



SENTIVIEW:

TRANSFORMING STUDENT FEEDBACK
INTO INSIGHTFUL VISUAL NARRATIVES
WHILE PRESERVING SENTIMENTS



Meet Our Team

Authors

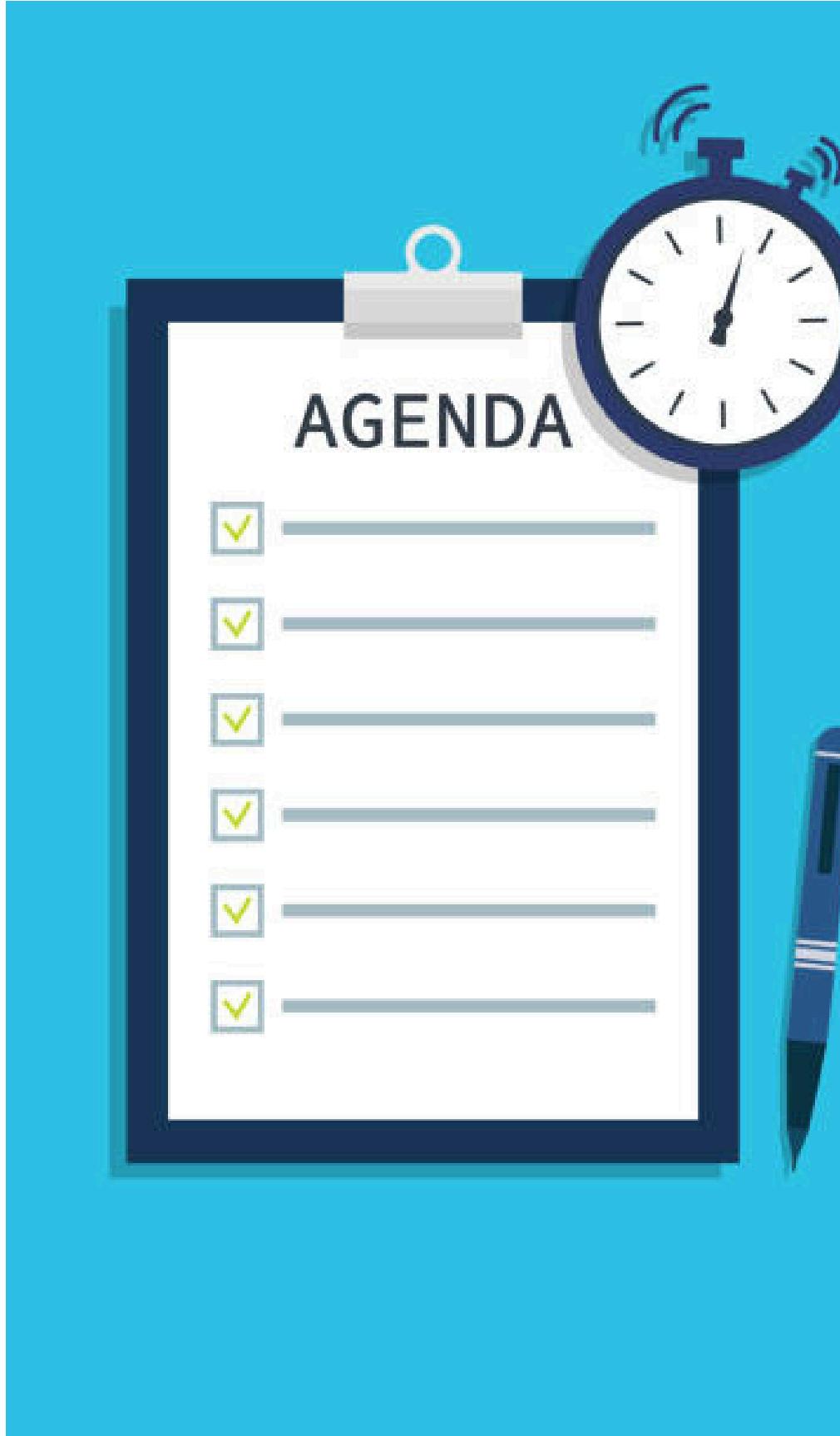
