ATME COLLEGE OF ENGINEERING

13th KM Stone, Bannur Road, Mysore - 560 028

DEPARTMENT OF COMPUTER SCIENCE & DESIGN

(ACADEMIC YEAR 2025-26)

LABORATORY MANUAL

SUBJECT: UI / UX LABORATORY

SUB CODE: BCGL606

SEMESTER: VI-2022 CBCS Scheme

Composed by	Verified by	Approved by
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INSTRUCTOR	FACULTY CO-ORDINATOR	HOD, CS&DESIGN

INSTITUTIONAL MISSION AND VISION

Objectives

- To provide quality education and groom top-notch professionals, entrepreneurs and leaders for different fields of engineering, technology and management.
- To open a Training-R & D-Design-Consultancy cell in each department, gradually introduce doctoral and postdoctoral programs, encourage basic & applied research in areas of social relevance, and develop the institute as a center of excellence.
- To develop academic, professional and financial alliances with the industry as well as the academia at national and transnational levels.
- To cultivate strong community relationships and involve the students and the staff in local community service.
- To constantly enhance the value of the educational inputs with the participation of students, faculty, parents and industry.

Vision

- Development of academically excellent, culturally vibrant, socially responsible and globally competent human resources.

Mission

- To keep pace with advancements in knowledge and make the students competitive and capable at the global level.
- To create an environment for the students to acquire the right physical, intellectual, emotional and moral foundations and shine as torch bearers of tomorrow's society.
- To strive to attain ever-higher benchmarks of educational excellence.

DEPARTMENT MISSION AND VISION

Vision

"To be a global leader in Computer Science and Design Engineering, striving for design excellence, cultural awareness, a profound commitment to environmental stewardship, and societal responsibility".

Mission

- To establish a technology-enabled experiential learning environment, prioritizing and cultivating problem-solving and design thinking skills among students.
- To foster collaboration with industries, research and development organizations, jointly addressing socially relevant challenges in Computer Science with a core emphasis on design.

Program Specific Outcomes:

PSO1: To develop stand-alone, embedded, and web-based solutions with easy-to-operate interfaces using software engineering practices and contemporary programming languages.

PSO2: Design and develop computer-based systems in various areas of Multimedia, Graphics data visualization and computer vision.

UI/UX LABORATORY SEMESTER – VI			
Subject Code	**BCGL606**	**CIE Marks**	50
Number of Contact Hours/Week	0:0:2:0	**SEE Marks**	50
Total Number of Lab Contact Hours	28	**Exam Hours**	3 Hrs.
Credits – 1			

Course Learning Objectives: This course (BCGL606) will enable students to:

- To explore and understand the nuances of User Experience and User Interface
- To gain mastery over the usage of Figma for designing and prototyping UI/UX
- To understand user requirement and translate it into UI/UX protype
- To analyse apps and websites and understand how they can be continually improved
- To understand the UI components and interactions being used in different apps and websites

Teaching-Learning Process (General Instruction):

1. These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes and make Teaching –Learning more effective.
2. Use https://www.figma.com/.

Experiments (Designing and Prototyping using Figma)

NOTE: Wire frames can be hand-drawn and recorded by the students. Designing and Prototyping can be done using Figma.

1.	Chat App Redesign: Create a Wireframe and redesign any popular chat app
2.	Food App: Create a wireframe, Design and Prototype the UI Pages for the food application.
3.	Social Media App: Create a wireframe, Design and Prototype social media photo sharing app.
4.	Product Website: Design and prototype a product website page. Create web pages and rollovers for the web pages
5.	Travel Agency Website: Create a wireframe, Design and prototype the UI for the website including design for Home Page with search bar, Activities page, Client Testimonial Page, Image Gallery
6.	UI/UX Designer Portfolio Design: Create a wireframe, Design and prototype a UI for a portfolio including design for About page, Work showcase page, Blog page, contact page
7.	Dashboard Design: Create a wireframe, Design and Prototype Dashboard UI page, add some Dashboard details, statistics and graphs, Add dropdown options for some dashboard details
8.	E-Commerce Website: Create a wireframe, Design and prototype Web pages including product category pages (example: mobiles, gaming consoles, Speakers), product pages in each category, buy now page, add to cart page
9.	Educational Website: Create a wireframe, Design and Prototype the UI for an educational website – Include a Homepage with footer, About Us Page, Programs page, Instructors page, Pricing page, Payments page with radial buttons. Design dropdowns for programs button
10.	Music Player App: Create a wireframe, Design and prototype the pages with a background and a Rollover button, and Song selection Page with a Home Rollover button. The third page may include animated play and pause button, play music animation, timer animation.

Course Outcomes (Course Skill Set):

At the end of the course the student will be able to:

CO1 Apply the basics of wireframing in designing apps and Websites.

CO2 Make use of Figma for designing and prototyping UI/UX for different types of apps and Websites

CO3 Analyse user requirements and translate the requirements to design prototypes.

CO4 Demonstrate the UI/UX concepts applied when designing the prototype of apps and Websites

CO5 Develop (redesign) the existing apps & Websites with customized design.

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks out of 50) and for the SEE minimum passing mark is 35% of the maximum marks (18 out of 50 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

Continuous Internal Evaluation (CIE):

CIE marks for the practical course are 50 Marks. The split-up of CIE marks for record/ journal and test are in the ratio 60:40.

- Each experiment is to be evaluated for conduction with an observation sheet and record write-up. Rubrics for the evaluation of the journal/write-up for hardware/software experiments are designed by the faculty who is handling the laboratory session and are made known to students at the beginning of the practical session.
- Record should contain all the specified experiments in the syllabus and each experiment write-up will be evaluated for 10 marks.
- Total marks scored by the students are scaled down to 30 marks (60% of maximum marks).
- In a test, test write-up, conduction of experiment, acceptable result, and procedural knowledge will carry a weightage of 60% and the rest 40% for viva-voce.
- The suitable rubrics can be designed to evaluate each student's performance and learning ability.
- The marks scored shall be scaled down to 20 marks (40% of the maximum marks). The Sum of scaled down marks scored in the report write-up/journal and marks of a test is the total CIE marks by the student.

