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VIDYAVIHAR UNIVERSITY

K J Somaiya School of Engineering
(formerly K J Somaiya College of Engineering)

**K. J. Somaiya School of
Engineering, Mumbai-77**
**Department of Computer
Engineering**



Batch: D-2

Roll No.: 16010123324

16010123325

16010123331

Experiment No. 6

Grade: AA / AB / BB / BC / CC / CD /DD

Signature of the Staff In-charge with date

Title: User interface design using UI tools for mini project

Aim: To enable the students learn different user interface design tools and their aspects

CO: Prepare the System Design and Model

Books/ Journals/ Websites referred:

1. Roger Pressman, “Software Engineering”, sixth edition, Tata McGraw Hill.

Pre Lab/ Prior Concepts:

The user interface Need:

System users often judge a system by its interface rather than its functionality. A poorly designed interface can cause a user to make catastrophic errors. Poor user interface design is the reason why so many software systems are never used. Most users of business systems interact with these systems through graphical interfaces although.

GUI characteristics

Windows Multiple windows allow different information to be displayed simultaneously on the user's screen. Icons different types of information. On some systems, icons represent files; on others, icons represent processes. Menus Commands are selected

from a menu rather than typed in a command language. A pointing device such as a mouse is used for selecting choices from a menu or indicating items of interest in a window.

GUI advantages

They are easy to learn and use.

- Users without experience can learn to use the system quickly

The user may switch quickly from one task to another and can interact with several different applications.

Information remains visible in its own window when attention is switched.

Fast, full-screen interaction is possible with immediate access to anywhere on the

User Interface Design Models

User model — a profile of all end users of the system

Design model — a design realization of the user model

Mental model (system perception) — the user's mental image of what the interface is

Implementation model — the interface "look and feel" coupled with supporting information that describe interface syntax and semantics

User interface design analysis:

The overall process for analysing and designing a user interface begins with the creation of different models of system function (as perceived from the outside). You begin by delineating the human- and computer-oriented tasks that are required to achieve system function and then considering the design issues that apply to all interface designs. Tools are used to prototype and ultimately implement the design model, and the result is evaluated by end users for quality.

Study and describe any one user interface tool:

Figma is a cloud-based UI/UX design and prototyping tool for web and mobile apps. It enables real-time collaboration, component-based design, and interactive prototyping directly in the browser.

Key Features

- **Real-Time Collaboration:** Multiple users can edit, comment, and give feedback live.
- **Component System:** Reusable design elements ensure consistency across projects.
- **Vector Editing:** Precise tools for icons, illustrations, and layouts.
- **Prototyping:** Clickable flows, animations, and device previews for testing.
- **Cloud & Cross-Platform:** Runs in any browser on Windows, Mac, or Linux.
- **Version Control:** Automatic history and file branching.
- **Accessibility Support:** Keyboard navigation, screen reader compatibility, and contrast check plugins.

Use Cases

- Designing mobile/web app interfaces
- Building design systems & UI kits
- Creating interactive prototypes for testing
- Developer handoff with inspect mode & CSS export
- Wireframing (low to high fidelity)

Advantages

- Seamless design–development collaboration
- Centralized feedback in the cloud
- Supports responsive, accessible UI design
- Rich plugin ecosystem



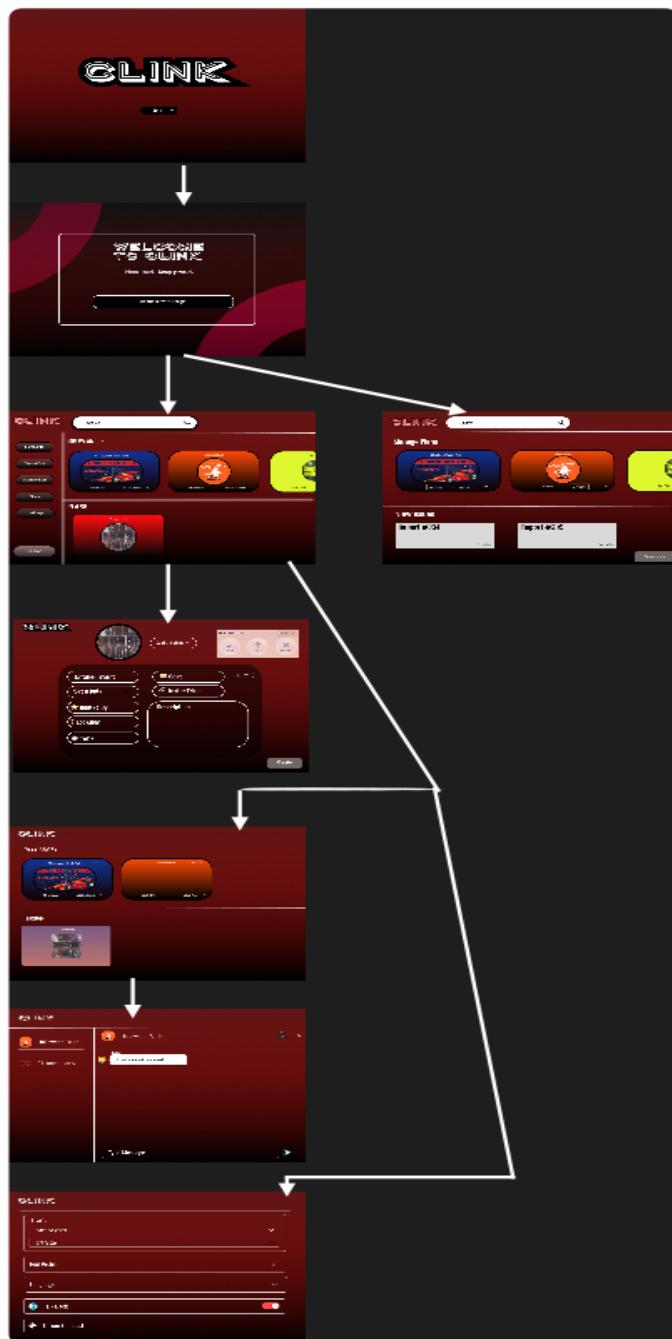
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Diagram for your system:





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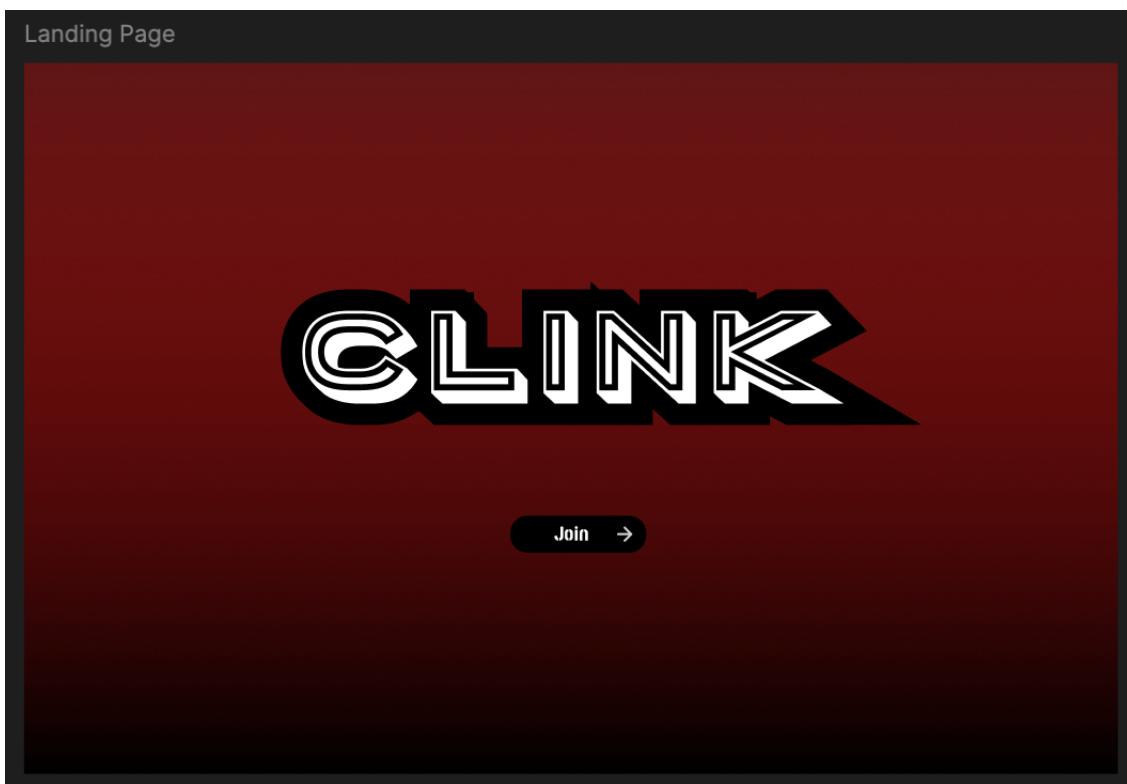
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UI design of your selected topics/ Wireframe design:

<https://www.figma.com/design/GS0p0OhbycxhwItNSiOjHv/Clink?node-id=0-1&t=0ENQjCrblRkC9LnG-1>

The UI takes care of accessibility features like responsiveness, high contrast, font size, talk back etc





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Login / Sign up Page

WELCOME TO CLINK

Host loud, Rsvp proud.

