ACADEX: WHERE DESIGN MEETS EDUCATION

A PROJECT REPORT

Submitted by

PARVEEN – 23MCI10053

in partial fulfillment for the award of the degree

of

MASTER OF COMPUTER APPLICATIONS

Specialization: ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Under the guidance of

Mr. Shivam Sharma (E17388)

UNIVERSITY INSTITUTE OF COMPUTING

CHANDIGARH UNIVERSITY

GHARUAN, MOHALI, PUNJAB -140413

April 2025

CERTIFICATE

This is to certify that **Parveen**, a student of **Master of Computer Applications (MCA) – Artificial Intelligence and Machine Learning**, has successfully completed the Project titled, **"Acadex: Where Design Meets Education"** under the esteemed guidance of **Mr. Shivam Sharma, Assistant Professor, University Institute of Computing (UIC), Chandigarh University.**

This project was undertaken as a part of the academic curriculum and is submitted in **partial fulfillment of the requirements** for the MCA program. The work presented in this project is a result of **independent research, diligent effort, and dedication**, demonstrating the student's ability to apply theoretical knowledge to practical problem-solving.

The project successfully implements **interactive web design principles using Figma**, demonstrating an efficient approach to creating an engaging and user-friendly college website prototype. It reflects the student's understanding of **human-computer interaction concepts, user experience design, and web animation techniques**.

I hereby confirm that this project is an **original work** carried out by the student and has not been submitted elsewhere for the award of any other degree, diploma, or certification.

Project Guide:

Mr. Shivam Sharma

Assistant Professor

University Institute of Computing

Chandigarh University

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to **Chandigarh University** and the **University Institute of Computing (UIC)** for providing me with the opportunity to undertake this project, **"Acadex: Where Design Meets Education"**

I extend my heartfelt appreciation to my esteemed mentor, **Mr. Shivam Sharma, Assistant Professor,** for their invaluable guidance, continuous support, and insightful feedback throughout the project. Their expertise in **Human-Computer Interaction and Web Design Principles** played a crucial role in the successful completion of this project.

I am also grateful to my friends and peers for their encouragement and discussions, which helped refine my approach. Lastly, I thank my family for their unwavering support and motivation during this endeavour.

This project has been an incredible learning experience, and I hope it serves as a foundation for further exploration in **interactive web design and user experience development**.

Parveen

MCA – Artificial Intelligence and Machine Learning

Chandigarh University

ABSTRACT

In the era of digital transformation, creating visually appealing and interactive websites has become a critical aspect of improving user experience and accessibility. Figma, a powerful web design and prototyping tool, provides a scalable solution for designing high-fidelity web applications with dynamic elements and responsive layouts. This project focuses on developing a prototype of a **college website** using Figma to simulate real-world functionality and address the diverse needs of students, faculty members, researchers, and external stakeholders.

The website prototype includes multiple pages such as **Homepage**, **Academics**, **Research**, **Admissions**, **Faculty-specific pages**, **Job Application Portal**, **Events**, and **Contact Us**. Each page is designed with attention to detail, incorporating animations, consistent typography, and color schemes to ensure usability and engagement. The design process involved creating wireframes, integrating plugins for animations and stock images, and iterating based on feedback to refine the interface.

Interactive elements such as smooth transitions between pages and dynamic features enhance user engagement while adhering to usability standards. By leveraging Figma's capabilities, this project demonstrates the importance of prototyping in modern web design and highlights its role in applying **Human-Computer Interaction principles** effectively.

The results of this project reinforce the significance of user-centric design in improving accessibility across digital platforms. Furthermore, it serves as a foundation for exploring advanced concepts in interactive web design, usability testing, and responsive development.

INTRODUCTION

The rapid advancement of technology has led to an increasing demand for well-designed, interactive, and user-friendly web applications. Websites serve as a crucial medium for providing information, engaging users, and enhancing accessibility. Traditional website designs often lack interactivity and responsiveness, which can hinder user experience. To address this challenge, modern tools like **Figma** enable designers to create high-fidelity prototypes that incorporate animations, responsive layouts, and user-centric features.