Semester End Evaluation (SEE):

- SEE marks for the practical course are 50 Marks.
- SEE shall be conducted jointly by the two examiners of the same institute, examiners are appointed by the Head of the Institute.
- The examination schedule and names of examiners are informed to the university before the conduction of the examination. These practical examinations are to be conducted between the schedule mentioned in the academic calendar of the University.
- All laboratory experiments are to be included for practical examination.
- (Rubrics) Breakup of marks and the instructions printed on the cover page of the answer script to be strictly adhered to by the examiners. OR based on the course requirement evaluation rubrics shall be decided jointly by examiners.
- Students can pick one question (experiment) from the questions lot prepared by the examiners jointly.
- Evaluation of test write-up/ conduction procedure and result/viva will be conducted jointly by examiners.
- General rubrics suggested for SEE are mentioned here, writeup-20%, Conduction procedure and result in – 60%, Viva-voce 20% of maximum marks. SEE for practical shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, rubrics shall be decided by the examiners) Change of experiment is allowed only once and 15% of Marks allotted to the procedure part are to be made zero. The minimum duration of SEE is 02 hours

Suggested Learning Resources

- https://www.figma.com/
- UX Programming for Beginners, August, 2022
- https://www.udemy.com/course/learn-figma-web-design
- https://www.udemy.com/course/figma-2023-master-class-realtime-uiux-web-projects

The Correlation of Course Outcomes (CO's) and Program Outcomes (PO's)

Subject Code: BCGL606	**TITLE:** UI/UX LAB	**Faculty:** Harshitha H B

List of Course Outcomes	**Program Outcomes**											
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**
CO-1	3	3	2	-	3	-	-	-	-	-	-	-
CO-2	3	3	2	-	3	-	-	-	-	-	-	-
CO-3	3	3	2	-	3	-	-	-	-	-	-	-
CO-4	3	3	2	-	3	-	-	-	-	-	-	-
CO-5	3	3	2	-	3	-	-	-	-	-	-	-
Total	**15**	**15**	**10**		**15**	**-**	**-**	**-**	**-**	**-**	**-**	

Note: 3 = Strong Contribution 2 = Average Contribution 1 = Weak Contribution 0 = No Contribution

The Correlation of Course Outcomes (CO's) and Program Outcomes (PO's)

Subject Code:	BCGL606	**TITLE:** UI/UX	
List of Course Outcomes	**Program Outcomes**		**Total**
	PSO-1	**PSO-2**	
CO-1	3	-	**3**
CO-2	3	-	**3**
CO-3	3	-	**3**
CO-4	3	-	**3**
CO-5	3	-	**3**
Total	**15**	-	**15**

CONTENTS

User Interface (UI) & User Experience (UX) Design

UI/UX design is essential in creating digital products that are visually appealing, easy to use, and effective in solving user problems. While UI (User Interface) focuses on the aesthetics and interaction design, UX (User Experience) emphasizes usability and user satisfaction

What is UX (User Experience) Design?

UX design is about enhancing user satisfaction by improving the usability, accessibility, and interaction experience of a product.

Key Aspects of UX Design:

1. User Research & Analysis:
    - Understanding the target audience through surveys, interviews, and user personas
    - Conducting competitor analysis to identify industry standards
2. Information Architecture (IA):
    - Structuring content logically for easy navigation.
    - Creating site maps and navigation flows.
3. Wireframing & Prototyping:
    - Designing low-fidelity wireframes to outline the structure of pages.
    - Creating interactive prototypes to test functionality
4. Usability Testing & Iteration:
    - Conducting user testing to gather feedback.
    - Making iterative improvements based on user behavior

Tools for UX Design: Figma, Adobe XD, Sketch, Balsamiq, InVision

What is UI (User Interface) Design?

UI design focuses on the look, feel, and interactive elements of a digital product to create an engaging visual experience.

Key Aspects of UI Design:

1. Visual Hierarchy & Layout:
    - Arranging UI elements based on importance.
    - Using grids and spacing for proper alignment.
2. Typography & Color Theory:
    - Choosing readable fonts and appropriate font sizes.
    - Applying color psychology to evoke emotions and improve accessibility.
3. Icons, Buttons, and Components:

- Designing interactive elements with clear affordances
- Creating a consistent design system for UI components.

4. Responsive & Adaptive Design:
   - Ensuring mobile-first design for better accessibility.
   - Using auto-layout in Figma for fluid responsiveness

Tools for UI Design: Figma, Adobe XD, Sketch, Material UI

The Relationship Between UI and UX

UI and UX go hand in hand:

- Good UX ensures that the product is usable and meets the needs of the target audience
- Good UI ensures that the product is visually appealing and interactive.
- A great digital product needs both UI and UX to be successful.

Advantages and Disadvantages of UI/UX Design

UI/UX design plays a critical role in ensuring that digital products are user-friendly, visually appealing, and effective. However, like any design process, it comes with both advantages and disadvantages

Advantages of UI/UX Design

1. Improves User Satisfaction & Engagement
   - A well-designed UI/UX makes it easier for users to navigate an app or website.
   - Intuitive interfaces reduce frustration, leading to a positive user experience.
2. Increases Conversion & Business Growth
   - A seamless user experience encourages more purchases, sign-ups, or interactions.
   - A good UI/UX reduces bounce rates and keeps users engaged.
3. Enhances Brand Reputation & Trust
   - A visually appealing UI strengthens brand identity
   - A smooth and efficient UX builds customer loyalty and trust.
4. Reduces Development Costs & Time
   - A well-planned UI/UX design prevents usability issues before development starts.
   - Fewer revisions and bug fixes save money and time
5. Competitive Advantage

• Better UI/UX helps a product stand out in a crowded market.

• Users are more likely to choose a product that is easy to use and visually appealing.

Disadvantages of UI/UX Design

1. Time-Consuming Process
   • User research, prototyping, testing, and iteration take time.
   • Companies looking for a quick launch may struggle with lengthy design processes.
2. High Initial Cost
   • Hiring skilled UI/UX designers or investing in research can be expensive.
   • However, it saves costs in the long run by reducing major design issues.
3. Constant Updates & Maintenance Needed
   • UI/UX trends evolve, requiring regular updates to stay relevant.
   • User feedback and new technologies often require design changes.
4. Requires User Testing & Feedback
   • Not all users interact the same way, so extensive usability testing is needed.
   • Poor testing can lead to misinterpretation of user needs.
5. Subjective User Preferences
   • Different users have different expectations and preferences.
   • A design that works well for one audience may not appeal to another.

What is Figma?

Figma is a cloud-based UI/UX design tool that allows designers to create, collaborate, and prototype digital

products in real time. It is widely used for wire framing, UI design, prototyping, and design system creation

Key Features of Figma

1. Cloud-Based Collaboration
   • Real-time collaboration allows multiple designers to work on the same file simultaneously.
   • Commenting and feedback features streamline design reviews.
   • Version history helps track changes without losing previous work.
2. Design Tools for UI/UX
   • Auto Layout: Makes UI elements responsive and flexible.
   • Components & Variants: Reusable design elements that maintain consistency
   • Vector Networks: A more flexible alternative to the traditional pen tool.
3. Prototyping & Animation

- Create interactive prototypes without needing additional software.
- Use smart animate to add smooth transitions between screens.
- Share prototypes with developers and stakeholders through a simple link.

4. Plugins & Integrations

- Unsplash: Quickly add high-quality images.
- Icons8 & Material Icons: Access icon libraries within Figma
- Accessibility Plugins: Check contrast and color accessibility.

UI/UX Workflow in Figma

Step 1: Wireframing

- Start with low-fidelity wireframes to plan layouts and user flows.
- Use frames (artboards) for different screen sizes.

