

MILESTONE-1

Course Title: Human Computer Interaction

Course Code: CSE 4451

Submitted to

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Submitted by Group H

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Problem Statement:

Student's parents must deal with the problem of not being able to find a tutor for their child and tutors also face problems finding students. Our solution allows them to connect with the best tutor for their child via an online platform. Guardians can post tutor requirements and their location in our system.

4 Our Target User Group: Parents/Students, and & Tutors.

Problems that the user group might face:

According to the National Center for Education Statistics [1]. the demand for tutoring services has been steadily increasing in recent years, with a strong emphasis on K-12 education [1]. As academic expectations rise, parents frequently seek additional educational support for their children, making tutoring services a valuable resource. Parents may struggle to find qualified and trustworthy tutors for their children in their local area. For parents who are often juggling multiple responsibilities, manually searching for suitable tutors can be time-consuming and overwhelming [2]. Parents may face difficulties evaluating potential tutors' qualifications and credentials, leading to uncertainty about the quality of instruction their child will receive [3]. Similarly, tutors may have expertise and a desire to help students, but they may struggle to find students who require their services. Tutors may face fluctuations in demand, making it difficult to maintain a stable income[3]. Many tutors rely on traditional, inefficient methods of advertising their services, such as flyers and local listings, which can limit their reach. [3]

Reference Paper:

- 1. Meho LI. The gender gap in highly prestigious international research awards, 2001–2020. Quantitative Science Studies. 2021 Nov 5;2(3):976-89.
- 2. Anfara Jr VA, Mertens SB. Varieties of parent involvement in schooling. Middle school journal. 2008 Jan 1;39(3):58-64.
- 3. Deming DJ, Goldin C, Katz LF, Yuchtman N. Can online learning bend the higher education cost curve. American Economic Review. 2015 May 1;105(5):496-501.

Research Method:

We are using "Interview" research method for our data collection because Interviews allow us to delve deeply into the experiences, perspectives, and challenges of both parents and tutors. It is an effective way to gather in-depth and qualitative information about the challenges faced by both students' parents and tutors in the process of finding each other, as well as their experiences with the solution we are proposing.

4 Reaching out to target user group:

To reach our target user groups, we collaborated with schools, colleges, and educational institutions, as well as utilized social media platforms.

Demographics of Participants:

	Age: 40
Participant-1(Parent)	Gender: Female
	Occupation: Nurse
	Hobby: Gardening
	Age: 38
Participant-2(Parent)	Gender: Male
	Occupation: Businessman
	Hobby: Watching TV
	Age: 45
Participant-3(Parent)	Gender: Female
	Occupation: House-wife
	Hobby: Travelling
	Age: 35
Participant-4(Tutor)	Gender: Male
	Occupation: Accountant
	Hobby: Cooking

	Age: 23
Participant-5(Tutor)	Gender: Female
	Occupation: Undergrade CSE Student
	Hobby: Painting
	Age: 22
Participant-6(Tutor)	Gender: Male
	Occupation: Undergrade BBA Student
	Hobby: Singing
	Age: 20
Participant-7(Tutor)	Gender: Female
	Occupation: Undergrade EEE Student
	Hobby: Writing
	Age: 24
Participant-8(Tutor)	Gender: Male
	Occupation: Undergrade Math Student
	Hobby: Gaming

4 Type of Data:

We collected qualitative data. We can ask open-ended questions to collect rich and detailed information that might not be obtainable through quantitative methods. We gathered qualitative data to understand the challenges faced by parents and tutors, as well as their experiences and needs in finding suitable tutoring services.

Recording of collected data:

As we interviewed of our users, we collected our data through audio recording of the interview session on our phone. Besides, we took hand notes of our interviews with parents and tutors.

4 Challenges we faced during data collection:

We collected our data through interview method. Though it is an effective method, we faced some problems while collecting data. Most of the participants were not willing to give interview as it is a time-consuming process. We have to convinced them. Participants were uncomfortable to share certain experiences which could help us to find the problem more effectively.

4 Mention the final insights that you gained from the affinity diagram.

- ✓ Search Method for Guardian
- ✓ Advertisement Method for Getting Tuition (As a Tutor)
- ✓ Benefits of their current approach (as a Parent/student and as a Tutor)
- ✓ Facing all Obstacles of their current approach (as a Parent/student and as a Tutor)
- ✓ Need for a collaborative platform (for Parent/student and tutor)

What did you find out that you didn't already know?

