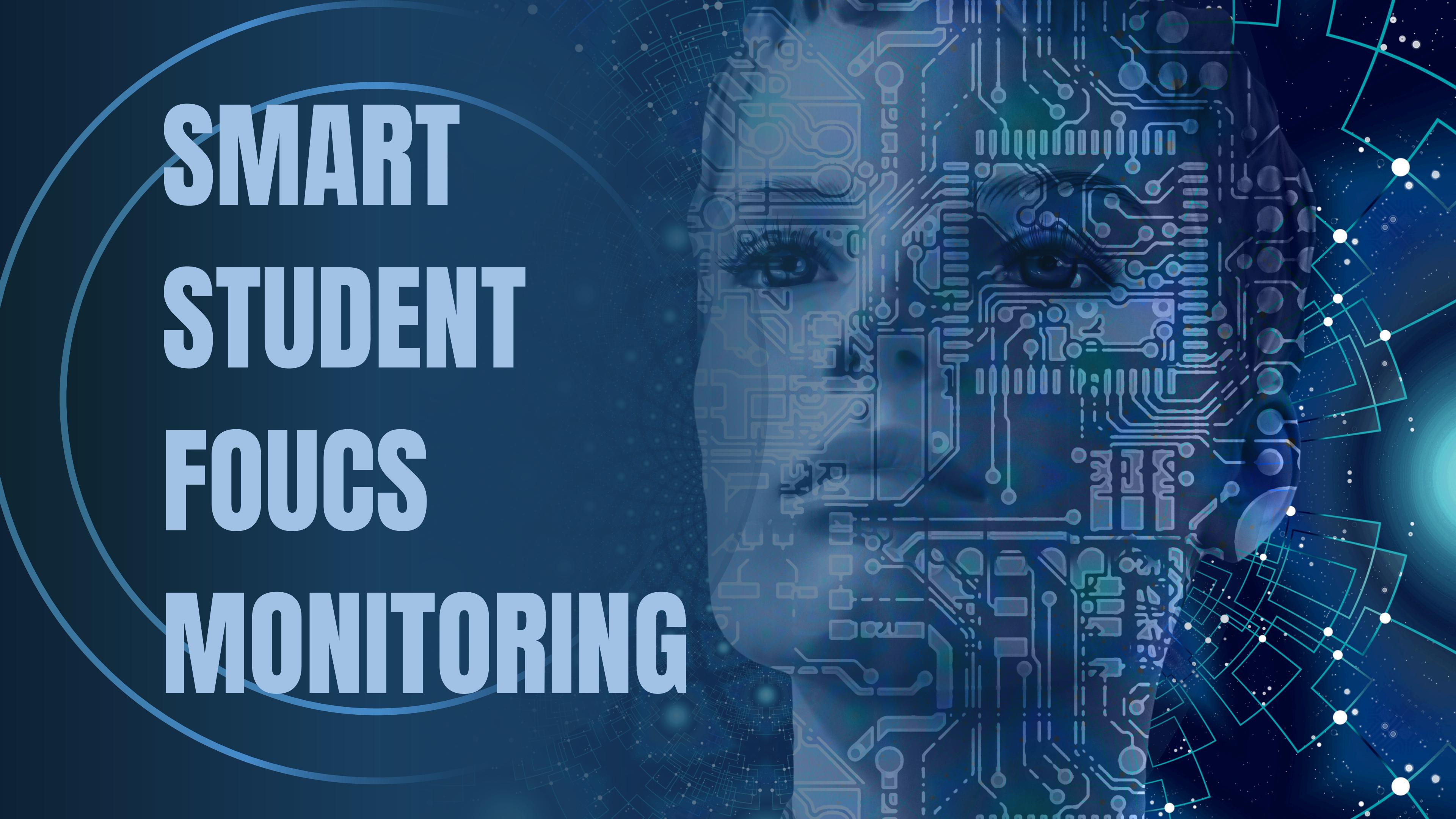


SMART STUDENT FOUCS MONITORING



HOW THE IDEA STARTED



I WISH THE INSTRUCTOR COULD KNOW
WHEN I LOSE CONCENTRATION AND TAKE
AN ACTION, SUCH AS RECORDING
ATTENDANCE, TO HELP KEEP ME ALERT