This project focuses on designing a prototype of a **college website** using Figma. The website provides a comprehensive platform for delivering essential information about the college, including academic programs, research initiatives, admissions process, faculty details, job opportunities, events, and contact information. The design emphasizes usability and interactivity by integrating animations and ensuring consistency in layout and typography.

The objectives of this project are:

- To demonstrate the use of Figma in designing an interactive and visually appealing college website.
- To showcase the application of **Human-Computer Interaction principles** in web design.
- To establish a foundation for creating responsive and user-friendly web interfaces.

By implementing this project, the prototype illustrates the practical applications of Figma in web design. The findings highlight how Figma can be leveraged to create engaging and accessible websites that cater to diverse user needs while adhering to modern design standards.

METHODOLOGY

The project follows a structured approach to designing and implementing the college website prototype using Figma. The methodology is divided into four key stages:

1. Planning and Dataset Preparation

- **Requirement Analysis:** The initial stage involved identifying the requirements for the college website, including the pages to be designed (Homepage, Academics, Research, Admissions, etc.).
- **Content Collection:** Relevant information such as course details, faculty profiles, admission procedures, and event calendars was gathered to populate the website.
- **Design Guidelines:** Established design principles focusing on consistency, usability, and accessibility.

2. Design Implementation in Figma

- **Wireframe Creation:** Developed wireframes for each page to outline the layout and structure.
- **Prototype Development:** Designed high-fidelity prototypes with interactive elements such as animations and transitions using Figma's tools and plugins.
    - **Homepage:** Includes dynamic animations for banners and quick navigation links.
    - **Faculty Pages:** Detailed layouts showcasing faculty profiles and departments.
    - **Job Application Portal:** Interactive forms for submitting applications.
- **Plugins Used:** Integrated plugins like Unsplash for stock images and Figmotion for animations.

3. Prototyping and Testing

- **Interactive Prototyping:** Linked pages to simulate navigation and user flow across the website.

- **Usability Testing:** Conducted tests to ensure smooth transitions, responsiveness, and user engagement.
- **Feedback Integration:** Incorporated feedback from peers and mentors to refine the design.

4. Analysis of Results

- **Evaluation Metrics:** Assessed the prototype based on design consistency, ease of navigation, responsiveness across devices, and user engagement.
- **Improvements:** Identified areas for enhancement, such as optimizing animation sequences for better performance.

Steps to Execute the Project

Step 1: Setup Design Environment

- **Install Figma:** Download and install Figma on your system or use the web-based version.
- **Configure Plugins:** Integrate essential plugins like Unsplash for stock images and Figmotion for animations to enhance the design process.

Step 2: Create Wireframes

- Develop wireframes for each page of the college website, including:
    - Homepage
    - Academics
    - Research
    - Admissions
    - Faculty-specific pages (Engineering, Agriculture, Business)
    - Job Application Portal

- Events and Contact Us pages

Step 3: Develop High-Fidelity Prototypes

- Use Figma's tools to transform wireframes into high-fidelity prototypes.
- Add interactive elements such as animations, transitions, and navigation links.
- Ensure consistency in typography, color schemes, and layout across all pages.

