

# HUMAN-COMPUTER INTERFACE



Course Code: COCSE59

Submitted by:

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CSE 3

Submitted To:

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# PROJECT-2

## **AIM:**

Design a new font. The font should be for a particular type of users and/or a particular purpose (for example, for children aged 5 to 7 years, or for writing programs in C/C++). Use any font design tool to design the font. Mention and justify the design decisions. Write a paragraph of text using the new font. Upload the font file on GitHub or similar platform and provide a link to the same. Submit the entire work as a PDF in this classroom. This project has to be done by students individually.

## **1. INTRODUCTION**

Dyslexia is a learning disorder characterized by difficulties in reading due to problems identifying speech sounds and decoding how they relate to letters and words. One of the major challenges faced by people with dyslexia, especially children, is distinguishing between similar-looking letters, such as 'b' and 'd' or 'p' and 'q'.

My project aims to design a dyslexia-friendly font that enhances readability by making each letter uniquely identifiable, reducing the cognitive load on the reader hoping to help

- the dyslexic people
- children
- people new to English language

## **2. OBJECTIVES**

- To create a dyslexia-friendly font that minimizes confusion between similar-looking letters.
- To improve reading speed and comprehension through better letter recognition.

### 3. DESIGN PRINCIPLES

The font was created with the following principles in mind:

- **Distinctiveness:** Tried to make each letter distinct, giving special attention to similar looking letters.
- **Black and White Contrast:** Tried to create a white and black contrast to help dyslexic people recognise similar letters and improve readability.
- **Simplicity:** The font features clean lines and avoids decorative elements that may distract or confuse readers.
- **Spacing:** Increased letter spacing to prevent crowding and make it easier for readers to distinguish between characters.

### 4. GOALS:

- **Improved Readability:** Hoping to improve readability for dyslexic people.
- **Faster Reading Speed:** Hoping to increase reading speed for dyslexic people and children.
- **Reduced Letter Confusion:** To reduce confusion of similar-looking letters.

### 5. CHALLENGES AND LIMITATIONS

- **Design Constraints:** Balancing between making the font visually distinct while maintaining aesthetic appeal for general use was challenging.
- **Diverse Needs:** Dyslexia affects individuals differently, and a single font may not cater to all needs; thus, further customization and personalization options could be explored.

- **Testing Scale:** Testing was conducted with a limited number of participants, which may not represent the entire dyslexic population. Larger-scale studies are needed for more generalized conclusions.

## 6. FONT TEMPLATE:

calligraphr							
!	"	'	,	.	:		
;	?	A	B	C	D		
E	F	G	H	I	J	K	L
M	N	●	P	Q	R	S	T
U	V	W	X	Y	Z	a	b
c	d	e	f	g	h	i	j
k	l	m	n	o	p	q	r
s	t	u	v	w	x	y	z



Include all those four markers  
untrimmed on your photo or scan.

www.calligraphr.com



**7. FONT MADE USING CALLIGRAPHER: [Calligraphr - Draw your own fonts.](#)**

**8. SAMPLE FONT:**

Human-Computer Interface (HCI) is the field of study focused on the interaction between humans and computers. It encompasses the design, evaluation, and implementation of user interfaces that facilitate effective and intuitive communication between users and machines. HCI integrates principles from computer science, cognitive psychology, design, and ergonomics to create systems that are both functional and user-friendly.

**9. GITHUB LINK:**

**<https://github.com/Sumit-Rana-PROcrastinatz/Font-for-Dyslexic-people>**