

EyeCue

## AI-Powered Real-Time Attention Monitoring

Abedalrheem Fialah

Aya Jabi

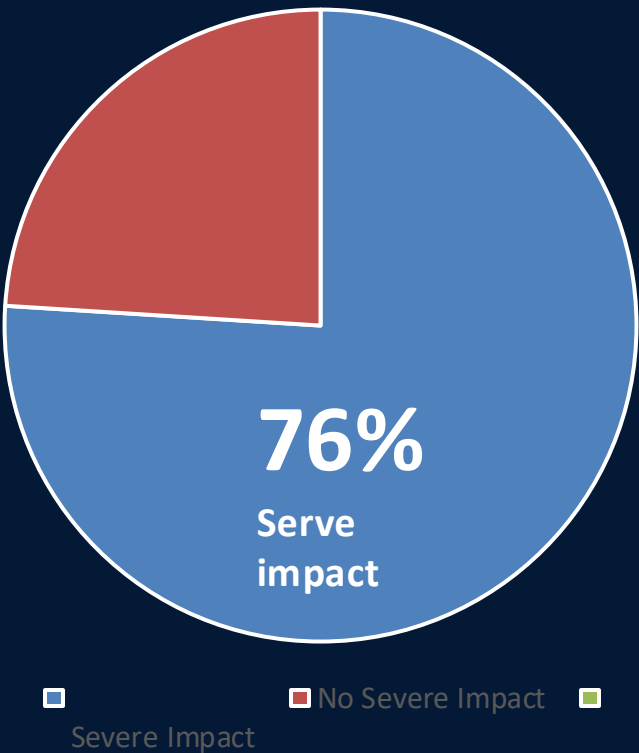
Ibrahim Abuhashhash

Saif Sabelaish

Taleen Abuzulof

# Problem Statement

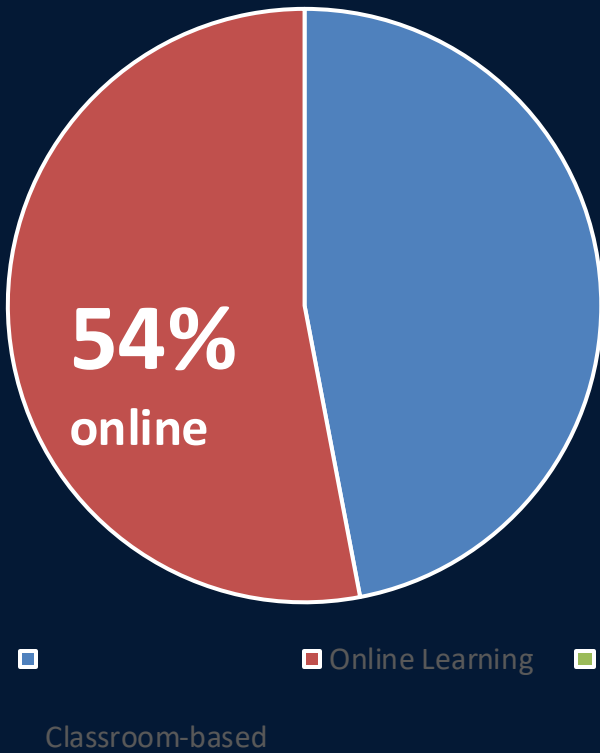
Impact of attention loss



72%

Students report low engagement hurt their online learning experience

Children's learning preference



75%

School leaders report moderate to severe negative impact from student inattention

## 01 Children Easily Lose Focus

Young students get distracted by games, videos, and surroundings during online classes, making it hard to stay engaged.

## 02 Teachers Can't See Who's Paying Attention

Without a way to track focus in real time, teachers miss cues when children zone out or need help.

# Proposed Solution



## We will develop an application to

- Monitor children's attention during online classes through webcam-based AI tracking of head movements and facial expressions
- Display real-time attention levels for each student in an easy-to-read dashboard
- Alert teachers immediately when a student's focus drops significantly
- Generate session summaries and engagement reports to track long-term participation trends

# Value propositions

## **01** Actionable Insights

Enhance decision-making for educators

## **03** Tailored Learning

Customize content for individual needs

## **02** Improved Engagement

Faster active participation in classes

## **04** Performance Tracking

Monitor progress and identify challenges

# Features



## 01 Real-Time Attention Monitoring

Tracks attention during learning sessions

## 02 Threshold-Based Alerts

Notifications based on user engagement levels

## 03 Attention Trends

Tracks attention patterns and highlights engagement trends over time

# Real-Time Attention Monitoring

- As a teacher, I want to see each student's attention in real time to support those who lose focus.
- As a teacher, I want to track the class's average attention to adjust my teaching pace.

# Threshold-Based Alerts

- As a teacher, I want to get an alert when the class's average attention drops, so I can re-engage students
- As a teacher, I want to be notified if a student's attention falls significantly, so I can check in with them.