Step 4: Test the Prototype

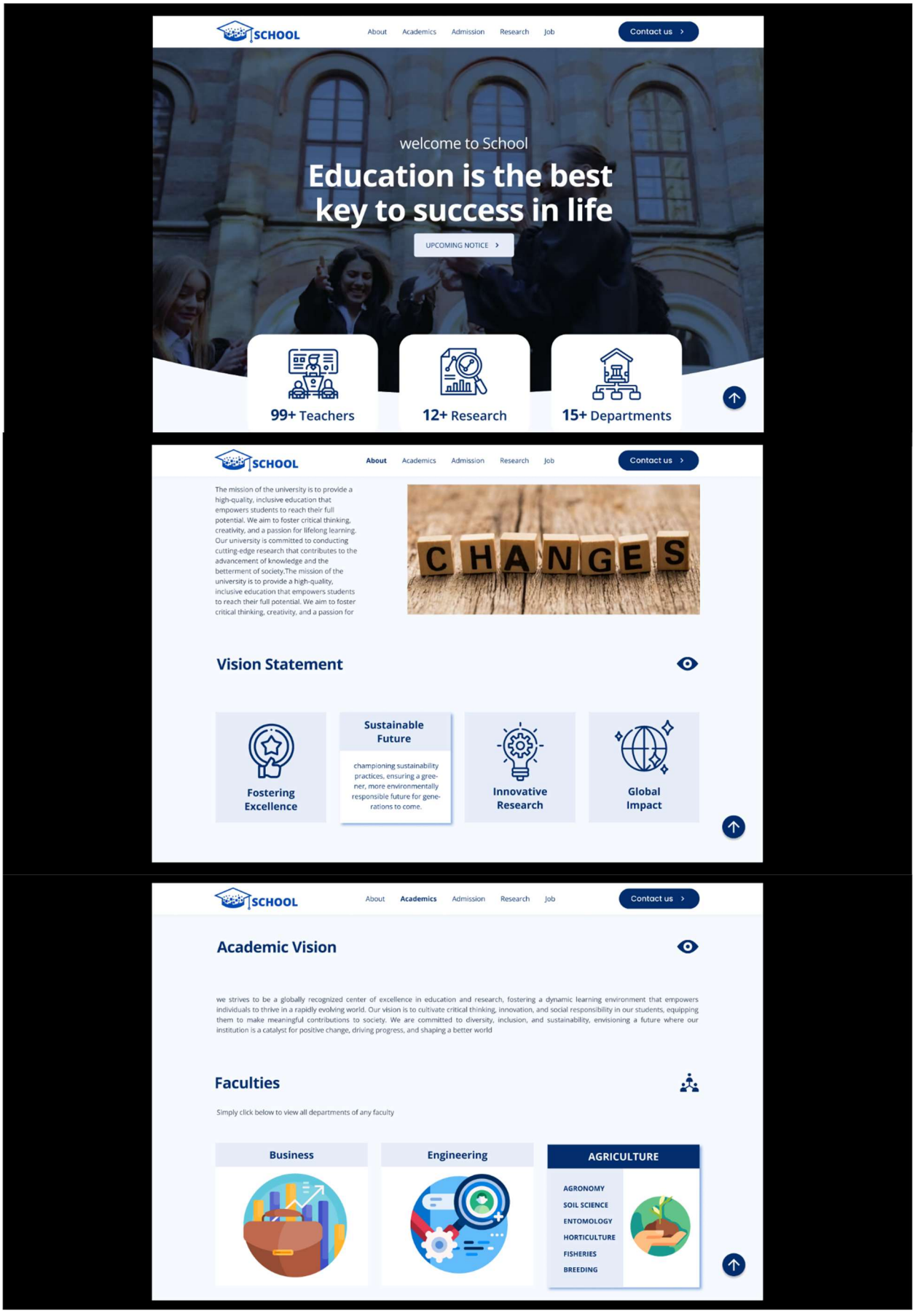
- Conduct usability testing to evaluate:
  - Navigation flow between pages.
  - Responsiveness across devices.
  - Effectiveness of animations in enhancing user engagement.

Step 5: Refine Based on Feedback

- Gather feedback from peers and mentors.
- Optimize animations and layout designs for better performance and user experience.