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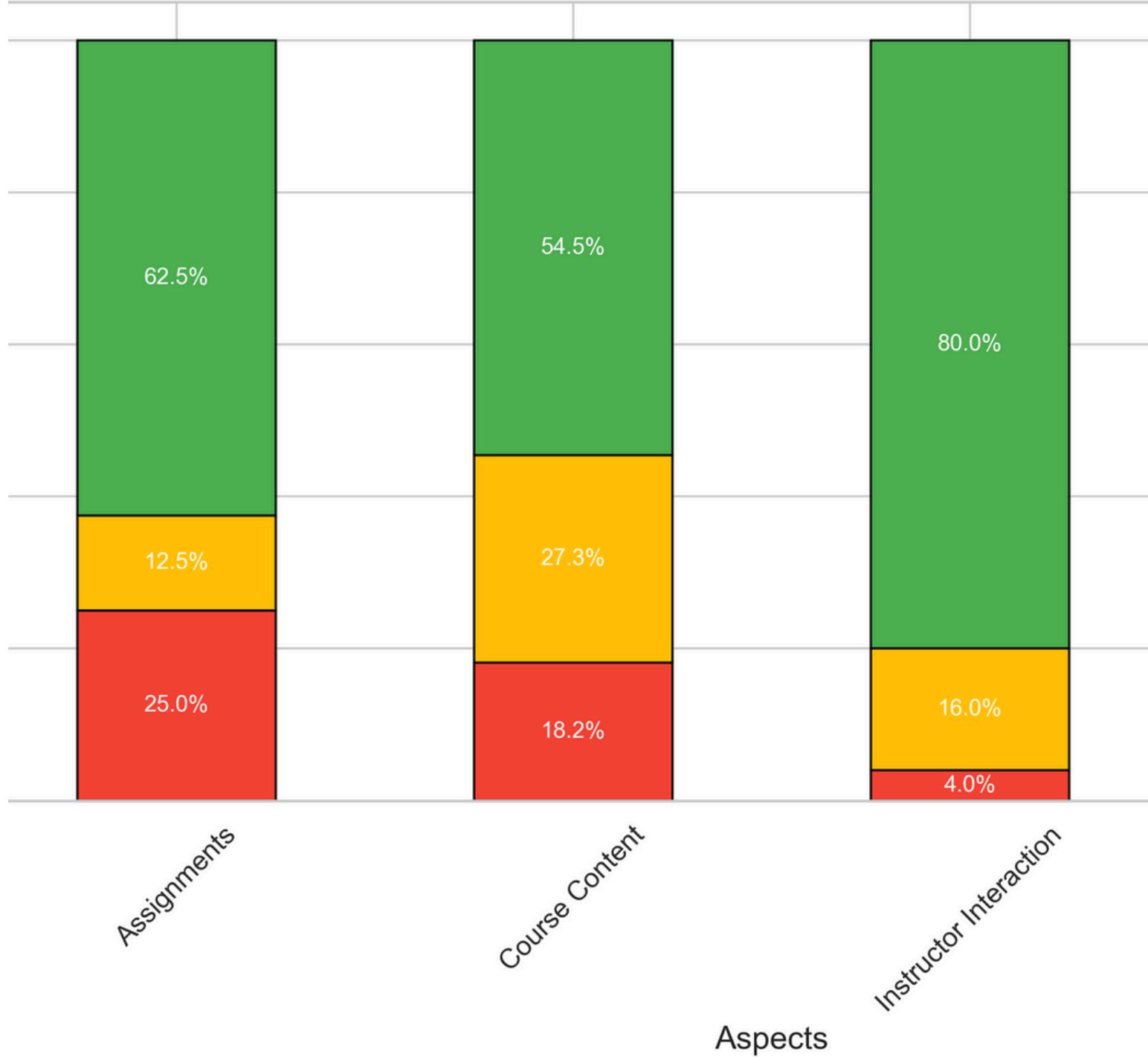
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Agenda