Step 2: UI Design

- Apply color schemes, typography, and spacing for a visually appealing interface.
- Use components and auto-layout to maintain design consistency.

Step 3: Prototyping

- Connect frames to define user interactions.
- Add animations using Smart Animate for a realistic experience.

Step 4: Testing & Feedback

- Share the prototype with stakeholders for feedback.
- Iterate based on usability testing insights.

Step 5: Developer Handoff

- Use Figma's inspect mode to provide CSS, iOS, or Android code snippets.
- Export assets directly from Figma.

Why Use Figma for UI/UX Design?

- Cross-platform (works on Windows, Mac, and browsers
- Real-time collaboration and cloud storage
- All-in-one tool for design, prototyping, and developer handoff
- Scalable design systems for consistent branding

Advantages of Using Figma

1. Cloud-Based & Real-Time Collaboration

- No need to install software—works directly in a web browser.
- Multiple designers can work on the same project simultaneously.
- Real-time commenting and feedback streamline teamwork.

2. Cross-Platform Compatibility
   - Works on Windows, Mac, Linux, and even Chrome books.
   - No compatibility issues since everything is stored in the cloud.
3. All-in-One Tool for UI/UX Design
   - Combines wireframing, UI design, prototyping, and developer handoff in one tool.
   - No need for separate prototyping tools like InVision or Adobe XD.
4. Auto Layout & Design Systems
   - Auto Layout makes components responsive and flexible.
   - Reusable components & variants ensure consistency across designs.
5. Easy Developer Handoff
   - Developers can inspect designs, copy CSS, and download assets directly.
   - No need for additional tools like Zeplin.
6. Plugin Support & Integrations
   - Figma offers a wide range of plugins for icons, illustrations, stock images, and accessibility.
   - Integrates with tools like Slack, Jira, and Notion.

Disadvantages of Using Figma

1. Internet Dependency
   - Since it's cloud-based, Figma requires a stable internet connection to work.
   - Offline mode is limited, unlike Adobe XD or Sketch.
2. Performance Issues with Large Files
   - Handling large design files or too many components can slow down Figma, especially in browsers.
   - Performance may lag on lower-end devices.
3. Limited Offline Functionality
   - Figma only allows viewing and editing in offline mode if the file was previously opened online.
   - You cannot access new files without an internet connection.
4. Fewer Advanced Animation Features

- Prototyping in Figma is good but not as advanced as tools like Adobe After Effects or Framer.
- Lacks timeline-based animations and micro-interaction control.

1] Chat App Redesign: Create a Wireframe and redesign any popular chat app. Using Figma.

Step 1: Research & Planning

- Choose a Chat App: Decide which chat app you want to redesign (e.g.,WhatsApp, Messenger, Telegram, etc.).
- Identify Pain Points: Research existing user complaints, UX issues, and potential improvements.
- Set Goals: Define what you aim to achieve (e.g., better UI, new features,improved accessibility).
- Gather Inspiration: Look at modern design trends and UI inspirations on platforms like Dribbble and Behance.

Step 2: Sketch Wireframes

- Low-Fidelity Wireframes: Use pen and paper or Figma to create rough sketches of the main screens (Home, Chat, Calls, Settings, etc.).
- User Flow: Define how users will navigate through the app.
- Iterate & Refine: Ensure the wireframes cover all key functionalities.

Step 3: Create High-Fidelity Designs in Figma

- Set Up Frames & Grid System: Choose a frame size (e.g., iPhone 14 Pro – 390x844 px).
- Typography & Color Scheme: Select a modern, accessible font and color palette.
- Design Components: Create reusable elements (buttons, icons, chat bubbles, navigation bars).
- Build Main Screens:
    - Login/Signup Page
    - Home Screen (List of Chats)
    - Chat Screen (Messages, Attachments, Voice Notes)
    - Calls & Contacts Page
    - Settings Page
- Dark Mode (Optional): Add a dark mode version for a modern touch.

Step 4: Prototype & Interactions

- Link Screens Together: Use Figma's prototyping feature to create interactive transitions.
- Add Micro-Animations: Improve user experience with subtle animations (e.g., button clicks, message sent animations).
- Test User Flow: Ensure smooth navigation and interaction.

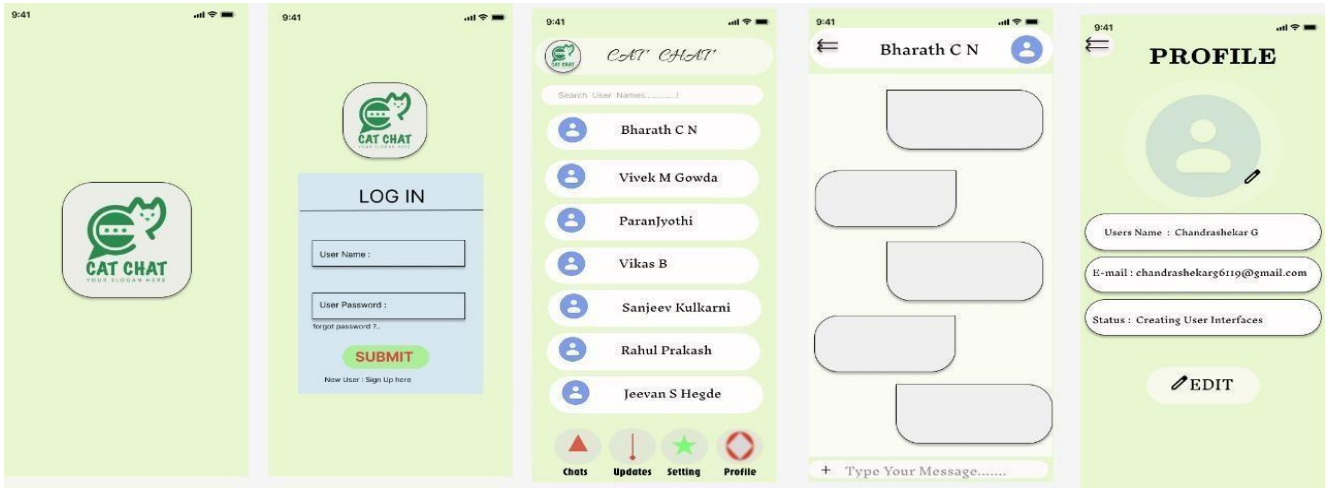
Step 5: User Testing & Feedback

- Share Prototype: Send the design link to users or stakeholders.
- Gather Feedback: Ask for usability and design improvements.
- Refine & Iterate: Make necessary adjustments based on feedback.

Step 6: Final Touches & Export

- Optimize UI Elements: Ensure all components are polished and consistent.
- Export Assets: If needed, prepare assets for developers.
- Present Your Work: Create a case study for your redesign, explaining your choices.

Output :



2] Food App: Create a wireframe, Design and Prototype the UI Pages for the food application. Using Figma.