Results and Discussion

The output of the project demonstrates the successful creation of a high-fidelity prototype of a **college website** using Figma. The design incorporates multiple pages, including **Homepage**, **Academics**, **Research**, **Admissions**, and more, each featuring consistent layouts, animations, and responsive designs. The results highlight the efficiency of Figma as a prototyping tool for developing interactive web applications.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99+ Teachers
12+ Research
15+ Departments
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The mission of the university is to provide a high-quality, inclusive education that empowers students to reach their full potential. We aim to foster critical thinking, creativity, and a passion for lifelong learning. Our university is committed to conducting cutting-edge research that contributes to the advancement of knowledge and the betterment of society.The mission of the university is to provide a high-quality, inclusive education that empowers students to reach their full potential. We aim to foster critical thinking, creativity, and a passion for
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Vision Statement
Fostering Excellence
Sustainable Future
championing sustainability practices, ensuring a greener, more environmentally responsible future for generations to come.
Innovative Research
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Academic Vision
we strives to be a globally recognized center of excellence in education and research, fostering a dynamic learning environment that empowers individuals to thrive in a rapidly evolving world. Our vision is to cultivate critical thinking, innovation, and social responsibility in our students, equipping them to make meaningful contributions to society. We are committed to diversity, inclusion, and sustainability, envisioning a future where our institution is a catalyst for positive change, driving progress, and shaping a better world
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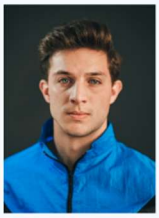
65-69	D+	1.5
60-64	D	1.0
Below 60	F	0.0

Our Expert Teachers

Hodor

Dreams are encouraged,
even the wild ones.
Reality checks come later.
Creativity knows no bounds here.



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About Academics **Admission** Research Job

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Bachelor Programs Requirements

The minimum educational requirement for admission application to bachelor programs is Higher Secondary Certificate (HSC) or twelve years of formal education in schools or College in science, commerce, humanities, vocational or other fields. Polytechnic, Agricultural Diploma, Nursing diploma holders are also qualified. In case of Madrasha students, the minimum educational requirement for application is Alim certificate. To be eligible to apply, the person must meet the following requirements:

- Candidates with GPA 2.50 out of 5.00 in SSC HSC or equivalent examinations will have to have accumulated GPA of 6.00 to qualify for admission.
- Only candidates with Science in HSC or equivalent examinations will qualify for admission in engineering programs.
- GCE candidates, 2'A' Levels with 5 'O' Levels with minimum four 'B' grades and three 'C' grades are required for admission in bachelor's programs.
- Appeared candidates at the terminal level can apply for provisional Admission but must fulfill the condition of provisional Admission at the earliest.

For other types of education, IUBAT Admissions Office may be contacted for determining equivalence

Admission Test

The applicants who are eligible for admission test will be called for appearing at the admission test that is held in the university campus on announce date and time.Candidates of ENGINEERING (Civil, Computer, Mechanical, Electrical and Electronic) programs must have Physics, Chemistry and Mathematics in their S.S.C and H.S.C

Download Sample Question

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DIT University's research corner is a vibrant nexus of intellectual exploration, where scholars and students converge to catalyze innovation and share knowledge. This dynamic space is equipped with cutting-edge resources, fostering groundbreaking research and academic excellence. It exemplifies the university's commitment to nurturing a thriving culture of inquiry and discovery.