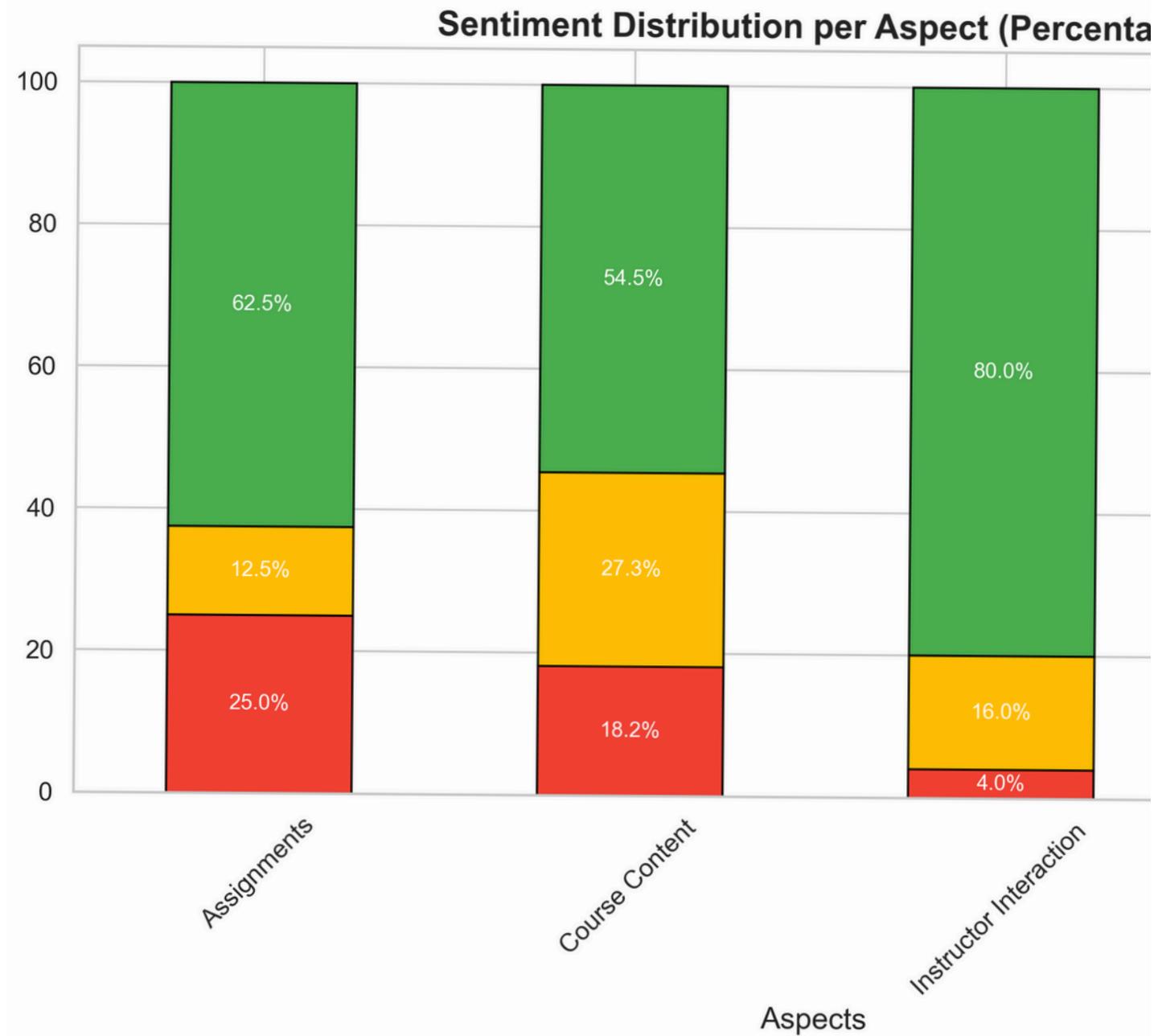
- Introduction
- Problem statement
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Sentiment Distribution per Aspect (Percentage)