Step 1: Research & Planning

- Define the Purpose: Is it a food delivery app (like UberEats) or a recipe app?
- Identify Key Features:
- User login/signup
- Restaurant/food listings
- Search & filters
- Food item details
- Cart & checkout
- Order tracking
- User profile & settings
- Gather Design Inspiration: Look at top food apps for UI trends.

Step 2: Wireframing (Low-Fidelity)

- Use Figma's wireframing tools or a pen & paper to sketch rough layouts for:
- Home Screen (featured restaurants, promotions)
- Search & Filter Page
- Food Details Page (with price, ingredients, add-to-cart button)
- Cart Page (order summary, checkout)
- Order Tracking Page
- Profile & Settings Page

Step 3: UI Design (High-Fidelity)

- Set Up Frames & Grids: Use an 8px grid system for spacing.
- Typography & Colors:
- Choose a modern, readable font (e.g., Inter, Poppins).
- Use warm & appetizing colors (red, orange, green) to enhance the food theme.
- Create Components: Design buttons, icons, navigation bars, food cards, and input fields as reusable Figma components.
- Design Pages:
- Onboarding/Login Page (with engaging food visuals)
- Home Page (restaurant listings, categories)

- Product Page (food details, add-to-cart button)
- Cart & Checkout Page (payment options)
- Order Tracking (live updates, estimated time)

- Profile Page (user preferences, saved addresses)

Step 4: Prototyping & Interactions

- Link Screens: Use Figma's prototype mode to connect buttons to relevant pages.
- Micro-Interactions: Add smooth transitions (e.g., sliding menus, fade-in effects).
- Test the Flow: Ensure seamless navigation between screens.

Step 5: User Testing & Final Touches

- Gather Feedback: Share the prototype with users or stakeholders.
- Make Adjustments: Refine UI elements and fix usability issues.
- Prepare for Handoff: Organize layers, name components properly, and export assets

Output :

3] Social Media App: Create a wireframe, Design and Prototype social media photo sharing app. Using Figma.

Step 1: Research & Planning

- Identify core features (e.g., photo uploads, feeds, likes, comments, stories, filters).
- Analyze competitor apps like Instagram, Snapchat, and VSCO.
- Sketch rough ideas on paper or use Figma FigJam for brainstorming.

Step 2: Wireframing (Low-Fidelity)

1. Open Figma → Create a new frame for mobile screens (iPhone/Android size).
2. Design the key screens using simple boxes and placeholders (No colors, just structure):
    - Login/Signup Screen
    - Home Feed (Posts from users)
    - Photo Upload & Edit Screen (Filters, captions, etc.)
    - User Profile
    - Notifications
    - Settings
3. Use grayscale elements (no images, just wireframe components).
4. Get feedback before moving to UI design.

Step 3: UI Design (High-Fidelity)

1. Choose a color palette (e.g., modern pastel, dark mode, or vibrant colors).
2. Use a clean typography style (e.g., Inter, SF Pro, or Poppins).
3. Add real images, buttons, and icons to bring it to life.
4. Apply auto layout for responsiveness.
5. Create reusable components (e.g., buttons, cards, nav bars)

Step 4: Prototyping & Interactions

1. Link screens using Figma's Prototyping tool.
2. Add animations (e.g., swipe to view photos, tap to like).
3. Include transitions (e.g., smooth modal popups).
4. Test the flow to ensure a seamless experience.

