(Autonomous) Perundurai, Erode – 638 060.**



**DEPARTMENT OF COMPUTER SCIENCE AND DESIGN 22CDL32- USER EXPERIENCE DESIGN**

Name 1. **PRIYADHARSHINI K** 2. **SASHWATH P** 3. **SATHYAPRIYA M**

Programme  **B.E** Branch **COMPUTER SCIENCE AND DESIGN**

Section \_**C\_** Semester **III** Register Number 1. **23CDR129** 2.

**22CDR152** 3. **22CDR153**

*Certified that this is a bonafide record of workdone by the above student of the during the year 2023– 2024.*

Submitted for the practical examination held on

**Signature of Lab in-charge Signature of the HOD Examiner-I Examiner- II**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Experime nt Date** | **Name of the Experiment** | | **Marks awarded** | | **Signature** |
| 1. |  | Perform user research to define the problem for your product or service. | |  | |  |
| 2. |  | Group customer information data for your product or service | |
| 3. |  | Conduct an interview with your customer | |
| 4. |  | Create user personas for your product or service. | |  | |  |
| 5. |  | Create user scenario/story telling for your product or service. | |
| 6. |  | Create affinity diagram for your product or service by using Sticky Notes, White Board and Fig jam. | |
| 7. |  | Create low-fidelity wireframes for your product or service by using Pen and Paper/Stenciling or Paper cutouts. | |  | |  |
| 8. |  | Create medium-fidelity wireframes for your product or service by using Figma. | |
| 9. |  | Create low-fidelity prototypes (paper prototypes) for your product or service by using pencil and paper. | |  | |  |
| 10. |  | Create medium-fidelity prototypes (digital prototypes) for your product or service by using Figma. | |
|  | Student ’s Roll Number | | **23CDR129** | **23CDR152** | **23CDR153** |  |
|  | Conduct of Experiment (40) | |  |  |  |  |
|  | Presentation and Viva-voce (20) | |  |  |  |  |
|  | Total (60) | |  |  |  |  |
|  | Continuous Assessment (15) | |  |  |  |  |
|  | Final Review (10) | |  |  |  |  |
|  | Internal Mark (25) | |  |  |  |  |

