

Design Thinking Lab Manual

Students' Auditorium Management Software.

01-04 Weeks: Research and Planning

Objective:

Conduct research, gather insights, and create a project plan for the development of the

Activities:

1. Stakeholder Interviews:

Identify Stakeholders: As the team lead, identify stakeholders involved in auditorium management, including students, faculty, and administrative staff.

Conduct Interviews: Schedule interviews with representatives from each stakeholder group. Prepare open-ended questions to gather insights into their experiences and needs.

Document Insights: Take detailed notes during the interviews and record key insights. Summarize the main pain points and expectations shared by stakeholders.

2. User Research:

Observation: Spend time observing the current process of managing auditorium events. Note any inefficiencies or bottlenecks.

Surveys: Create and distribute surveys to students, faculty, and staff to collect quantitative data on their preferences and experiences.

Data Analysis: Analyze the data gathered from observations and surveys to identify common patterns and areas for improvement.

3. Market Analysis:

Research: Explore existing auditorium management software solutions available in the market. Visit their websites, read user reviews, and analyze their feature sets.

Comparison: Create a spreadsheet to compare different software solutions based on criteria such as features, pricing, and user ratings.

Identify Trends: Look for emerging trends in auditorium management software, such as mobile ticketing or integrated marketing tools.

4. Project Planning:

Task Identification: List all the tasks required for developing the auditorium management software, such as requirements gathering, design, development, testing, and deployment.

Timeline Creation: Estimate the time required for each task and create a timeline or Gantt chart to visualize the project schedule.

Responsibility Assignment: Assign responsibilities to team members based on their skills and expertise. Clearly define roles such as project manager, developer, and tester.

Week 5-10: Ideation and Concept Development

Objective:

Generate ideas, brainstorm solutions, and develop concepts for the Students' Auditorium Management Software.

Activities:

5. Ideation Sessions:

Brainstorming: Organize a brainstorming session with your team to generate ideas for software features. Use techniques like mind mapping or rapid ideation to encourage creativity.

Idea Generation: Capture all ideas, no matter how wild or unconventional, on a whiteboard or digital collaboration tool. Encourage everyone to participate and build on each other's ideas.

6. Concept Development:

Idea Selection: After brainstorming, review all generated ideas and identify the most promising ones based on feasibility and alignment with stakeholder needs.

Concept Refinement: Develop detailed concepts for selected ideas by creating sketches or wireframes. Focus on key features such as event scheduling, seat booking, and ticketing.

7. Storyboarding:

User Flow Mapping: Use a whiteboard or digital tool to map out the user journey through the software. Start with the initial user interaction (e.g., logging in) and map out each step until the desired outcome is achieved.

Storyboard Creation: Create visual storyboards or user flow diagrams to illustrate each step of the user journey. Include annotations to describe user actions and system responses.

8. Prototyping:

Tool Selection: Choose a prototyping tool such as Figma, Sketch, or Adobe XD to create interactive prototypes.

Prototype Creation: Use the selected tool to design interactive screens for key features of the auditorium management software. Include navigation elements, buttons, and interactive elements to simulate user interactions.

Final Problem Statement

After completing the research, planning, ideation, and concept development phases, the problem statement for the Students' Auditorium Management Software may look something like this:

Design and develop an intuitive and efficient auditorium management software solution for our college's large (800 seating capacity) auditorium. The software should be user-friendly and capable of streamlining the process of scheduling events, managing ticket sales, and tracking financial transactions.

Key features of the software include:

Event Scheduling: Enable the auditorium secretary to schedule various social and cultural events, set show timings, and manage event dates.

Seat Booking: Allow users to book seats online for events, with options for selecting balcony or ordinary seats. Provide real-time availability updates and support secure payment processing.

Ticketing System: Generate digital tickets for booked seats and offer options for both online and offline ticket purchases. Include functionalities for issuing complimentary tickets and managing VIP seating.

Sales Agent Management: Facilitate the appointment and management of sales agents, track their sales performance, and calculate commissions based on sales revenue.

Financial Tracking: Maintain detailed records of revenue generated from ticket sales, expenses incurred for each event (e.g., artist payments, maintenance charges), and overall profitability.

Reporting and Analysis: Provide comprehensive reporting tools for analyzing ticket sales, seat occupancy rates, and revenue trends. Enable stakeholders to make data-driven decisions for optimizing event management processes.

The software should be highly configurable, scalable, and cost-effective, running on standard hardware and utilizing open-source technologies such as Linux and Apache web server.

Overall, the goal is to create a robust auditorium management solution that enhances the user experience for both administrators and attendees, improves operational efficiency, and maximizes revenue generation for the college."

This problem statement encapsulates the insights gathered from stakeholder interviews, user research, market analysis, and ideation sessions, providing a clear and concise outline of the objectives and requirements for the software development project.