Step 5: Testing & Feedback

1. Share the Figma prototype link with testers.
2. Collect feedback (Are buttons clear? Is navigation smooth?).

3. Iterate and refine based on feedback.

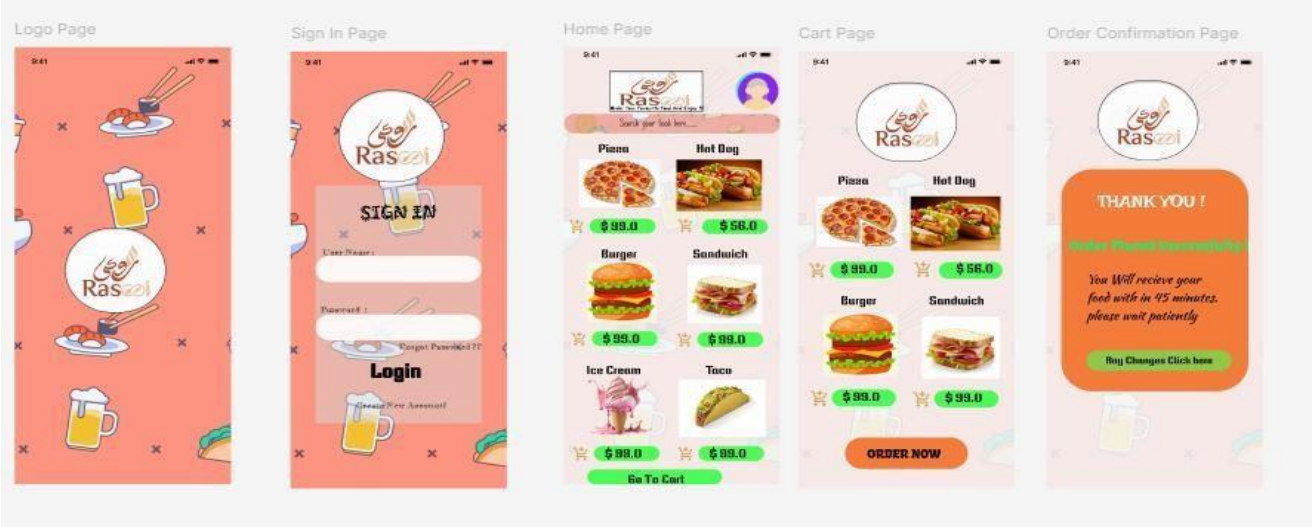
Step 6: Finalize & Handoff

1. Organize your Figma files neatly (use sections & labels).

2. Export assets (icons, images, etc.) for developers.

3. Use Figma's Dev Mode to provide specs for developers.

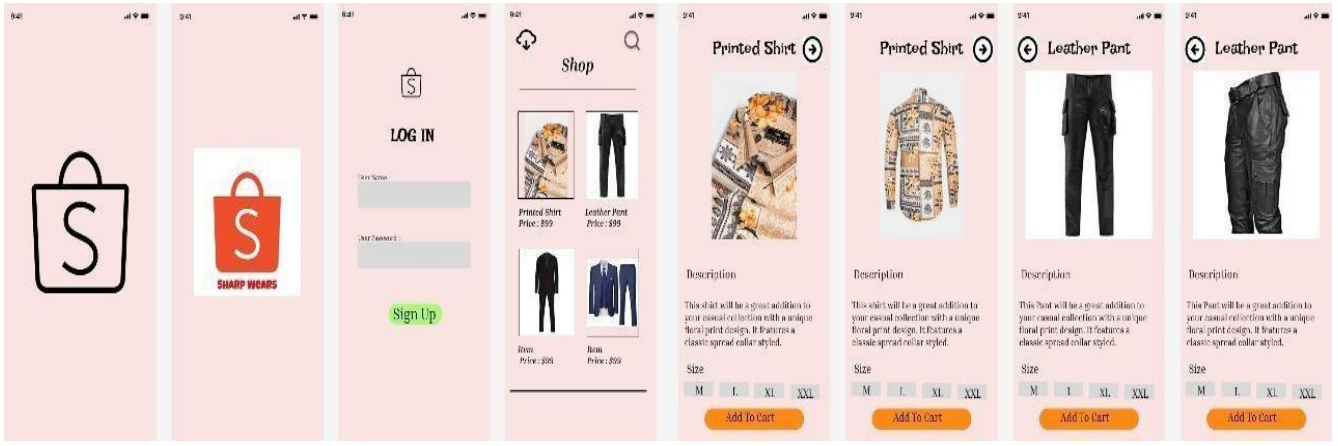
Output:



4] Product Website: Design and prototype a product website page. Create web pages and rollovers for the web pages. Using Figma.

1. Plan the Website Layout
   - Define the structure (Header, Hero Section, Product Display, Features, Testimonials, Footer).
   - Sketch a wireframe in Figma to visualize the layout.
2. Design the Web Pages in Figma
   - Use Frames (F key) to create different pages.
   - Add UI components:
   - Header – Logo, navigation menu, search bar.
   - Hero Section – Product image, tagline, CTA button.
   - Product Display – Grid or carousel for product details.
   - Testimonials – Customer feedback section.
   - Footer – Links, contact, social icons.
3. Create Rollovers (Hover Effects) in Figma
   - Button Hover Effect:
     1. Select a button, convert it to a Component (Ctrl + Alt + K / Cmd + Option + K).
     2. Click + in Variants to create a hover state.
     3. Change background color, shadow, or text color.
     4. Go to Prototype, set interaction "While Hovering" → Link to the hover variant.
   - Image Hover Effect (Zoom or Opacity Change):
     1. Duplicate the image component, scale it slightly larger or adjust opacity.
     2. Create an interactive component and set the hover effect.
4. Prototype the Website
   - Add interactions between pages (Prototype tab).
   - Link navigation items to different frames (Home, Product, About, etc.).
   - Test rollovers in Figma's Prototype Mode

Output :


SHARP WEARS
LOG IN
Sign Up
Shop
Printed Shirt
Price : $99
Leather Pant
Price : $99
Printed Shirt
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Description
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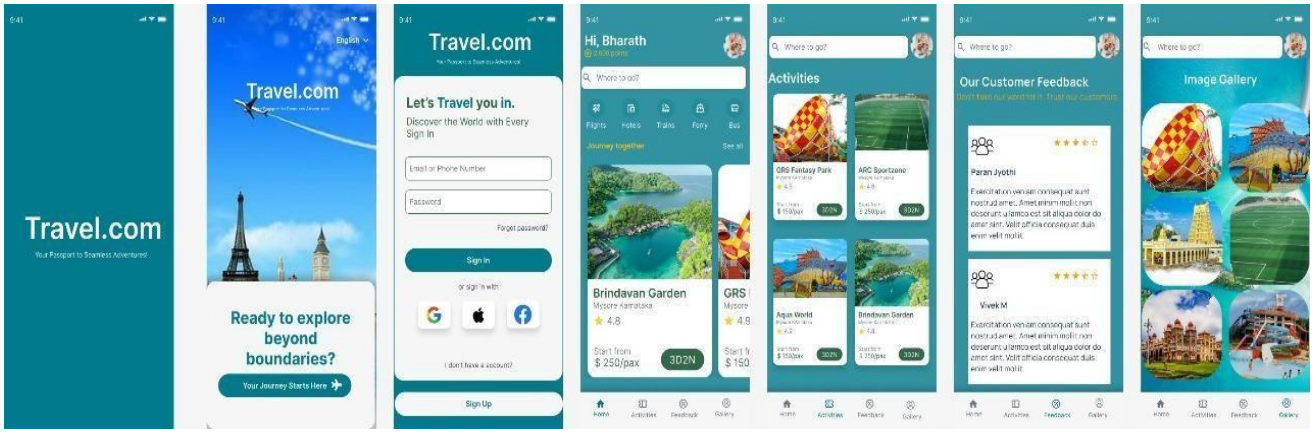
5] Travel Agency Website: Create a wireframe, Design and prototype the UI for the website including design for Home Page with search bar, Activities page, Client Testimonial Page, Image Gallery. Using Figma.

1. Create a Wireframe
   - Use Figma frames to sketch the website layout.
   - Plan the following pages:
     - Home Page (with a search bar)
     - Activities Page (list of travel experiences)
     - Client Testimonial Page (user reviews)
     - Image Gallery (travel destinations)
2. Design the UI in Figma
   - Home Page:
     - Hero section with a search bar (destination, dates, travelers).
     - Featured travel packages.
     - Call-to-action (CTA) buttons (e.g., "Book Now").
   - Activities Page:
     - List of activities with filters (e.g., adventure, beach, cultural tours).
     - Card-based layout with images, descriptions, and pricing.
   - Client Testimonial Page:
     - Carousel or grid-style testimonials with star ratings.
     - Profile pictures for credibility.
   - Image Gallery:
     - Grid or masonry layout of travel images.
     - Hover effect to enlarge images.
3. Add Rollovers & Interactions
     - Button Hover Effects: Change color, add shadows.
     - Image Hover Effects: Zoom-in effect on images.
     - Navigation Links: Link between pages in Prototype mode.
     - Search Bar: Prototype an interactive dropdown for destination suggestions.
4. Prototype & Test
     - Go to Prototype mode and set interactions.

- Test user flow from searching trips to viewing testimonials and gallery.
- Ensure smooth hover effects and page transitions.

Output :



6] UI/UX Designer Portfolio Design: Create a wireframe, Design and prototype a UI for a portfolio including design for About page, Work showcase page, Blog page, contact page. Using Figma.

1. Create a Wireframe
   - Plan the website structure with four main pages:
   - About Page – Personal bio, skills, and experience.
   - Work Showcase Page – Portfolio projects with case studies.
   - Blog Page – Articles, insights, and UX/UI tips.
   - Contact Page – Contact form and social media links.
2. Design the UI in Figma
   - About Page:
     - Professional introduction with a hero image.
     - Skills section with progress bars or icons.
     - Timeline or card-style work experience.
   - Work Showcase Page:
     - Grid or masonry layout for case studies.
     - Clickable project cards leading to detailed pages.
     - Hover effects on thumbnails.
   - Blog Page:
     - List of blog posts with featured images and previews.
     - Search bar and categories for filtering.
     - Click to open full articles.
   - Contact Page:
     - Simple contact form (Name, Email, Message).
     - Linked social media icons.
     - Location map (optional).
3. Add Rollovers & Interactions
   - Hover Effects: Change colors, enlarge images, add shadows.
   - Page Transitions: Smooth animations when switching pages.
   - Interactive Cards: Clicking a project card opens full details.

