Human Computer Interaction

Submitted by:

Eman Muzaffar (233676)

Amina Hussain (233683)

Abeeha Fatima (233762)

Submitted to:

Sir Ubaid Bin Zafar

Semester Project

Report

Introduction

The **VR-Based Job Interview Simulator** is a cutting-edge virtual reality application aimed at helping users practice and improve their job interview skills in a realistic, immersive environment. The system uses AI-driven

feedback to analyze body language, speech, and eye contact, offering real-time performance insights. The purpose of this project was to develop an interactive, user-centered prototype in **Figma**, applying HCI principles, ergonomic design, and accessibility standards based on the system's Software Requirements Specification (SRS).

Objectives

- Develop an interactive, **high-fidelity UI prototype in Figma** based on the SRS.
- Map functional requirements from the SRS to UI components.
- Apply **HCI design principles** for usability, accessibility, and inclusivity.
- Conduct **usability testing** to identify and address design issues.

Tools Used

- **Figma** (mandatory) – For high-fidelity prototype.
- **Google Forms** (optional) – For usability surveys.
- **Notion/Docs** – For documentation and collaboration.

Norman's Interaction Model Mapping

Goal	Task	Domain Knowledge Required
Prepare for job interview	Login, Select Scenario	Basic VR usage, login process
Attend simulated interview	Start VR Session, Receive Feedback	VR controls, question understanding
Review feedback	View Reports	Interpretation of scores, recommendations
Track progress	Dashboard	Understanding of charts, improvement tracking

Gulf of Execution & Evaluation

Execution Gap	Evaluation Gap
VR icons unclear (e.g., Start Interview)	No clear confirmation when scenario is loaded

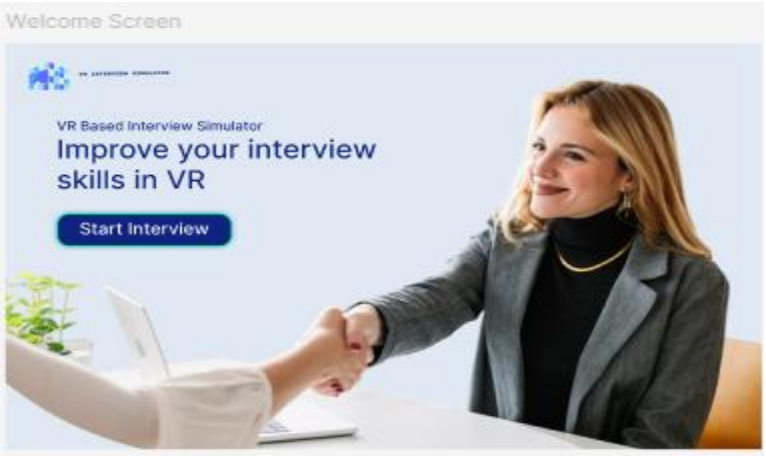
Scenario selection lacks filtering	Lack of visual feedback for gesture actions
No session replay button in main screen	Inconsistent color themes for different screens

Recommendations for Improvement

Issue	Recommendation
No feedback for task completion	Add visual/audio confirmations
Unclear icons	Add labels & tooltips
Limited color scheme	Enhance color variety for industry-specific scenarios
Lack of accessibility settings	Add voice control toggle, text-to-speech support

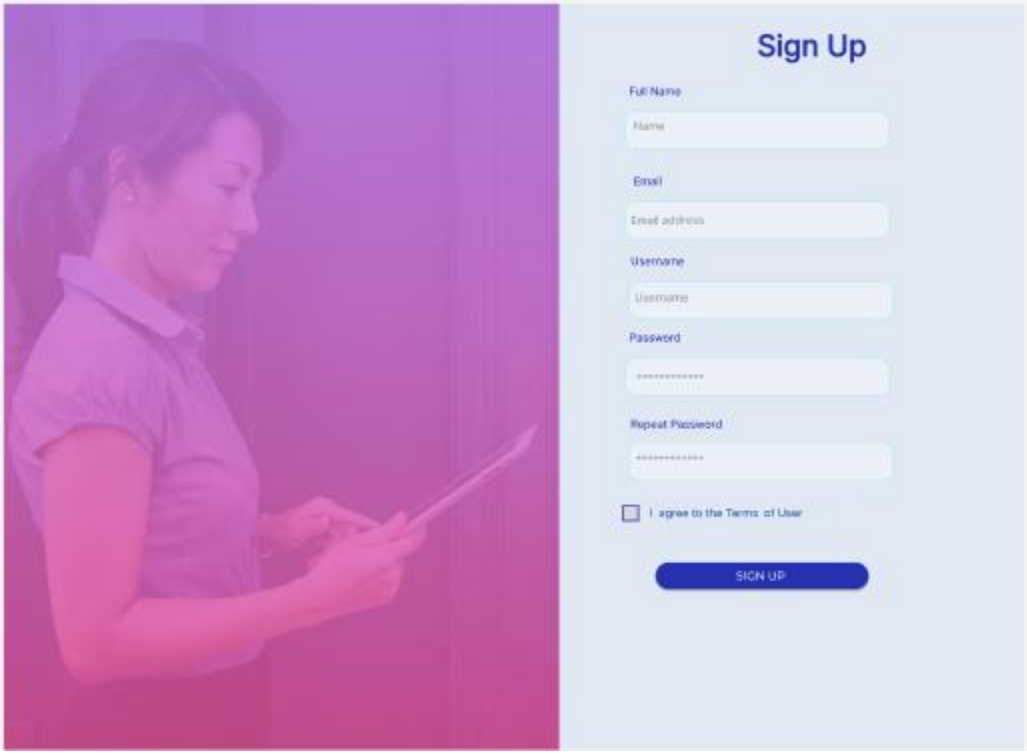
Interface Screens

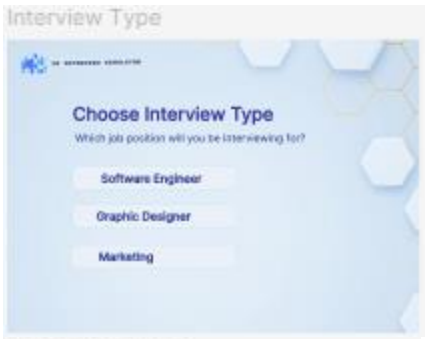
2D Screens

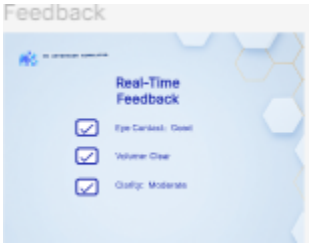


login

signup







3D Screens

1 interviewer

2 interviewers

3 interviewers

4 interviewers

Conclusion

The **VR-Based Job Interview Simulator** prototype successfully demonstrates key HCI principles in a practical application. With immersive environments, AI-driven feedback, and user-centered design, this project supports users in preparing for interviews confidently. Future iterations will focus on integrating real-time AI models, enhanced feedback systems, and expanded scenario libraries.