Introduction

Why Sentiview

- Student feedback is key to evaluating faculty performance.
- Traditional methods for feedback analysis are time-consuming and prone to bias (Gupta et al., 2019).
- Existing methods miss specific aspects like teaching methods or knowledge (Hajrizi & Nuçi, 2020).
- Direct sharing of harsh or aggressive comments with teachers can be discouraging that may hinder constructive reflection (Hill, 2024)



Introduction...

Why Sentiview

- Need of interactive system that can
 - extract useful insights from the student feedback
 - leverage LLMs and NLP techniques for extracting the crucial aspects and their sentiments
 - paraphrasing harsh feedback while preserving its meaning that promotes growth by constructive reflection

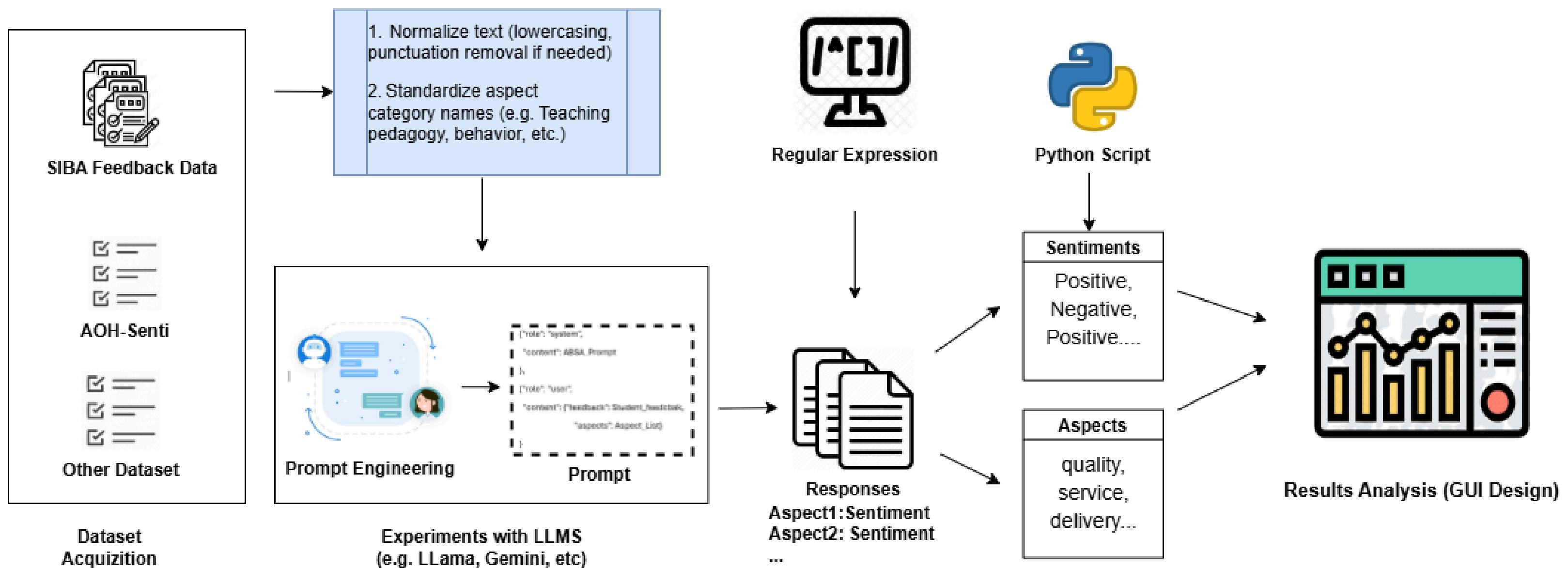
Problem Statement

- Vast student feedback data exists, but institutions lack efficient tools to process it.
- Manual analysis misses specific aspects like teaching quality, clarity, and engagement.
- Harsh feedback shared directly can be discouraging.

Solution Needed

- Automated system using LLMs for aspect-based analysis.
- Intuitive GUI to present actionable, visualized insights.