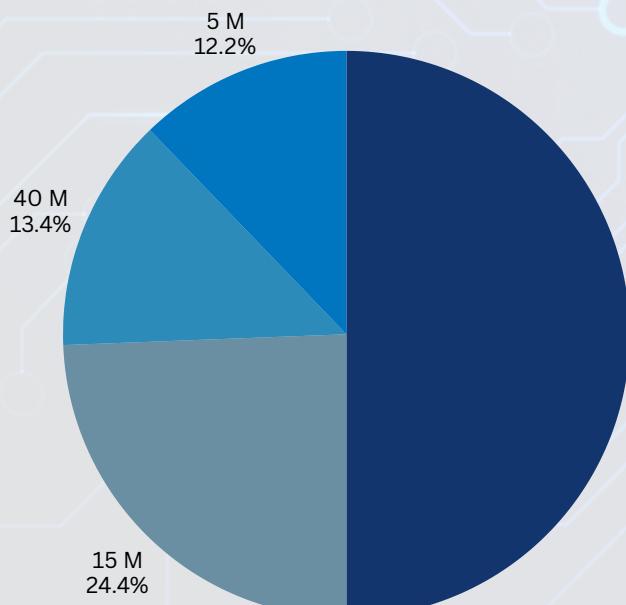


HOW WE COLLECTED INFORMATION

FROM STUDENTS:

WE PERSONALLY EXPERIENCED THE ISSUE

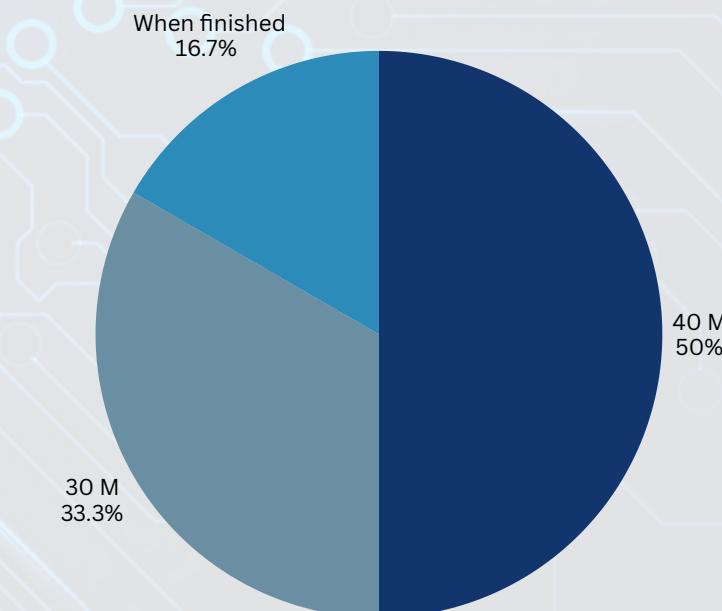
CONDUCTED A SURVEY AMONG CLASSMATES
BOTH FACE-TO-FACE AND VIA FORMS



FROM INSTRUCTORS:

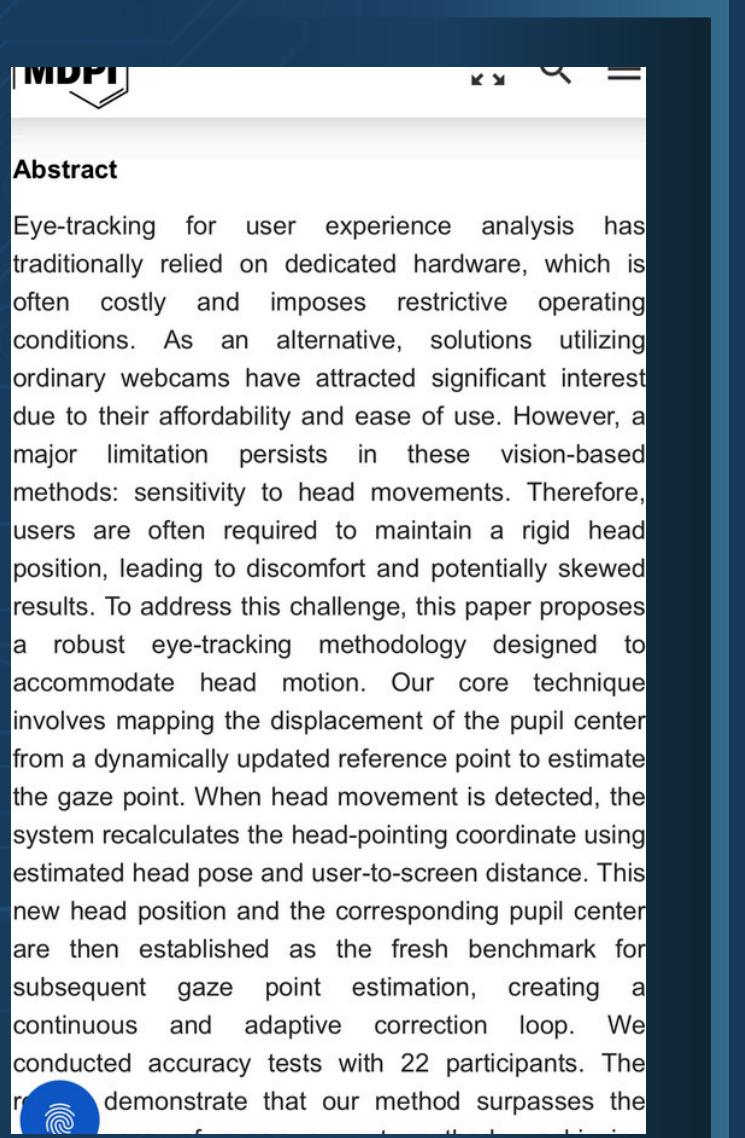
CONSULTED OUR INSTRUCTOR AND OTHER DOCTORS

