United International University



ProTutor.BD

Submitted to

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ProTutor.BD

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1. Introduction:

Welcome to "**ProTutor.BD**", your premier destination for personalized academic support in Bangladesh! Tutoring services can be incredibly helpful for students looking to enhance their academic skills or prepare for exams. Although after searching many places for academic help in personal life we find a premium or tutor of our choice. It takes us a lot of time and we have to deal with various problems in life starting from studies. In this digital era, we have created these products to find a solution to find our favorite teacher without wasting time.

2. Objectives:

Although the main objective of this project is to facilitate the learning process of the students. We know that a tutor is a lifesaver for a child's education. "**ProTutor.BD**" suggests a connection to education and guidance. However, it implies a sense of leading or piloting through the educational journey, which aligns with the idea of guiding and supporting students. It involves helping the student understand concepts, acquire new skills, and improve their overall academic performance. Tutors often provide personalized support tailored to a student's specific needs. Tutors aim to build the student's confidence in their abilities. By providing guidance, positive reinforcement, and constructive feedback, tutors help students feel more capable and confident in their academic pursuits. For everything, we have taken the initiative so that every parent can find a good and decent teacher to educate their children through our plot form.

3. Methodologies:

Speaking of methodology, we will generally follow a few things in providing the structural framework for our product. Addressing aspects such as tutor recruitment or hire a tutor, proper training, regular supervision as well as evaluation is very necessary for this product which we are aiming for more. Here's a breakdown of key areas to consider:

i. Tutor Recruitment and Selection:

- Determine the criteria for selecting tutors, including educational background, experience, and subject expertise.
- Develop recruitment strategies to attract qualified tutors, such as advertising through educational institutions, online platforms, or professional networks.
- Conduct interviews or assessments to evaluate candidates' suitability for tutoring roles.

ii. Proper Training and Guidance:

- Provide comprehensive training to tutors on effective teaching methodologies, communication skills, and subject-specific content.
- Offer workshops or seminars to enhance tutors' understanding of pedagogical principles and learner-centered approaches.
- Provide ongoing professional development opportunities to keep tutors updated on best practices and educational trends.

iii. Monitoring and Evaluation:

- Develop performance metrics and evaluation criteria to assess tutors' effectiveness in supporting student learning.
- Implement systems for collecting feedback from students, parents, and other stakeholders to evaluate the quality of tutoring services.
- Use data-driven insights to identify areas for improvement and make informed decisions about tutor allocation and resource allocation.

iv. Recognition and Incentives:

- Recognize and reward tutors for their contributions and achievements in supporting student learning and academic success.
- Offer incentives or bonuses for tutors who demonstrate exceptional performance, such as high student satisfaction ratings or improved academic outcomes.
- Foster a positive and supportive work environment that values the efforts and dedication of tutors.

v. Continuous Improvement:

- Regularly review and refine tutor management policies, procedures, and practices to ensure alignment with organizational goals and educational standards.
- Solicit feedback from tutors, students, and other stakeholders to identify areas for improvement and implement necessary changes.
- Stay abreast of emerging trends and innovations in education to adapt and enhance tutor management methodologies accordingly.