Methodology





Methodology

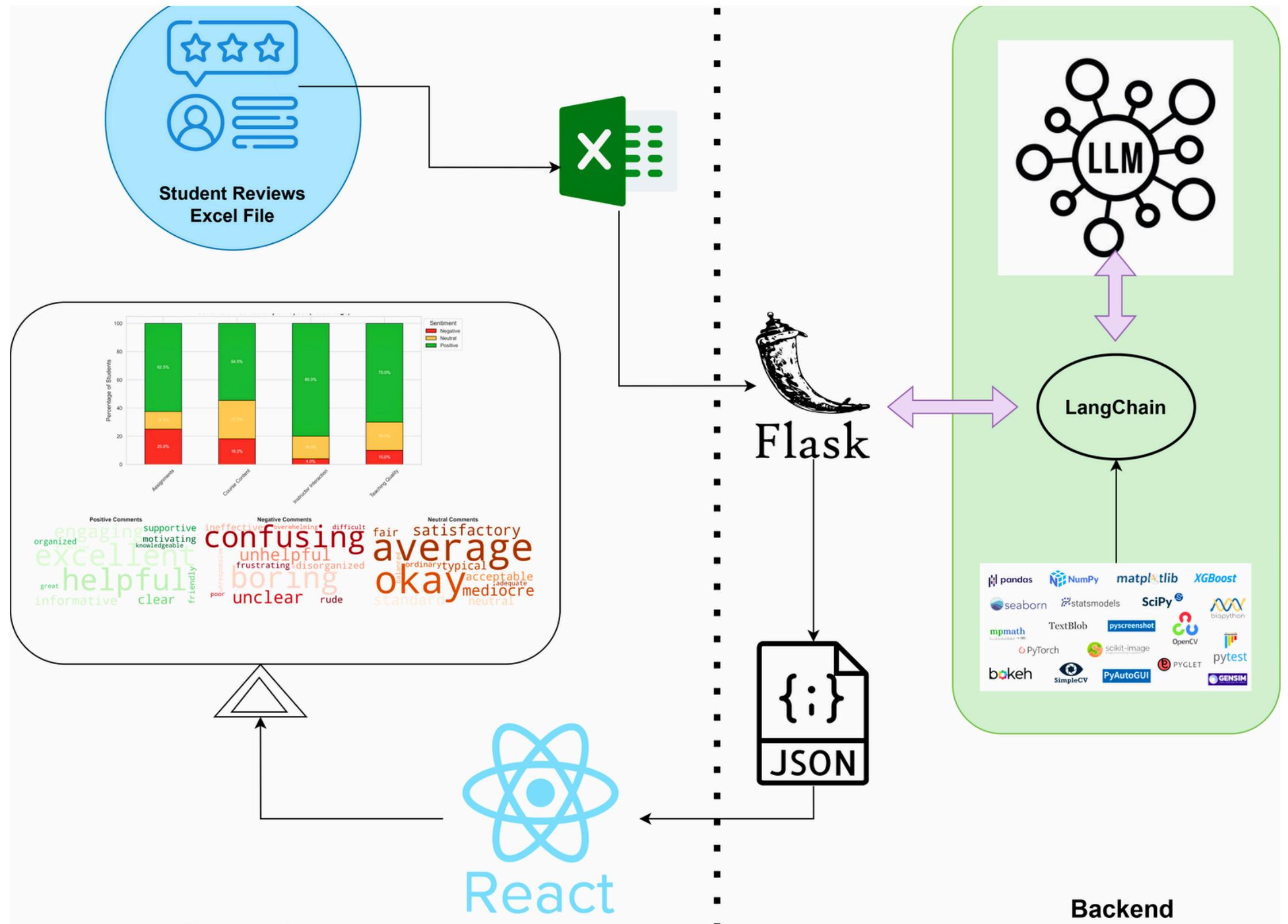
```
{"role": "system",
  "content": ABSA_Prompt
},
{"role": "user",
  "content": {"feedback": Student_feedback,
    "aspects": Aspect_List}
}
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ABSA_Prompt = "You are an aspect-based sentiment analysis assistant. Given a feedback sentence and a list of aspect categories, identify the sentiment polarity of each aspect if mentioned. Return results in JSON format. Use one of: 'positive', 'negative', 'neutral', or 'not mentioned'."

Student_feedback = "The lectures were interesting, but the assignments were confusing.",

Aspect_List = ["lectures", "assignments", "course content", etc]

Methodology





Dataset Overview

by (Sindhu et al., 2019)

01

Stats:

- 2,180 student reviews.
- 5,015 sentences.
- 6 aspects: Teaching Pedagogy, Knowledge, Experience, Assessment, Behavior, General.
- 3 sentiment categories: Positive, Negative, Neutral.

02

Purpose:

Comprehensive insight into faculty performance.

	Remarks	Aspect	Orientation
1			
2	he is possessing high Teaching Skills	Teaching Pedagogy	Positive
3	he has skills to understand the capability of students to run the class accordingly	Teaching Pedagogy	Positive
4	Always degrade the students	Behavior	Negative
5	He is very fast!	Teaching Pedagogy	Negative
6	The teacher is well equipped with enough knowledge	Knowledge	Positive
7	He is Expert of the finance field	Knowledge	Positive
8	hH also was a bit speedy	Teaching Pedagogy	Negative
9	The pace of his teaching was fast so few points were missed	Teaching Pedagogy	Negative
10	He provides real time learning environment with his experience	Experience	Positive
11	Nice teacher	General	Positive
12	Well-Experienced	Experience	Positive
13	Always pay respect to students	Behavior	Positive
14	should be slow in pace while teaching	Teaching Pedagogy	Negative
15	we learned alot in the class	Experience	Positive
16	evaluation is unjustified	Assessment	Negative
17	Excellent Teaching Skills	Teaching Pedagogy	Positive
18	He has strong knowledge about course	Knowledge	Positive
19	he is very good teacher for case study especially	Knowledge	Positive
20	Brilliant Methodology	Teaching Pedagogy	Positive
21	Nice approach of teaching	Teaching Pedagogy	Positive