ATTENDED A LECTURE TO OBSERVE STUDENT BEHAVIOR
FROM A TEACHER'S PERSPECTIVE



THINKING ABOUT A SOLUTION

WE CAME UP WITH A
SYSTEM THAT MONITORS
STUDENT CONCENTRATION
USING ARTIFICIAL
INTELLIGENCE, AND BEFORE
STARTING, WE REVIEWED
SEVERAL RESEARCH PAPERS
AND REPORTS



STUDENT ATTENTION & ALERTNESS MONITORING USING AI
MITADTSOCCON, MIT ART, DESIGN & TECHNOLOGY UNIVERSITY, IN
COLLABORATION WITH IEEE, 2024

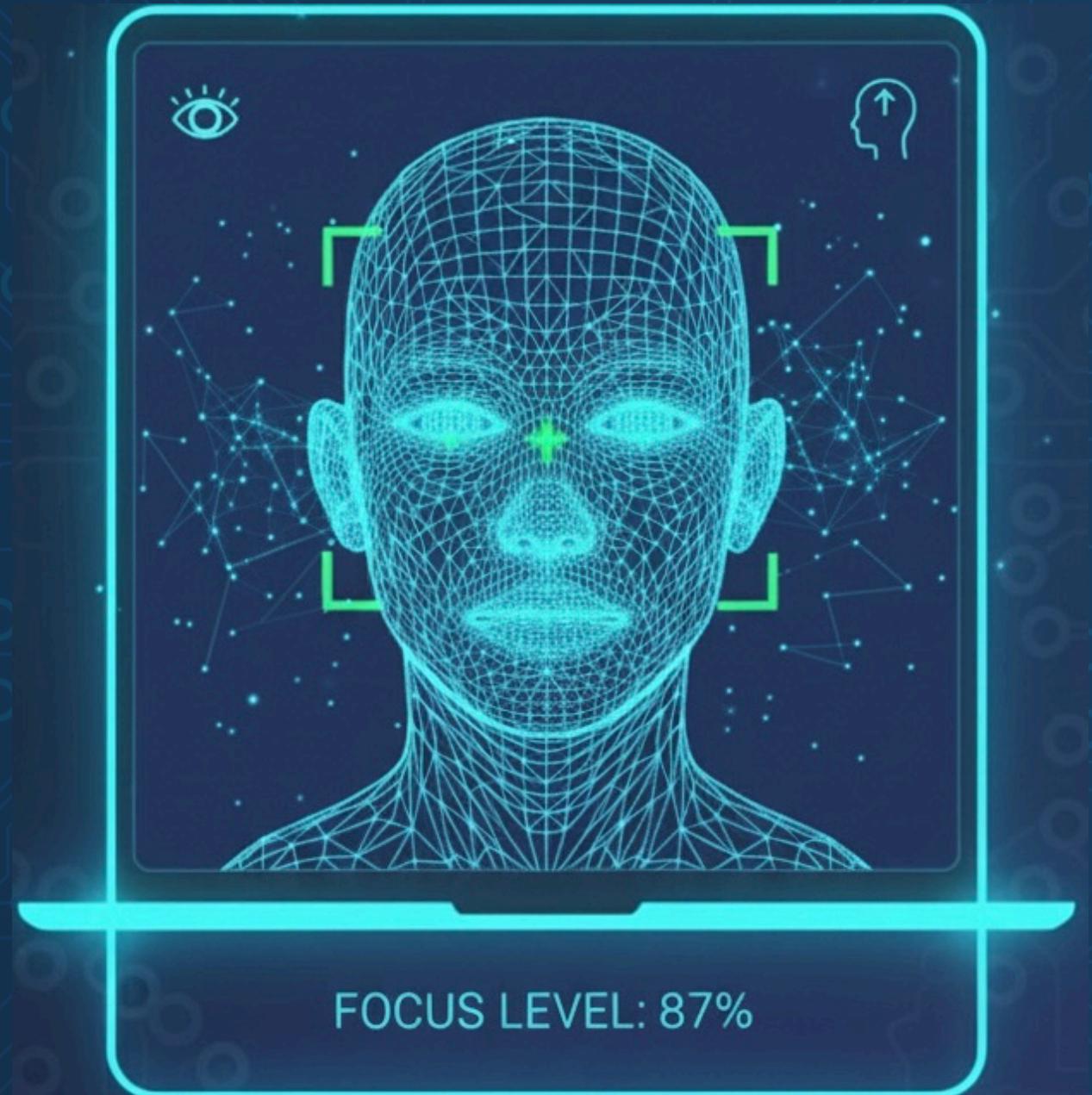
www.reallygreatsite.com

ROBUST EYE-TRACKING WITH HEAD MOVEMENT COMPENSATION
MDPI SENSORS JOURNAL

DETAILED SYSTEM EXPLANATION

AI TECHNOLOGIES USED :