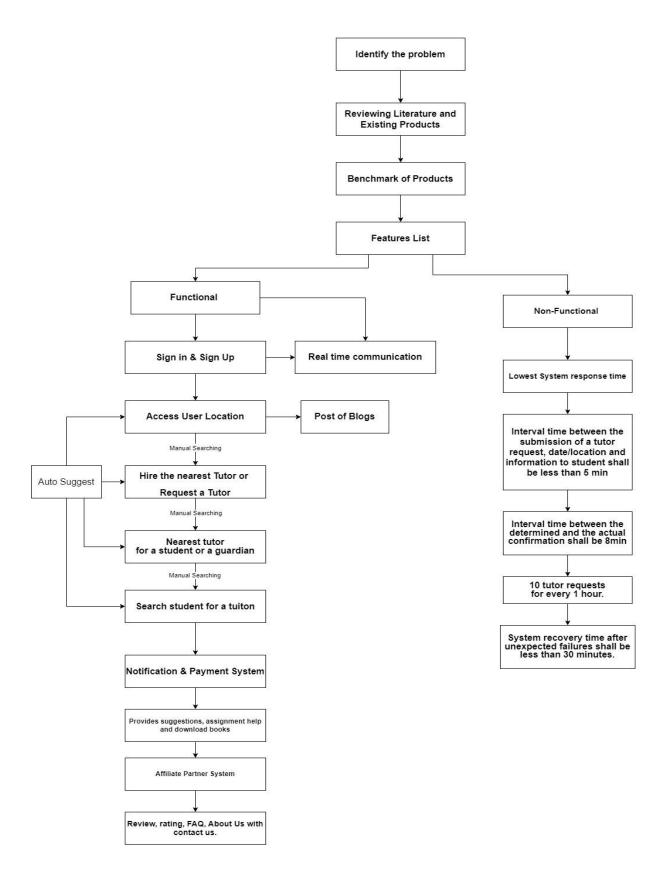


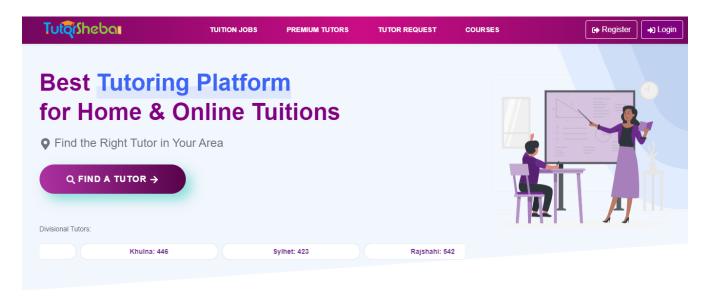
Figure 1:Methodology diagram

4. Research and System Study:

i. Product's Benchmark:

Benchmarking education-related systems like "**ProTutor.BD**" involves evaluating the functionality, features, and capabilities of educational technology in its context. We have selected some of the top-tier products on the market to benchmark our products. There are a few products currently running that we want to benchmark with and test our product's capabilities. List of selected products from the ongoing marketplace: <u>tutorsheba.com</u>, <u>Bdtutors.com</u>, <u>caretutors.com</u>, <u>dhakatutors.com</u>, <u>deshtutor.com</u> etc.

TutorSheba.com



SEARCH TUTORING JOBS

Find Your Tution Jobs, in your area

Figure 2:tutorsheba.com

TutorSheba.com is created for the students and teachers of Bangladesh. The key features and limitations are as following:

Key Features:

- Tutors can create account and give tuition post
- Students can create account and hire tutor from available tutors
- Students can request for tutors according to their own requirements
- one day demo session over phone is conducted before hiring a tutor

Limitations:

• Features like online tuition, review and rating, payment gateway, assignment help are unavailable

bdtutors.com

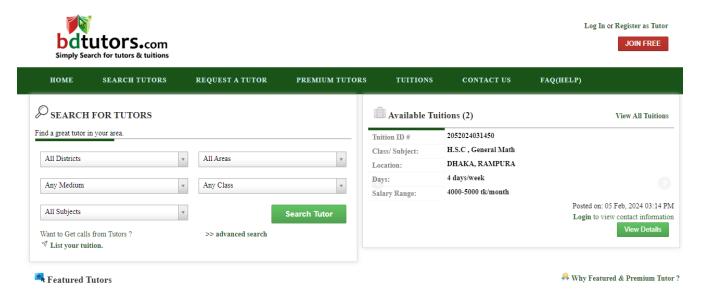


Figure 3: bdtutors.com

<u>bdtutors.com</u> is made for Bangladeshi students and tutors. The key features and limitations are as following:

Key Features:

- Tutor can create account and give tuition post
- Student can create account, give tutor searching post based on requirements and Hire tutor from available tutors
- Student can find tutor using filter options
- Payment gateways: VISA, MasterCard, bKash, DBBL Master, IBBL iBanking, Islami Bank M CASH

Limitations:

- Online tuition is unavailable
- Students cannot find tutor using map
- Blog posting, downloading books and preview sessions are unavailable

caretutors.com

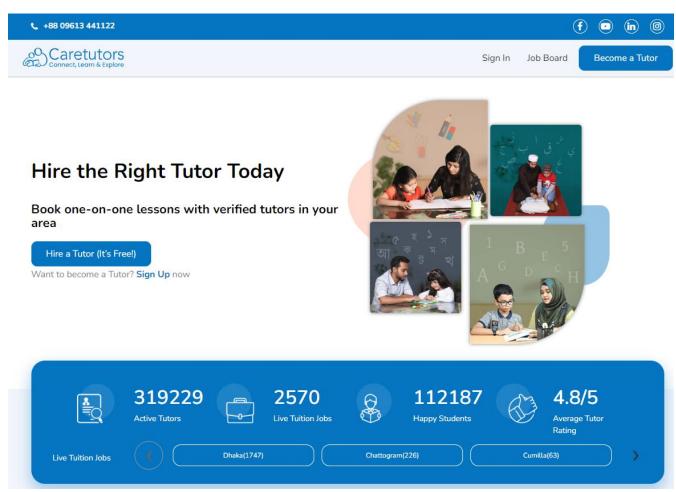


Figure 4:caretutors.com

Caretutors.com is created for Bangladeshi students and tutors. The key features and limitations are as following:

Key Features:

- Tutors can create account and give tuition post
- Students can create account and hire tutor from available tutors' list
- · Students can find tutor using filter options

Limitations:

- Online tuition is unavailable
- Payment, blog posting and downloading books options are unavailable
- Students cannot give tutor searching post based on their own requirements

dhakatutors.com

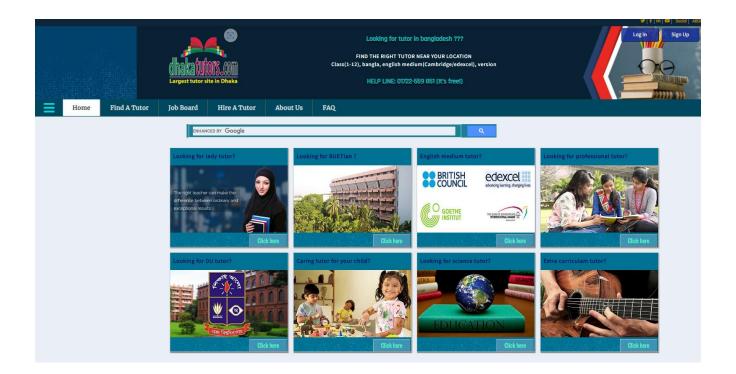


Figure 5:dhakatutors.com

dhakatutors.com is created for Bangladeshi students and tutors. The key features and limitations are as following:

Key Features:

- Tutors can create account and give tuition post
- Students can create account and hire tutor from available tutors' list
- Students can find tutor using filter options

Limitations:

- Online tuition is unavailable
- Payment, blog posting and downloading books options are unavailable
- Students cannot give tutor searching post based on their own requirements

deshtutor.com

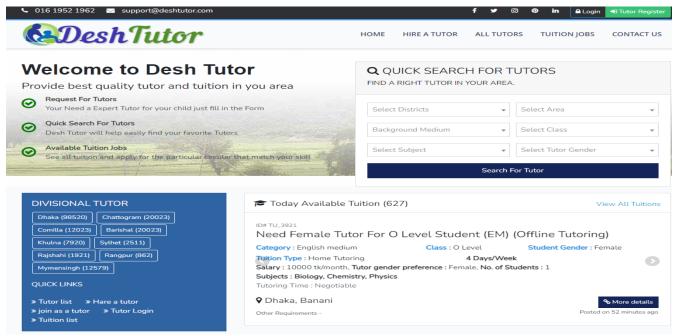


Figure 6:deshtutor.com

DeshTutor is made for the students and teachers of our country. The key features and limitations are as following:

Key Features:

- Tutors can create account and give tuition post
- Students can create account and hire tutor from available tutors
- Students can request for tutors
- Online tuition available
- · Ouick search for tutors
- Payment gateways: Rocket, bKash

Limitations:

- Students cannot search tutor using map
- Students cannot give tutor searching post based on their requirements

ii. Research paper study:

1.

Paper Name: The Demand for Shadow Education: Socioeconomic Determinants and Implications

Summary:

The authors of this paper wanted to understand -

- Why do some families pay for this extra help?
- Does it actually help kids learn more?
- Are there any problems with this extra tutoring?

What they found:

- Richer families and families where parents had more education were more likely to pay for extra tutoring.
- Kids who got extra tutoring did tend to score better in school.
- But this extra tutoring can be expensive, and it can make it harder for poorer families to keep up.

What this means:

- Some kids get a big advantage because their families can afford extra help.
- This isn't fair, and it can make it harder for kids from poorer families to succeed in school.
- Maybe schools need to get better so that all kids get the help they need, without their families having to pay extra.

Other findings:

- If tutorial centers run alongside schools long-term, good teachers might leave schools, lowering education quality. This could make tutoring even more essential.
- More research is needed considering factors like student-teacher ratio and high-stakes test levels in various schools.

2.

Paper Name: The Expansion and Roles of Private Tutoring in India: From Supplementation to Supplantation

Summary:

This paper dives into the world of private tutoring in India, exploring how it's grown and changed over time.

Here's the findings:

- Private tutoring, also known as "shadow education", is HUGE in India. Many students get extra help outside of school from private tutors.
- It used to be seen as "supplementary," just filling in gaps from regular school. But now, it's more like "supplantation," meaning it's almost like a whole different school system happening alongside the official one.
- This shift has some big upsides and downsides. On the plus side, some say it helps students do better in exams and get into competitive colleges. But on the other side, it creates pressure, adds financial strain on families, and can widen the gap between rich and poor students.