2
Research Institutes

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Research Centers

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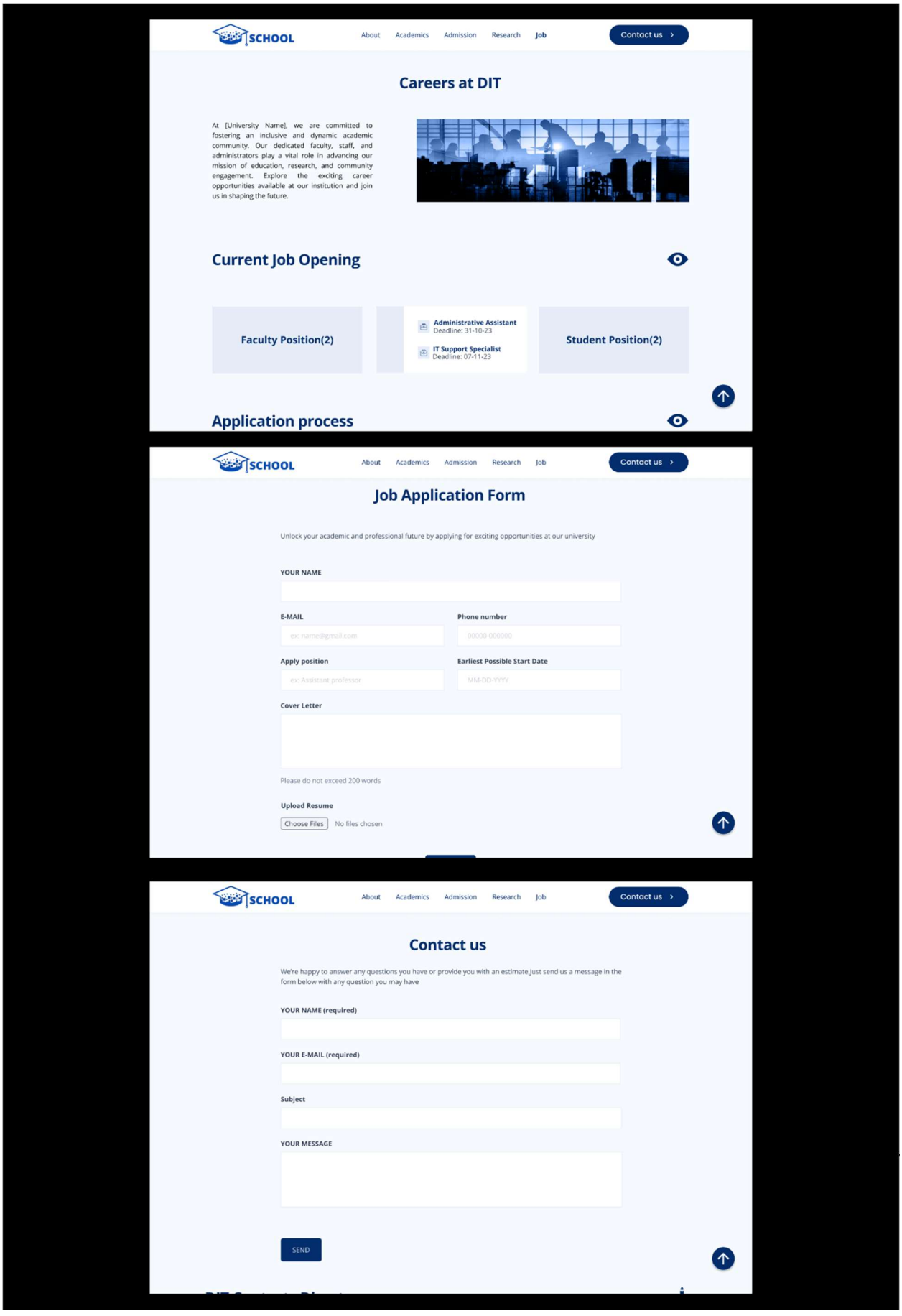
Annual Research Budget