• Blog Post Previews: Clicking a blog snippet expands the article.

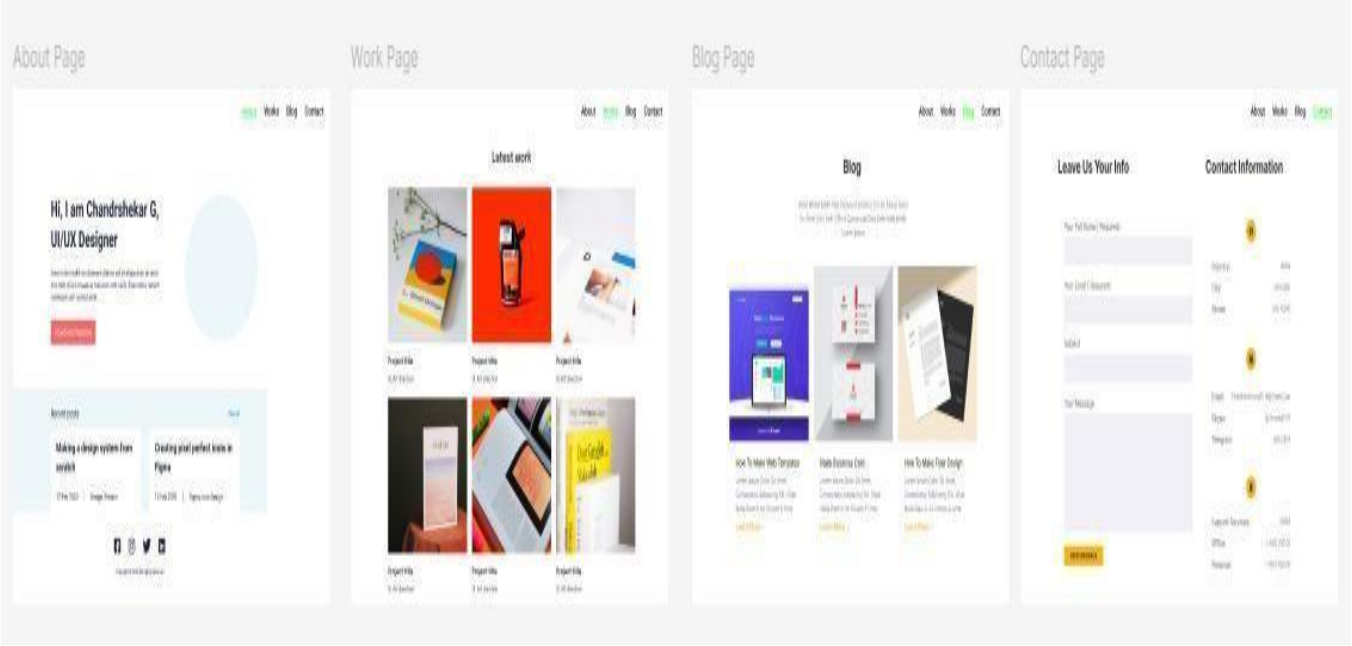
4. Prototype & Test

• Use Prototype mode to link pages.

• Ensure easy navigation and interactions.

• Test responsiveness (desktop & mobile versions).

Output :



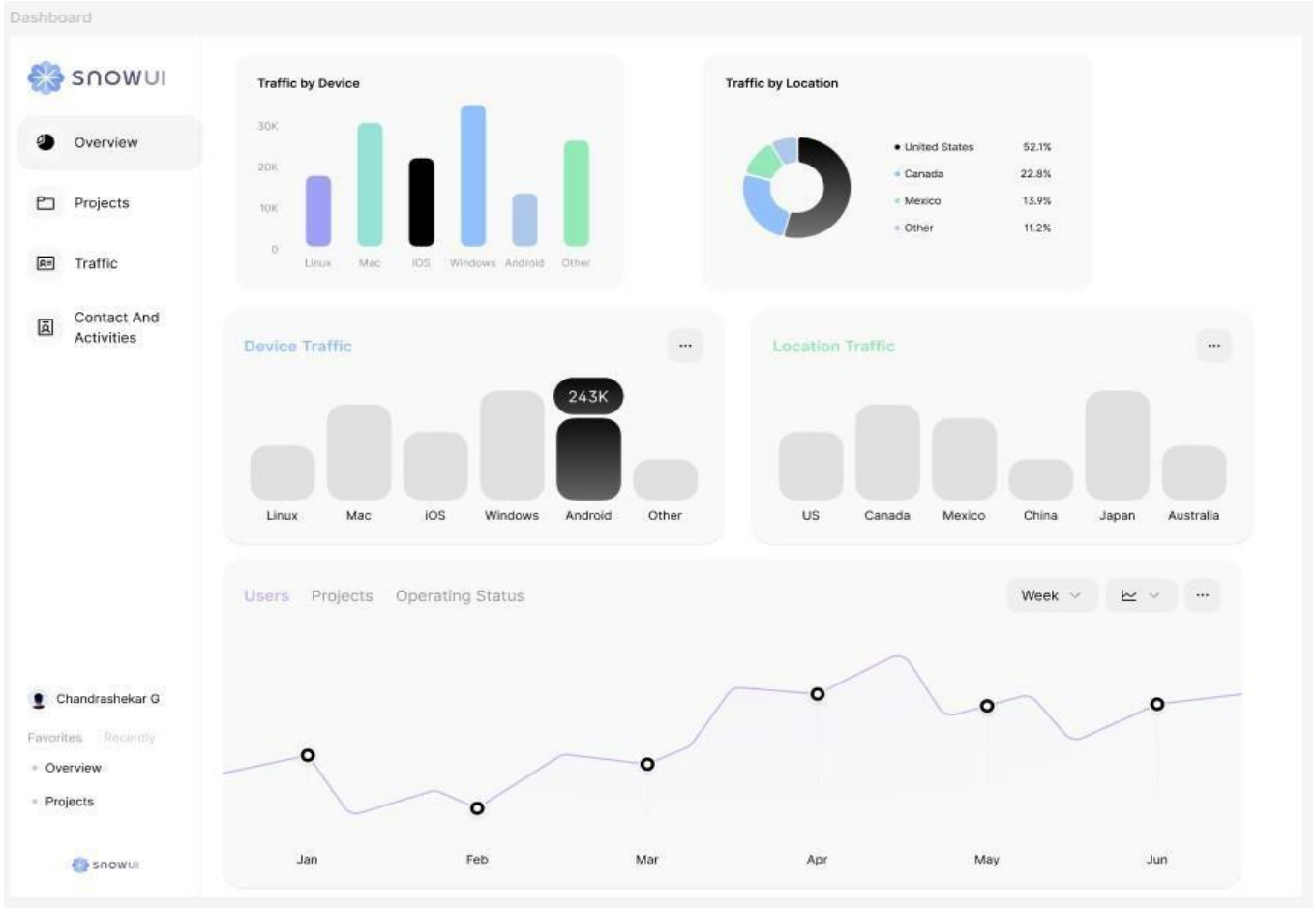
7] Dashboard Design: Create a wireframe, Design and Prototype Dashboard UI page, add some Dashboard details, statistics and graphs, Add dropdown options for some dashboard details. Using Figma.

