"Ask Dora": A User-Centered Approach to **Generative Al Integration**

Background

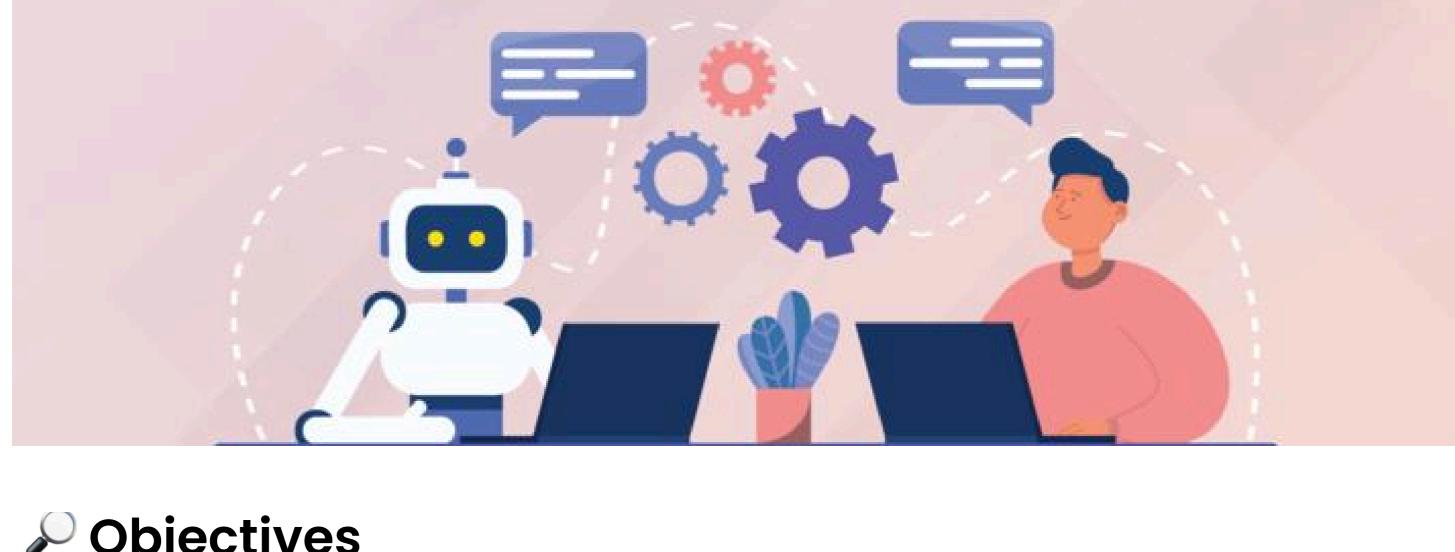
User feedback and queries revealed a strong demand for a generative AI feature within an AI based writing assistant tool. This enhancement would address evolving user needs and expand the tool's value proposition to support diverse writing workflows.

Scope User Interviews, Secondary Research, Competitive **Analysis**

Tools Zoom, Calendly, Figma, Google

Timeline 1 month

sheets



• Assess the use of a Generative AI feature for users by analyzing how it integrates into their current writing workflows.

• Identify user challenges and expectations from a Generative AI feature. • Analyze similar AI-powered writing tools in the market, assess their feature offerings, UI-UX, and uncover gaps that writing

- assistant tool can uniquely address.
- **Methodology**

• Primary Research: User Interviews

- Secondary Research

• Focus Area: a. Investigating the preferences and methods users employ during the writing and content generation process. Commonly used

2. Challenges faced while using Gen Al

focusing on the integration of generative AI into user writing workflows.

employed to ensure the originality in the output. b. Exploring the role of different tools for revision in their writing process w.r.t grammar suggestions, plagiarism , and AI content detection

To establish a foundation for the "Ask Dora" feature, we conducted comprehensive secondary research,

- 1. Purpose of using Gen Al
- Key FIndings:
- a. Genral Use case:
- 1. Majority prefer using Generative AI for the purpose of grammar corrections, paraphrasing/refining text and finidng gaps in their drafts/ articlss
- 3. Other major use case is content generation/ template geenration
 - b. Challenges faced: 1. Al generated content contains hallucinations i.e. some false statements along with accurate information
 - 3. There are challenges in maintaing the integrity standard while using the AI generated content.

2. Generative AI is also used to summarize and translate content

6 Competitive Analysis

2. The generated data maybe outdated

• Analyzed features of competing tools like , Grammarly, QuillBot, Writer.com, ProWriting Aid, Wordtne to evaluate their Gen Al feature and functionality.

b. Current generative AI usage and experiences

b. We did thematic analysis for each interview

c. Challenges and expectations from a generative AI feature

- WORDTUNE **GRAMMARLY** QUILLBOT WRITER **PROWRITING AID Feature Offerings**
- tonality

 What are the colors they have chosen

 What is the font they have gone for?

 Have they used icons? What kind of
 icons have they used?