- **AI & COMPUTER VISION:** ANALYZING FACIAL EXPRESSIONS, HEAD MOVEMENTS, AND CALCULATING CONCENTRATION LEVELS
- **PYTHON, OPENCV & MEDIAPIPE:** IMPLEMENTING AI ALGORITHMS AND REAL-TIME TRACKING
- **CHARTS & DATA VISUALIZATION:** CREATING REAL-TIME AND HISTORICAL REPORTS



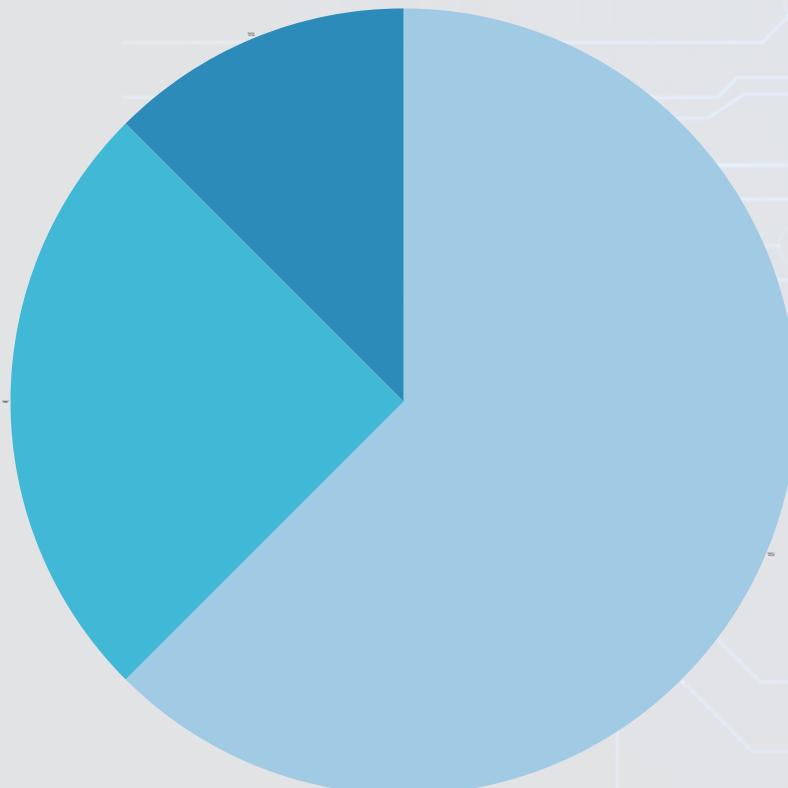
USER INTERFACE

- DESIGNED TO BE SIMPLE AND USER-FRIENDLY FOR INSTRUCTORS OF ANY TECHNICAL BACKGROUND
- COLOR SCHEME CHOSEN FOR COMFORT AND CLARITY
- LAYOUT OPTIMIZED BASED ON UX STUDIES: CLEAR BUTTONS, MINIMAL CLUTTER, EASY NAVIGATION
- FOCUSED ON QUICK ACCESS TO COURSES, MONITORING, AND REPORTS