1. Create a Wireframe
   - Plan the dashboard layout with key sections:
     - Sidebar Navigation (Dashboard, Reports, Analytics, Settings).
     - Header Bar (User profile, notifications, search).
     - Main Content Area (Statistics, charts, key metrics).
     - Dropdown Options (Filter data, switch views).
2. Design the UI in Figma
   - Sidebar Navigation:
     - Add icons and labels for sections.
     - Highlight active section.
   - Dashboard Overview Section:
     - Display KPIs (Key Performance Indicators).
     - Show total sales, active users, revenue, etc.
   - Charts & Graphs:
     - Use line charts, bar graphs, pie charts for analytics.
     - Ensure data visualization is clear and modern.
   - Dropdown Options:
     - Add filters (Date range, categories, user roles).
     - Use Figma's interactive components for smooth dropdown functionality.
3. Add Interactions & Prototyping
   - Dropdowns: Set up "While Clicking" interaction for dropdown menus.
   - Hover Effects: Change button or card color on hover.
   - Graphs & Charts: Use component swapping to simulate live data updates.
   - Page Transitions: Smooth navigation between dashboard sections

   .
4. Prototype & Test

- Link all UI elements in Prototype mode.
- Test different dropdown selections.
- Check responsiveness for desktop & mobile versions.

Output :



8] E-Commerce Website: Create a wireframe, Design and prototype Web pages including product category pages (example: mobiles, gaming consoles, Speakers), product pages in each category, buy now page, add to cart page . Using Figma.

1. Create a Wireframe

Plan the website structure with key pages:

- Homepage (Featured products, offers, search bar).
- Product Category Pages (Mobiles, Gaming Consoles, Speakers).
- Product Pages (Detailed product view, reviews, specifications).
- Add to Cart Page (Cart summary, quantity adjustments).
- Buy Now Page (Checkout process, payment options).

2. Design the UI in Figma

- Homepage:
  - Hero section with banners (New arrivals, discounts).
  - Search bar, featured products, categories.
- Category Pages:
  - Grid-style product listing.
  - Filters (Price, Brand, Ratings).
- Product Page:
  - High-resolution product images.
  - Price, specifications, reviews.
  - "Add to Cart" and "Buy Now" buttons.
- Cart Page:
  - List of added products.
  - Quantity selector, total price calculation.
  - Proceed to checkout button.
- Buy Now Page:
  - Shipping details form.
  - Payment method selection.
  - Order summary.

3. Add Interactions & Prototyping

- Hover Effects: Change button colors, zoom-in product images.

• Dropdowns: Category filters, payment options.

• Page Transitions: Smooth navigation from category → product → cart → checkout.

• Cart Update Animation: Quantity change updates total price dynamically.

4. Prototype & Test

• Connect UI elements in Prototype mode.

• Test "Add to Cart" flow and checkout process.

• Ensure mobile responsiveness.

Output:

9] Educational Website: Create a wireframe, Design and Prototype the UI for an educational website – Include a Homepage with footer, About Us Page, Programs page, Instructors page, Pricing page, Payments page with radial buttons. Design dropdowns for programs button. Using Figma.

1. Create a Wireframe

Outline the key pages and sections:

- Homepage (Hero section, featured courses, testimonials, footer).
- About Us Page (Mission, vision, team info).
- Programs Page (List of available courses with filters).
- Instructors Page (Profiles, expertise, contact details).
- Pricing Page (Subscription plans, comparison table).
- Payments Page (Payment form with radial buttons for plan selection).

2. Design the UI in Figma

Homepage:

- Hero section with a call-to-action ("Get Started" button).
- Featured programs in a grid layout.
- Testimonials slider.
- Footer with links (Contact, Socials, FAQs).

Programs Page:

- List of courses with thumbnails, duration, and price.
- Dropdown for course categories (Tech, Business, Design).
- Search bar and filter options.

Instructors Page:

- Instructor profiles with photos, names, and expertise.
- Social media links for networking.

Pricing Page:

- Pricing plans in a card layout (Basic, Premium, Lifetime).
- Feature comparison table.

Payments Page:

- Payment form with radial buttons for plan selection.

• Secure checkout section with payment methods.

3. Add Interactions & Prototyping

• Dropdown Menu: Programs button expands categories when clicked.

• Hover Effects: Buttons change color on hover.

• Form Validation: Clicking payment options enables the checkout button.

• Page Transitions: Smooth navigation between homepage → programs → checkout.

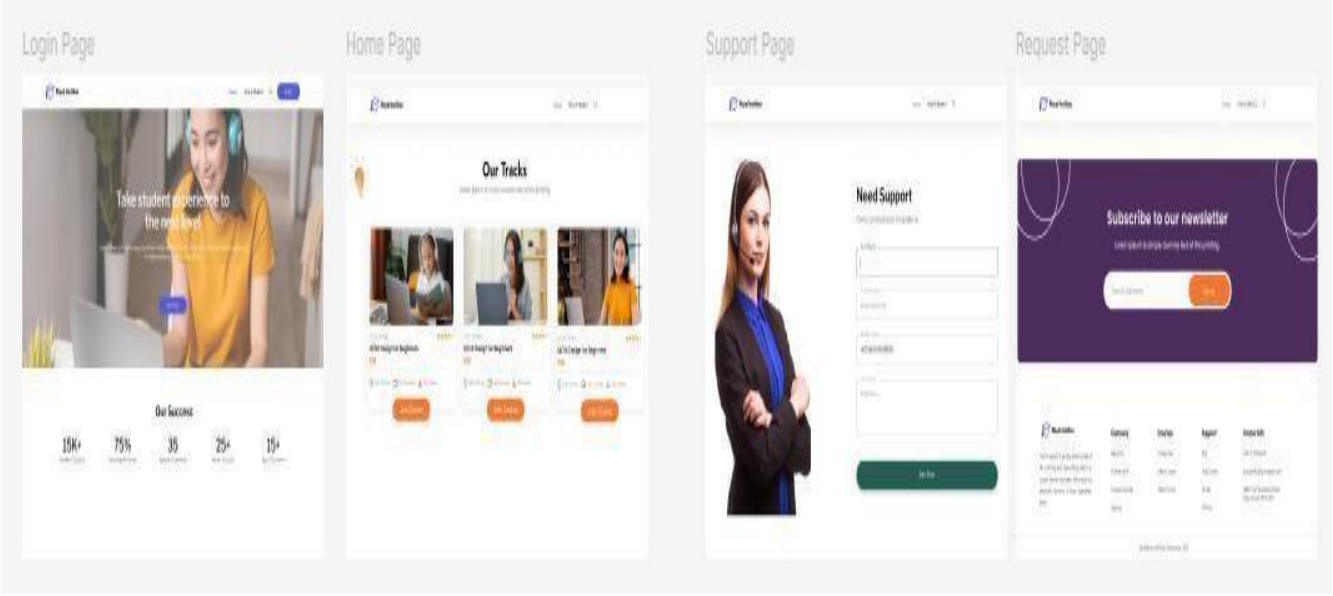
4. Prototype & Test

• Connect UI elements in Prototype mode.