DIT Research Institute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At [University Name], we are committed to fostering an inclusive and dynamic academic community. Our dedicated faculty, staff, and administrators play a vital role in advancing our mission of education, research, and community engagement. Explore the exciting career opportunities available at our institution and join us in shaping the future.
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Deadline: 31-10-23
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We're happy to answer any questions you have or provide you with an estimate,Just send us a message in the form below with any question you may have
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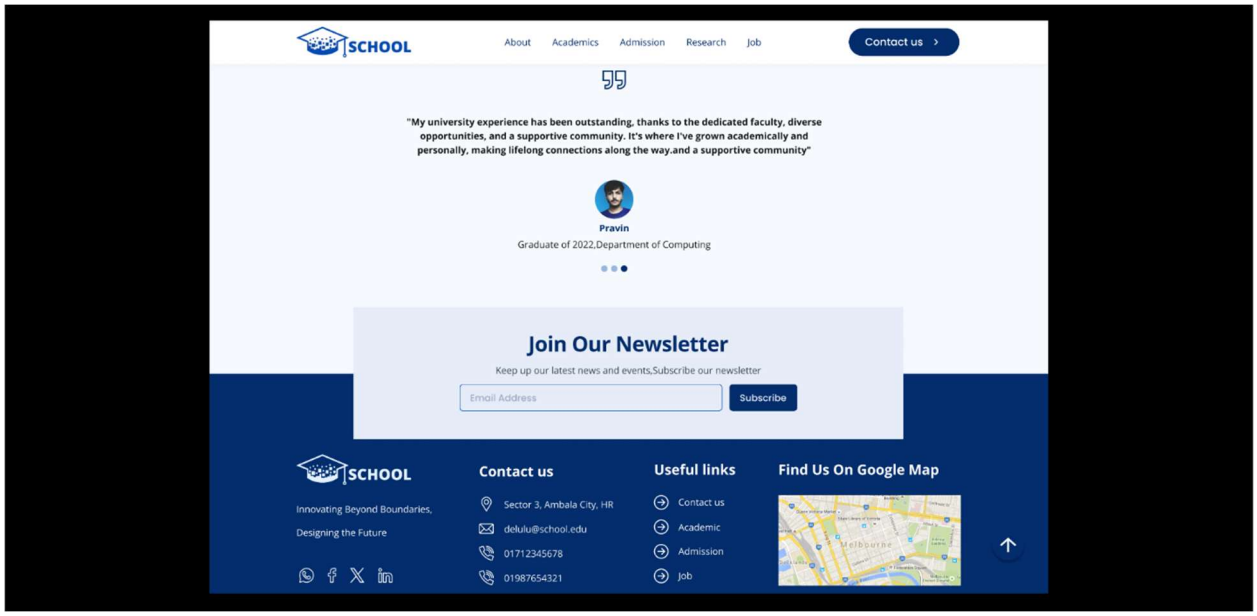

Key Observations

1. **Interactive Design:** The animations integrated into the website enhance user engagement by providing smooth transitions between pages.
2. **Responsive Layouts:** The prototype adapts seamlessly to various screen sizes, ensuring accessibility across devices such as desktops, tablets, and mobile phones.
3. **User Navigation:** Testing confirmed that users could navigate between pages intuitively without encountering usability issues.
4. **Dynamic Elements:** Features like the job application portal and event calendar function effectively, simulating real-world use cases.

Significance

The project demonstrates how Figma can be leveraged to implement **Human-Computer Interaction principles** in web design. The prototype showcases the potential of interactive elements in improving user experience and accessibility for diverse stakeholders such as students, faculty members, researchers, and external visitors.

This work serves as a foundation for future enhancements, such as integrating backend functionality or conducting advanced usability testing with larger user groups.

Conclusion

The successful completion of this project demonstrates the potential of Figma as a versatile tool for designing interactive and user-friendly web applications. The prototype of the **college website** effectively showcases essential features such as academic programs, research initiatives, admissions details, faculty profiles, job opportunities, and event information. By incorporating animations, responsive layouts, and intuitive navigation, the design adheres to modern web design standards while applying key principles of **Human-Computer Interaction**.

This project highlights the importance of prototyping in web design, especially in creating engaging and accessible interfaces for diverse users. The iterative design process ensured that feedback was integrated to refine the prototype and address usability challenges. The results emphasize how tools like Figma can streamline the design process and enable designers to simulate real-world functionality efficiently.

Overall, this project serves as a foundation for further exploration in interactive web development. Future enhancements could include integrating backend functionality to make the website fully operational or conducting advanced usability testing with a larger audience. The knowledge gained through this project reinforces the significance of user-centric design in improving digital experiences across platforms.