[Continue with Google](#)



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Dashboard - User/ Host

CLINK

Search

BROWSE →

- Dashboard
- Create Plan
- Manage Plan
- Chats
- Settings
- Support

F1 Singapore Watch Party
YOU'RE INVITED!
START YOUR ENGINES
05-10-2025 Socials, Powai →

Halloween Bash
TRICK OR TREAT
31-10-2025 Kasa Kai, Parel →

Surprise Party
SMILE SURPRISE PARTY
03-12-2025 Hac →

PLANS

Admin Dashboard

CLINK

Search

Manage Plans

F1 Singapore Watch Party
YOU'RE INVITED!
START YOUR ENGINES
Take Action View Clink →

Halloween Bash
TRICK OR TREAT
Take Action View Clink →

Surprise Party
SMILE SURPRISE PARTY
Take Action →

View Issues

Report #334

Details

Report #335

Details

View More

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Create Plan/ Edit Plan

CLINK

SHHH... SURPRISE PARTY

Make Public →

RSVP Options

Icons

Going **Maybe** **Can't Go**

Untitled Event

Cost

Edit

Set a Date

Invite Friends

Hosted By

Description

Location

Time

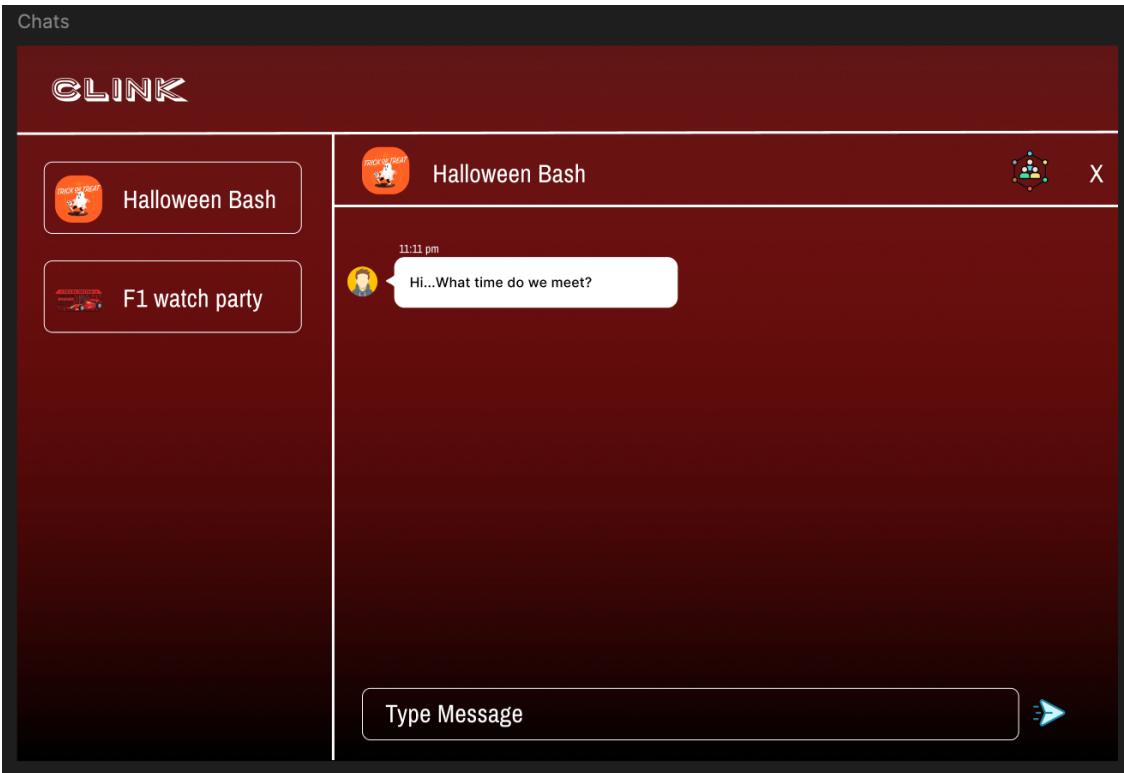
Create



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Manage Plan

CLINK

Your RSVPs



Hosted



Settings

CLINK

Font

Font Styles

Font Size

AA

Edit Profile

>

Language

▼

Talk Back

Colour Contrast

▼

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CONCLUSION:

The above experiment highlights design of UI for Clink along with addition of accessibility features for the users.

Post Lab Descriptive Questions

1. State various types of UI design tools.
 - **Wireframing & Prototyping Tools** – For sketching layouts and creating interactive prototypes.
Examples: Figma, Sketch, Adobe XD, InVision, Balsamiq
 - **Graphic & Visual Design Tools** – For creating detailed visuals, icons, and illustrations.
Examples: Adobe Photoshop, Adobe Illustrator, Affinity Designer
 - **Collaboration & Handoff Tools** – For developer handoff, feedback, and design specs.
Examples: Zeplin, Avocode, Figma Inspect Mode
 - **Animation & Interaction Design Tools** – For motion design, transitions, and interactive experiences.
Examples: Principle, Framer, After Effects, ProtoPie
 - **Design System & Component Libraries** – For managing reusable components and maintaining consistency.
Examples: Storybook, Figma Libraries, Sketch Libraries
 - **Usability Testing & Feedback Tools** – For user testing and gathering feedback.
Examples: Maze, Lookback, Hotjar, UserTesting