Parents/Students: We discovered that many parents depend heavily on referrals from other parents, friends, and family. Furthermore, they frequently face the unpredictability of tutor quality and scheduling issues.

Tutors: Tutors frequently face competition on online platforms, and the prevalence of fake posts or fraudulent advertisements is a major impediment. They express their desire to communicate more effectively with parents/students and manage their schedules.

4 What did you confirm that you suspected?

Parents/Students: The interviews confirmed the assumption that parents value

recommendations from reliable sources and want a more streamlined process for

finding qualified tutors. It was also confirmed that a centralized platform was re-

quired to address tutor quality and scheduling concerns.

Tutors: The interviews confirmed the suspicion that tutors face difficulties effec-

tively advertising and marketing their services. The desire to connect with par-

ents/students based on their specific subjects and skills was also expressed.

4 You have already created an affinity diagram on Miro, please share the

link again with this report.

Link: https://miro.com/app/board/uXjVNfrrTzk=/

♣ Presona-1:



Persona

Rafi Khan

Age: 23 Status: Undergraduate

Profile: Rafi is a graduate student pursuing a degree in Mathematics. He is passionate about teaching and has been offering tutoring services for the past two years. However, he faces challenges in finding students and establishing a stable income stream. Rafi wants an efficient way to connect with students and build his tutoring business.

- · Struggles to find students who need tutoring.
- · Inconsistent income due to varying demand.
- · Limited marketing resources.

- · Easily connect with students seeking tutoring services.

 • Establish a stable income source.
- Access tools for promoting his tutoring services.

· Rafi employs a patient and problemsolving approach when teaching

- Rafi is looking for a platform that helps him showcase his expertise and connect with students seeking help in math.
- · He's interested in a platform that provides marketing resources to expand his student base and offer online tutoring.

♣ Presona-2:



Persona

Sarah Akhter

Age: 35

Status: House-wife

Profile: Sarah is a working mother of two children, aged 10 and 12. She values education and wants the best possible tutoring for her children. However, her busy work schedule and household responsibilities make it challenging to find a suitable tutor. She wants convenience and assurance that the tutor will be a good fit for her kids.

Challenges

- Struggles to find qualified and reliable tutors through traditional methods.
- Limited time for extensive research and interviews.
- Concerns about her children's academic progress.

Goals

- Easily find a qualified and trustworthy tutor for her children.
- Ensure her children receive quality education.
- Save time in the tutor search process.
- Gain confidence in the tutor's ability and background

Preferred Learning Style

 Sarah's child responds well to visual and interactive learning methods.

Solution

- Sarah expects a user-friendly platform that helps her easily find a qualified and trustworthy math tutor.
- She's looking for a platform that offers flexible scheduling options for online tutoring.



 Gain confidence in the tutor ability and background.

Save time in the tuter search

that offers flexible scheduli options for online tutoring.

find a qualified and trustworthy math tutor.

♣ Scenario (Based on our problem statement):

Amy has been advertising her tutoring services through various channels due to her passion for teaching. But market competition and the difficulty in connecting with the right students, she is looking for a more effective solution. Amy established an online presence through a personal website, showcasing her qualifications, and sharing engaging posts on social media platforms. She also collaborates with local schools and relies on word-of-mouth recommendations to promote her tutoring services. Connecting with students who truly require her expertise becomes a difficult task, leading to frustration. Amy expresses her desire for a more efficient solution in this frame. She envisions a platform that will enable her to reach a larger audience of students and parents who are actively looking for tutors. She imagines that the ideal platform would allow her to successfully showcase her qualifications and teaching style. Amy uses proposes a platform that connects students and tutors based on their needs. She envisions a tool that not only saves her time by handling scheduling and availability efficiently but also sends notifications to potential students who are actively looking for tutoring services.

♣ Storyboard (Based on our problem statement):

A mother's struggle and finally success in finding a home tutor for her children's Storyboard.

SCENE 1

Arisha notices her child struggling with homework and looks concerned. Determined, she begins asking family and close friends for recommendations and searching online for tutors.



SCENE 2

Arisha faces challenges due to a lack of recommendations and unreliable information. As she struggles to find a tutor with suitable availability, scheduling conflicts arise.

SCENE 3

Arisha discovers a new online platform that connects parents with qualified tutors. She decided to create an account on the platform because she is excited.



SCENE 4

Arisha uses the platform to post her child's tutoring needs and location. Based on her criteria, the platform algorithm matches her to multiple qualified tutors. Arisha confidently chooses a tutor with a proven track record and available dates.





record and available dates. tutor with a proven track