HISTORICAL DATA & PERFORMANCE ANALYSIS



PIE CHART



HISTORICAL DATA ANALYSIS

THE SYSTEM STORES HISTORICAL CONCENTRATION DATA FROM PREVIOUS LECTURES, ALLOWING INSTRUCTORS TO ANALYZE TRENDS AND PATTERNS OVER TIME. BASED ON THIS DATA, INSTRUCTORS CAN CONDUCT STUDIES TO EVALUATE PAST LECTURES AND IMPROVE TEACHING STRATEGIES AND OVERALL LECTURE PERFORMANCE.

LINE CHART



FUTURE DEVELOPMENTS & SYSTEM IMPACT



FUTURE DEVELOPMENTS

TRACK ATTENDANCE AND MONITOR STUDENT LATENESS

USE VOICE ANALYSIS AS AN INDICATOR OF FATIGUE OR LACK OF FOCUS

SYSTEM IMPACT

EDUCATION:

ENHANCED LEARNING
THROUGH AI INTEGRATION

INSTRUCTORS:

REAL-TIME INSIGHT INTO
STUDENT ATTENTION

STUDENTS:

IMPROVED FOCUS
AND UNDERSTANDING

LIST OF WORK TASKS

DR.ABRAR

HEBA

SARAH

TO DO LIST
HEBA AND SARAH

<input checked="" type="checkbox"/> Completing the database integration for all forms	5%
<input checked="" type="checkbox"/> Finalizing the line chart feature	
<input type="checkbox"/> Adding Yarmouk University's logo image	
<input type="checkbox"/> Converting the project into App	
<input type="checkbox"/> Improving detection so it can recognize unusual shapes, not only faces	
<input type="checkbox"/> Completing the two diagrams and converting them	
<input checked="" type="checkbox"/> Preparing a PowerPoint presentation with around 8 slides	
<input type="checkbox"/> Writing the content to be included in the poster	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

TO DO LIST
HEBA AND SARAH

<input checked="" type="checkbox"/> Completing the database integration for all forms	75%
<input checked="" type="checkbox"/> Finalizing the line chart feature	
<input type="checkbox"/> Adding Yarmouk University's logo image	
<input type="checkbox"/> Converting the project into App	
<input checked="" type="checkbox"/> Improving detection so it can recognize unusual shapes, not only faces	
<input checked="" type="checkbox"/> Completing the two diagrams and converting them	
<input checked="" type="checkbox"/> Preparing a PowerPoint presentation with around 8 slides	
<input checked="" type="checkbox"/> Writing the content to be included in the poster	
<input type="checkbox"/>	
<input type="checkbox"/>	

TO DO LIST
HEBA AND SARAH

<input checked="" type="checkbox"/> Completing the database integration for all forms	60%
<input checked="" type="checkbox"/> Finalizing the line chart feature	
<input type="checkbox"/> Adding Yarmouk University's logo image	
<input type="checkbox"/> Converting the project into App	
<input checked="" type="checkbox"/> Improving detection so it can recognize unusual shapes, not only faces	
<input checked="" type="checkbox"/> Completing the two diagrams and converting them	
<input checked="" type="checkbox"/> Preparing a PowerPoint presentation with around 8 slides	
<input type="checkbox"/> Writing the content to be included in the poster	
<input type="checkbox"/>	
<input type="checkbox"/>	

TO DO LIST
HEBA AND SARAH

<input checked="" type="checkbox"/> Completing the database integration for all forms	100%
<input checked="" type="checkbox"/> Finalizing the line chart feature	
<input checked="" type="checkbox"/> Adding Yarmouk University's logo image	
<input checked="" type="checkbox"/> Converting the project into App	
<input checked="" type="checkbox"/> Improving detection so it can recognize unusual shapes, not only faces	
<input checked="" type="checkbox"/> Completing the two diagrams and converting them	
<input checked="" type="checkbox"/> Preparing a PowerPoint presentation with around 8 slides	
<input checked="" type="checkbox"/> Writing the content to be included in the poster	
<input type="checkbox"/>	
<input type="checkbox"/>	

WE HAVE CONCLUDED WITH GOD'S HELP



THANK YOU

DR.ABRAR FAWAZ
HEBA ODIBAT
SARAH HAWAMEDH