• Test user flow from selecting a course → viewing details → making a payment.

• Ensure responsiveness for mobile and desktop versions.

Output:



10] Music Player App: Create a wireframe, Design and prototype the pages with a background and a Rollover button, and Song selection Page with a Home Rollover button. The third page may include animated play and pause button, play music animation, timer animation. Using Figma.

1. Create a Wireframe

Plan the main pages of the app:

- Landing Page (Background image, logo, and rollover button).
- Song Selection Page (List of songs, album covers, home rollover button).
- Music Player Page (Play/Pause button, progress bar, animations).

2. Design the UI in Figma

- Landing Page:
  - Full-screen background image or gradient.
  - Rollover Button that changes color when hovered.
  - Navigation to the song selection page.
- Song Selection Page:
  - Scrollable list of songs with album covers.
  - Home Rollover Button to navigate back.
  - Play button on each song card.
- Music Player Page:
  - Animated Play/Pause Button (Micro-interactions).
  - Music Animation (Waveforms, equalizer effects).
  - Timer Animation (Progress bar updating in real-time).

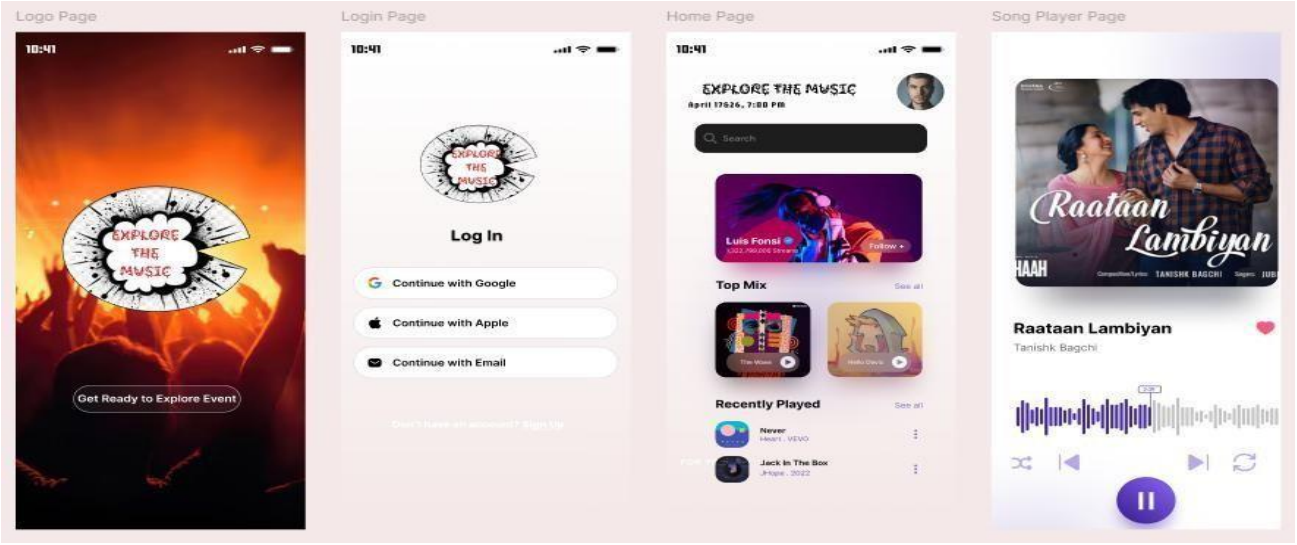
3. Add Interactions & Prototyping

- Hover Effects: Rollover button changes color or size.
- Play/Pause Animation: Button switches states smoothly.
- Music Progress Animation: Timer and progress bar move with music.
- Navigation: Clicking songs leads to the player screen.

4. Prototype & Test

- Link interactions in Prototype mode.
- Test smooth page transitions and animations.
- Ensure touch-friendly UI for mobile users.

Output :


Logo Page
10:41
EXPLORE THE MUSIC
Get Ready to Explore Event
Login Page
10:41
EXPLORE THE MUSIC
Log In
Continue with Google
Continue with Apple
Continue with Email
Home Page
10:41
EXPLORE THE MUSIC
Search
Luis Fonsi
Follow
Top Mix
See all
Recently Played
See all
Never
Jack In The Box
Song Player Page
Raataan Lambiyan
TANISHK BAGCHI
Raataan Lambiyan
Tanishk Bagchi

UI/UX VIVA QUESTIONS:

1. What is the difference between a wireframe, a UI design, and a prototype?
2. What tools did you use?
3. What design principles did you apply?
4. How did you ensure responsiveness?
5. What UX research did you perform?
6. How does your design address accessibility?
7. What challenges did you face?
8. How would you improve this project?
9. Chat App Redesign
    - Which app did you redesign and why?
    - What new features did you add?
    - How is the user flow improved?
    - How does your design address privacy?
10. Food App
    - What user roles did you consider?
    - How does the search/filter work?
    - Describe your cart and checkout flow.
    - How is delivery time shown?
11. Social Media Photo Sharing App
    - How is your app different from Instagram?
    - How is the upload flow designed?
    - What about privacy controls?
    - How does user interaction work?
12. Product Website
    - What product is the site for?
    - How is the homepage structured?
    - What rollovers did you add?
    - How do users convert on the site?

13. Travel Agency Website

- What does the search bar do?
- How is the Activities page designed?
- What is shown in Testimonials?
- What makes the Image Gallery appealing?

14. UI/UX Designer Portfolio

- What are the main sections?
- How did you showcase your work?
- How does the blog support your portfolio?
- What's unique about your contact page?

15. Dashboard Design

- What does your dashboard show?
- What types of charts are used?
- How do filters work?
- What usability factors did you consider?

16. E-Commerce Website

- How are products categorized?
- What's unique about the product page?
- How is user trust built?
- How's the checkout flow optimized?

17. Educational Website

- What's on the homepage?
- What does the Programs dropdown offer?
- Why use radio buttons in payment?
- How are instructors shown?

18. Music Player App

- What animations did you add?
- How is the timer displayed?
- What does the song selection page look like?
- How is user interaction handled?