 Is the design accessible for all groups UI * First impressions- How to access the Gen Al feature? How many steps are involved? How much time does it take? How is the navigation across the platform?
 How easy it is to access the Gen Al

Following an initial exploration of generative AI usage in research workflows through secondary research, we conducted user interviews to deepen our understanding of user behaviors, challenges, and needs. This approach allowed us to validate preliminary findings, uncover nuanced pain points, and gather actionable insights to inform feature development. For conducting user interviews following points were taken into consideration: • Target Audience: 8 active platfrom users, including university students and professors, recruited through personalized email

d. Insights into maintaining integrity and originality while using generative AI Data Analysis:

a. After the interviews were conducted these sessions were transcribed and inferences were written for each transcript

- **User Interview Findings:** Following are the insights drawn after doing an overall analysis: a. General Use Case: 1. Majority of the users used Generative AI for the purpose of refinising/paraphrasing their content. 2. To genrate outline/ structure for their drafts 3. Other use cases include: summarising text, looking for similar topics and finidng gaps in their work b. Pain Points: 1. Accuracy: Concerns about hallucinations in generated content. 2. Integrity: Changes in the meaning of the content after AI assistance. 3. Time Consumption: Significant time spent fact-checking AI-generated outputs. 4. Plagiarism: Al generated content is often flagged as plagarized c. User Expectation: 1. Introduce a fact checking feature 2. Domain specific prompts tailored as per user's area of work
 - Introduction: The following study is being conducted to understand researchers' an ChatGPT (n=5) Objectives:

User Research Study

Researc

Moster's St

reliable outputs guided feature prioritization.

ensuring seamless workflow integration.

create a competitive edge.

satisfaction and retention

Wireframing / Lo-fi Design

Design low-fidelity/ wireframes

incorporating user feedback

Basic

Premium

Master's Student Civil Engineering

the Stakeholders

User Research Study

(iii) Understand

Understand

academic v

you ideas of how the paper would go like." To get a structure or outline for the 7 use it only as a tool to palish it up, to make it more Eng document (n=5) "I copy this regression tables the result and I say can yo for analyzing data (n=2)

content short. (n=8)

- Our research led to a deep understanding of user workflows and pain points, resulting in actionable insights that shaped the development of Ask Dora. Key outcomes include: • User-Centered Feature Development: Identified needs like fact-checking, domain-specific prompts, and
- drives adoption, and strengthens the tool's market position. **Next Steps**
- My Role

Usability testing

Validate designs with users to

refine functionality

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Participnat Recruitment Study Design Secondary Research Streamlined participant recruitment to Created a research plan and semi-Conducted literature reviews and match target audience and research structured interview guide competitor analysis needs. **Data Analysis Stakeholder Communication Primary Research** Analyzed primary and secondary Presented findings in the form of Conducted user interviews via Zoom research data to identify themes actionable insights to the stakeholders



End-to-End Project management

Data Analysis Generating Actionable Insights Reflection This project has been a great learning experience, emphasizing the importance of keeping users at the core of decision-making,



objectives:

Secondary Research Competitive Analysis

- tools for writing, generating content, checking plagiarism and AI content detection. Investigating the tools and strategies
- a. Data Collection : We reviewed articles, blogs , academic papers, reports on Generative AI trends in writing b. Analyis: We categorized the gathered in the following sections:

• Process:

- · The competitive analysis highlights the writing assistant tool's potential to stand out by addressing gaps such as limited multi-lingual support, absence of fact-checking, and lack of domain-specific recommendations.

• We used the below template for the competitive analysis :

- Types of prompts it provides, such as open-ended, guided, or specific suggestions, option to create own Types of prompts
- UX . How easy it is to regenerate the How fast users are able to recieve the What is the tone of the UX copies
- **User Interviews**
- invitations • Interview Process: a. Semi-structured interview guide was used to ensure consistency while allowing participants to provide detailed responses b. Scheduling of the Interview was facilitated through Calendly c. Interviews were conducted remotely through video calls via Zoom, and each session lasted approximately 30 to 45 minutes • Focus Areas: a. Users' writing workflows
- c. Once all the interviews were conducted , an overall analysis was done and data was organised into common/ unique themes along with Frequency Analysis
- 3. Al models to be trained on variety of data. Created a detailed report covering all the insights from the user interviews and the same was shared with

Gernini (n=2)

Sci-space (n=2)

think the writing mainly trying to

lim a Spanish no

long sentence."

Tike sometimes I also use AI to paraphysise. So, If there's

that I want to use, I want to paraphrase, I asked AI to par

ChotPDF

Use case of Generative AI in Aca

Outcome/Impact

Generative Al Tools used by the users

Common Themes

The tool changes the mea

Output received is very generic (n=3)

Issues faced while using Generative AI

"So I do not condemn denerative Al Decause I use it. Only that it

"It does not yet have this reasoning ability so I still have to think

Suggestions/Improvement w.r.t Generative AI in

they are related to each other those papers and then when I have a

question or when I write about my results or about my introduction

some kind of fact checking based on empirical research. So what

you mean it does, but for fact checking, you know, for the ciairs of

then it it's not really hallucinating

Beta launching and testing

Launch a beta version for a limited

audience and iterate based on feedback.

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Cross-Functional Collaboration

guides you but not giving you the best"

academic writing

A fact checking feature to ensure that the

Common Themes

generated output exists. (n=2)

The insights directly influenced a user-centric design for Ask Dora, leading to a feature that meets user expectations,

• Enhanced User Experience: Delivered a tool that simplifies workflows, ensures accuracy, and boosts user

• Strategic Roadmap Alignment: Findings shaped a roadmap balancing user needs and business goals,

• Market Differentiation: Address gaps like limited multi-lingual support and originality safeguards to

- - and insights. **Skills Acquired**
 - **Competitor Analysis Insight shaped Product Scope Figma Stakeholder Management**

Qualitative Research

especially during the scoping and development phases. By combining user insights with competitive analysis, we will be able to shape the "Ask Dora" feature to address real user needs and position it to stand out in the market. The process reinforced how critical user research is—not just for validating ideas but for ensuring the feature is on track to deliver a meaningful and impactful experience once launched.