|  |  |
| --- | --- |
| **Project Team Number:** | C-11 |
| **Project Team Members:** | **S.No Roll Number Name**   1. 23CDR129 PRIYADHARSHINI K 2. 23CDR152 SASHWATH P 3. 23CDR153 SATHYAPRIYA M |
| **Project Title:** | **GARDENIA APPLICATION** |
| **Project Description:** | Gardenia is a mobile app designed to sell nursery products, providing a seamless online shopping experience for plant lovers. It features a clean, nature-inspired interface, guiding users through sign-up, browsing, and purchasing plants, flowers, and gardening essentials. Users can easily add items to their cart, enter delivery information, and make payments within the app. Gardenia also offers a profile section for tracking orders and managing personal details. Overall, it’s a convenient solution for plant enthusiasts to shop for garden items from their mobile devices. |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **01** | ***USER RESEARCH*** |
| **Date:** |  |
| **Aim:** | | |
| To perform user research regarding Gardenia app offerings through a mobile platform. | | |
| **Description:** | | |
| 1. Develop detailed personas representing different types of users (e.g., beginner gardeners, urban plant lovers, gift buyers). Understanding each persona’s goals, motivations, and challenges can inform the app’s design and feature prioritization. 2. Conduct usability tests to observe how easily users can navigate the app. This helps uncover issues in the user flow, like confusion in browsing categories or adding products to the cart, and can provide insights for improvements 3. Research users’ expectations for customer support, order tracking, and after-sales service. Users might need reassurance on order status, delivery timelines, and support in case of issues. 4. Conduct surveys and interviews post-purchase to gather feedback on overall satisfaction, likelihood of reuse, and potential improvements. Understanding what drives repeat use and loyalty can help Gardenia maintain a competitive edge. | | |
| **Tools Used:** | | |
| 1. Data Analysis tool 2. Google Forms | | |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **02** | ***GROUP CUSTOMER INFORMATION DATA*** |
| **Date:** |  |
| **Aim:** | | |
| To design a user-centered experience for the Gardenia Nursery Plant Selling App, connecting users with a variety of plants and gardening products, promoting transparency, trust, and sustainability in plant sourcing. | | |
| **Description:**   1. User data on plant preferences and gardening needs is organized into groups and prioritized based on relevance to the Gardenia Nursery product offerings. 2. Feedback from users on plant purchases, delivery, and plant care is reviewed and prioritized to highlight valuable suggestions for improving the app. 3. A competitive analysis is conducted to identify similar plant marketplaces and assess potential partnerships or strategies for improvement. 4. The competitive analysis helps identify effective strategies and avoid common challenges in delivering a sustainable and transparent plant marketplace. 5. Data on user behavior and interactions with the app is collected, tracking preferences, actions, and challenges in purchasing plants, accessories, or caring for plants. 6. This information guides the development of a user-centered platform that meets the needs of plant buyers, gardeners, and nurseries, making the app effective and   beneficial for all parties. | | |
| **Tools Used:** | | |
| 1. Sticky notes | | |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **03** | ***USER INTERVIEW*** |
| **Date:** |  |
| **Aim:** | | |
| To interview target users to gather insights on their preferences and expectations for purchasing nursery products through the Gardenia app. | | |
| **Description:** | | |
| 1. The goals of the interview were set, and suitable users were identified to provide feedback on plant offerings, gardening needs, and plant care interactions. 2. Three specific participants were chosen: a regular plant buyer, a gardening enthusiast, and a local nursery owner. 3. Interviews were scheduled at convenient times and locations for the participants, ensuring comfort and accessibility. 4. Participants answered questions comfortably, with follow-up questions to gather in-depth insights into their needs and challenges. 5. Interviews were recorded to ensure accurate capture of their feedback and suggestions. 6. Insights from the interviews informed design choices and feature development for the Gardenia Nursery app, such as product listings, plant care tips, and customer support. 7. The interviews provided valuable information on user needs, preferences, and expectations, helping to create a trusted, user-friendly marketplace for plants and gardening products. | | |
| **Tools Used:** | | |
| 1. Camera 2. Notes | | |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **04** | ***USER PERSONAS*** |
| **Date:** |  |
| **Aim:**  To create user personas for the Gardenia app, focusing on understanding customer needs and preferences for purchasing nursery products and engaging with nursery owners | | |
| **Description:** | | |
| 1. User data was collected through interviews and surveys to understand customer views purchasing plants, plant care, and connecting with nurseries. 2. Key themes and patterns were identified from the data, helping to analyze common motivations, goals, and concerns related to plant shopping and gardening. 3. A background story was crafted for each persona, representing typical motivations, shopping behaviors, and attitudes toward sustainable plant sourcing and gardening practices. 4. The initial personas were tested and refined based on insights from the data collection process, ensuring they reflect real user needs. 5. Each user persona included details on preferences, concerns, and challenges related to plant selection, care, and buying experience on the app. | | |
| **Tools Used:** | | |
| 1. Canva | | |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **05** | ***USER STORY/SCENERIO*** |
| **Date:** |  |
| **Aim:** | | |
| To create a user scenario/story for the Nature's Cart app, illustrating how users interact with the platform to purchase nursery products and connect with nursery owners | | |
| **Description:** | | |
| 1. Gather information from various sources, including user surveys and interviews, about experiences with nursery products . 2. Write each idea or insight on an individual sticky note for easy organization. 3. Arrange the sticky notes in a logical sequence to build a flow for the story. 4. Group similar notes into clusters to identify themes or categories around user needs and preferences. 5. Look for recurring themes or similar ideas and combine them to create a cohesive story. 6. Label each cluster to define different stages or aspects of the user journey on the app, making it easy to follow and understand. | | |
| **Tools Used:** | | |

|  |
| --- |
| 1. Sticky notes 2. A4 sheets |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **06** | ***AFFINITY DIAGRAM*** |
| **Date:** |  |
| **Aim:** | | |
| To create an affinity diagram for the Gardenia app to organize insights about customer needs and preferences for purchasing nursery products and connecting with nursery owners | | |
| **Description:**   1. Gather inputs from various sources, such as surveys and interviews on user preferences and expectations for the app. 2. Write each idea or insight on separate sticky notes for easy categorization. 3. Start by placing the sticky notes randomly on a whiteboard or in FigJam, without any particular order. 4. Collaboratively sort the sticky notes into clusters based on similar themes or concepts related to nursery products shopping and nursery owner interactions. 5. Identify common patterns or themes among the ideas and group them together accordingly. 6. Label each cluster to clarify the grouped idea | | |
| **Tools Used:** | | |

|  |
| --- |
| 1. Fig Jam |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **07** | ***LOW-FIDELITY WIREFRAMES(PAPER/STENCILING)*** |
| **Date:** |  |
| **Aim:** | | |
| Create low-fidelity wireframes for Gardenia nursery App by using Pen and Paper/Stenciling or Paper cutouts. | | |
| **Description:** | | |
| 1. Start by defining the main screens and features based on user needs, such as the Home Screen, Product Listings, Plant Detail Page, Cart, and Checkout. 2. Use pencil and paper or digital to sketch the main screens of the app, including the Home Screen with plant categories, login screen, and the navigation menu. 3. Concentrate on the overall structure and placement of UI elements, like plant images, buttons for "Add to Cart," "View Details," and navigation elements. Avoid getting into specific colors or styling at this stage. 4. Use basic shapes to represent UI elements: rectangles for screens, buttons, and product cards; circles for icons; and lines for text input fields, such as the search bar. 5. Label each element (e.g., “Search bar,” “Product image,” “Add to Cart button”) to indicate its purpose. This ensures the wireframe is easy to understand. 6. Use arrows or lines to show how users will move between screens (e.g., from the Home Screen to a Plant Detail Page or Cart). This helps visualize the user journey and interaction flow. | | |
|  | | |