# Attention Trends

- As a teacher, I want to see each student's attention stats (highest, lowest, average) during a session to spot who needs support
- As a teacher, I want to compare today's class attention with previous sessions to track engagement trends
- As a teacher, I want a summary report after each class to help identify students who may need follow-up



# Feature Prioritization Table

Feature	Priority
Real-Time Attention Monitoring	P1
Threshold-Based Alerts	P2
Attention Trends	P3

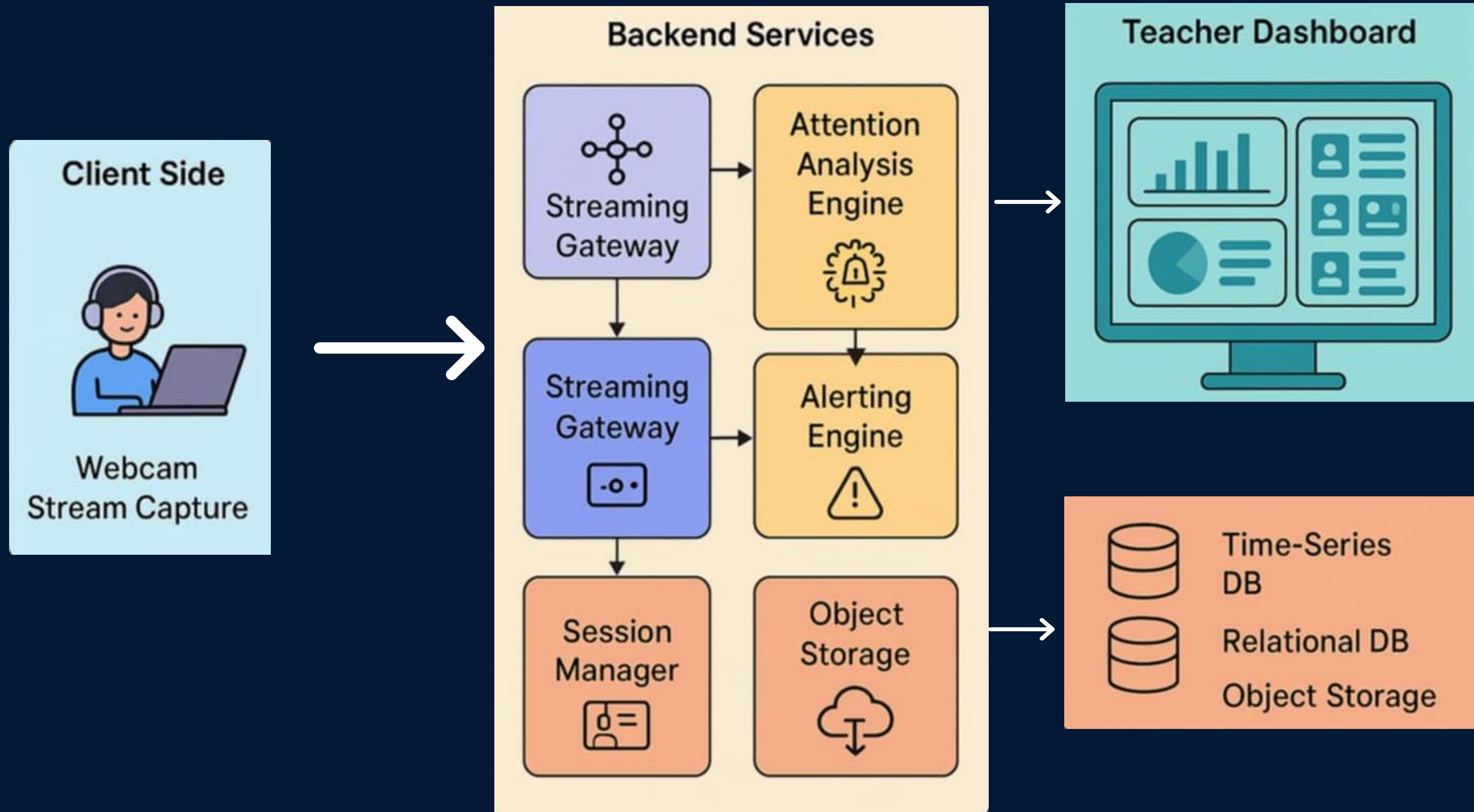
# MVP: Key Features

- Real-Time Attention Monitoring: Live display of each student's attention using webcam-based head tracking
- Threshold-Based Alerts: Automatic alerts when individual or class attention drops below set levels

# Out of MVP Scope

- Long-Term Attention History: storage or session-over-session tracking of student attention data
- Advanced Analytics Graphs: complex charts, comparisons, or statistical visualizations in this phase
- AI-Based Focus Suggestions: personalized suggestions to help students regain focus once a loss of attention detected

# System Architecture



**Thank you**