22	Keeps each student on same track	Behavior	Positive
23	He is good i think Sir a guru of finance at SIBA	Knowledge	Positive
24	sir taught us very effectively	Teaching Pedagogy	Positive
25	Sir still hasn't given result of 1st 2nd mid strongly disagree in fair assessment option	Assessment	Negative
26	His pace is very much high	Teaching Pedagogy	Negative
27	I have a very wonderful learning experience with respected sir	Teaching Pedagogy	Positive
28	one of the most talented teaching faculty	Knowledge	Positive
29	sir has a lot practical knowledge we are very lucky because we have learned many things	Knowledge	Positive
30	he is a great teacher in terms of teaching methods	Teaching Pedagogy	Positive
31	he explained less about the topics must work on his knowledge	Knowledge	Negative
32	he should teach the students in proper way	Teaching Pedagogy	Negative
33	he only asks from students don't define himself	Teaching Pedagogy	Negative
34	The way of teaching is good	Teaching Pedagogy	Positive
35	He has good knowledge	Knowledge	Positive
36	a man with a grace	Behavior	Positive
37	He was very friendly to us	Behavior	Positive
38	Enhance effective learning	Teaching Pedagogy	Positive
39	well prepared in classes	Teaching Pedagogy	Positive
40	he has excellent teaching methodology	Teaching Pedagogy	Positive
41	exceptionally brilliant teacher i have ever learned from experienced teacher	Experience	Positive
42	his teaching method is quite learning for students	Teaching Pedagogy	Positive
43	The best teacher at IBA	General	Positive
44	please employ all teachers as he is	General	Positive
45	such a wonderful person in sukkur iba	General	Positive
46	very cooperative honest	Teaching Pedagogy	Positive
47	outstanding mentor	General	Positive
48	Sir gets personal with students on silly things too quickly	Behavior	Negative
49	sir seems to be suffering from objection	Behavior	Negative
50	shows too much anger	Behavior	Negative



Major Outcomes

Aspect-level sentiment analyzer system

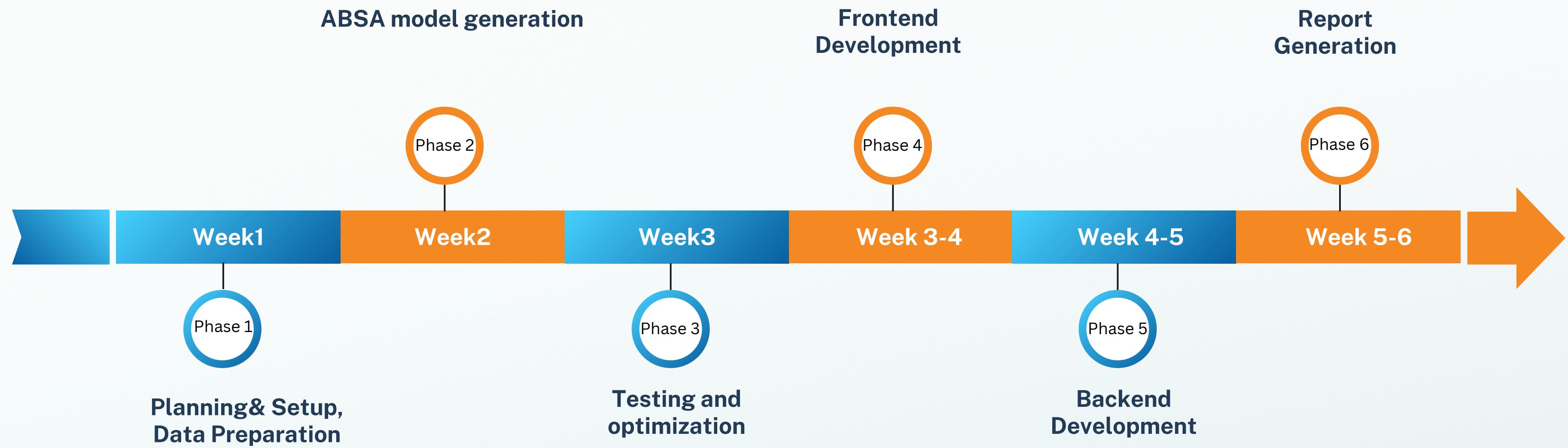
Qualitative feedback analysis, overcoming manual challenges

An interactive website for one-click exploration of teacher reviews by subject.

Improved faculty assessment with detailed, actionable insights.



PROJECT TIMELINE





Thank You