|  |
| --- |
| **Tools Used:** |
| 1. A3 sheets 2. Pencil 3. Stencils |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **08** | ***MEDIUM-FIDELITY WIREFRAME(GRAY SCALE)*** |
| **Date:** |  |
| **Aim:** | | |
| Create medium-fidelity wireframes for Gardenia nursery plants selling App by using Figma. | | |
| **Description:** | | |

|  |
| --- |
| 1. Open Figma, either through the web browser or the desktop application, and create a new project. 2. Create a new frame for each screen of your app by clicking on the "Frame" icon in the toolbar or using the shortcut "Ctrl + Alt + N" (Windows) or "Cmd + Option + N" (Mac). 3. Access the Figma toolbar and select basic shapes and elements to represent different UI components, such as buttons, input fields, text blocks, images, and navigation menus. Drag and drop these elements onto your frames. 3. Use the text tool from the toolbar to add labels, headings, and body text to your wireframes. Click on the frame to add text and customize its style using the options in the right sidebar. 4. For medium-fidelity wireframes, use grayscale colors instead of full-color designs. Select elements and modify their fill color to grayscale tones using the color picker in the right sidebar. 5. Arrange the elements on your wireframes to create the desired layout and hierarchy. Move and resize elements using the selection tool in the toolbar. 6. Utilize Figma's prototyping features to add interactions and navigation between screens. Select an interactive element, such as a button, and switch to the "Prototype" tab in the right sidebar. Create connections between screens by dragging the arrow from the interactive element to the target screen. 7. Repeat the process for each screen of your app, adding elements, text, grayscale colors, and interactions as required to complete the wireframes. |
| **Tools Used:** |
| 1. Figma |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **09** | ***LOW-FIDELITY PROTOTYPE(PAPER PROTOTYPE)*** |
| **Date:** |  |
| **Aim:** | | |

|  |
| --- |
| Create low-fidelity prototypes (paper prototypes) for Gardenia nursery plants selling App by using pencil and paper. |
| **Description:** |
| 1. Group the data provided by the user and prioritize the identified needs. Analyze the data to identify common themes or patterns and determine the most critical user needs. 2. Evaluate and prioritize the suggestions from users regarding the product. Assess their feasibility, potential impact, and alignment with the overall product vision and goals. Prioritize the suggestions that align with user needs and have the potential to enhance the product's value. 3. Conduct a competitive analysis to identify existing competitors in the market.   Evaluate their strengths, weaknesses, and unique selling points. This analysis helps identify potential gaps or areas where the product can differentiate itself from competitors.   1. Based on the user feedback and competitive analysis, identify the do's and don'ts for the product. Understand what aspects of the product resonate well with users and what should be avoided or improved to meet their expectations and preferences. 2. Collect user behavior data, such as through user analytics tools or feedback mechanisms, to understand how users interact with the product, the tasks they perform, and the issues they encounter. This data provides insights into user preferences, pain points, and areas for improvement. 3. Utilize the gathered data to inform the design and development of the product, ensuring that it is tailored to the needs and preferences of the users. Incorporate user feedback, address pain points, and prioritize features and improvements that align with user needs, resulting in a product that resonates well with the target users. |
| **Tools Used:** |
| 1. A3 sheets 2. Pencil 3. Stencils |

|  |  |  |
| --- | --- | --- |
| **Ex.No:** | **10** | ***MEDIUM-FIDELITY PROTOTYPE(DIGITAL PROTOTYPE)*** |
| **Date:** |  |  |

|  |
| --- |
| **Aim:** |
| Create medium-fidelity prototypes (digital prototypes) for Gardenia nursery plants selling App by using Figma. |
| **Description:** |
| 1. Open Figma and create a new project. 2. Create separate frames for each screen of your app. You can do this by selecting the "Frame" tool from the toolbar and placing frames on the canvas for each screen you want to design. 3. Begin designing each screen by adding UI elements using Figma's design tools. Utilize buttons, input fields, text blocks, images, and navigation menus to create the desired layout and visual representation of your app. 4. Use Figma's prototyping features to add interactivity to your screens. Define how different UI elements should behave when interacted with, such as button clicks or input field interactions. 5. Connect screens together by creating interactions. In the Figma prototyping panel, define triggers (e.g., button clicks) and actions (e.g., screen transitions) to link screens together and create a seamless user flow. 6. Incorporate micro-interactions to enhance the user experience. Add hover effects, button states (e.g., pressed or disabled states), loading animations, or any other dynamic behaviors that make the app feel interactive and engaging. 7. Continuously review and refine your design, ensuring consistency, usability, and visual appeal across all screens. 8. Collaborate with stakeholders or team members by sharing your Figma project, allowing them to provide feedback and iterate on the design as necessary. |
| **Tools Used:** |
| 1. Figma |