- The authors studied tutoring in Maharashtra, India. They found that students rely heavily on tutors, especially for key subjects like math and science. Tutors often focus on exam preparation and specific strategies, rather than broader learning.
- This raises concerns about what it means for regular schooling like Is the official system good enough or are students missing out on important skills by focusing too much on tutoring.

3. Paper Name: The impact of shadow education on student academic achievement: Why the research is inconclusive and what can be done about it

Summary:

Findings:

- 1. The research on the impact of shadow education on student achievement is inconclusive. Studies have shown:
 - o Positive impacts on some students and contexts.
 - o also no significant difference in academic performance between students who participated in shadow education and those who didn't..
 - potentially negative consequences like increased stress and increases educational inequality.
- 2. The lack of a clear definition for "shadow education" makes it difficult to compare studies and draw definitive conclusions.
- 3. Research methods face challenges in data collection and analysis, limiting the ability to isolate the true impact of shadow education.

Limitations:

- **Inconsistent definitions:** Lack of standardization regarding what constitutes "shadow education" interrupts comprehensive analysis.
- **Methodological limitations:** Challenges in data collection and study design restrict the ability to establish clear cause-and-effect relationships.
- **Individual factors:** Difficulty in accounting for individual student characteristics and motivations, as well as the quality of tutors, which can significantly impact outcomes.
- **4. Paper Name:** The Issue of Private Tuition: An Analysis of the Practice in Mauritius and Selected South-East Asian Countries

Summary:

Findings:

- **Prevalence:** Private tuition is widespread at both primary and secondary levels across Mauritius and Southeast Asian countries.
- **Motivations:** Competitive exams, pressure for success, and perceived shortcomings in formal education drive demand.
- Financial Burden: Significant cost burden on families, potentially widening social inequalities.
- Mixed Effects: Some students benefit, others experience stress and decreased motivation.
- **Teacher Involvement:** Raises ethical concerns, potential conflicts of interest, and exploitation of students.
- Ineffective teaching-learning processes, Insufficient Regular Class Instruction,
- Students seek private tuition for better understanding and individual attention.
- Teachers, often demotivated in regular classes, become **more engaged in tuition** as they work for themselves.
- Class Size Challenges: Large class sizes, Financial constraints, inadequate infrastructure, and a shortage of qualified teachers
- Students opt for private tuition due to **peer pressure and competition**

Methodology:

- Literature review on private tuition practices in selected countries.
- Case studies of Mauritius and other Southeast Asian nations.
- Interviews with parents, students, teachers, and policymakers.

Limitations:

- Limited data availability on specific impacts and student outcomes.
- Difficulty isolating true effects of private tuition from other factors.
- Generalization of findings across diverse countries and contexts.

Overall:

- Private tuition is a complex issue with both potential benefits and drawbacks.
- Addressing the root causes in the formal education system and regulating private tuition are crucial.
- Further research needed to understand the socio-economic, educational, and ethical implications.

5. Paper Name: The more, the better? Intensity of involvement in private tuition and examination performance

Summary:

Findings:

- There is no significant advantage to taking private tuition, even for students who took a lot of it.
- This suggests that other factors, such as a student's natural ability and attitude towards learning, may be more important for exam success than private tuition.

Limitations:

- The study was conducted in Ireland, so the results may not be generalizable to other countries.
- The study relied on self-reported data, which can be subject to bias.
- The study did not control for all possible factors that could affect exam performance
- **6. Paper Name:** The Shadow Education System in Bangladesh: A Blessing or a Curse?

Summary:

The paper draws on research conducted in five regions of Bangladesh, employing qualitative methods and questionnaires.

The author analyzes different perspectives and presents data on the extent of support for and against private tutoring. The paper calls for further research and dialogue to address the complexities of this system and its impact on Bangladesh education.

Research questions

- 1. What are the benefits of private tutoring in Bangladesh?
- 2. What are the repercussions of private tutoring in Bangladesh?
- 3. What are the main factors that lead to the spread of private tutoring in Bangladesh?

Findings:

- **Prevalence:** This system is widespread, especially in urban areas, with many students relying on it to succeed in exams.
- **Determinants:** Low teacher salaries, parental aspirations for children's academic success, and perceived inadequacies of formal education are driving factors.
- Impact:
 - o **Positive:** Can improve academic performance, boost confidence, and offer personalized attention.
 - Negative: Creates financial strain, widens social inequalities, and potentially hampers creativity and critical thinking.

- **Open question:** Whether the shadow system is ultimately a blessing or a curse remains debatable.
- **Social Implications:** Increased pressure on students, weakened family bonds, and potential for increased social inequalities are observed.
- **Economic Implications:** Private tutoring can contribute to economic development, but mainly benefits wealthier individuals, further widening the economic gap.
- **Prohibition:** Banning private tutoring entirely, as attempted in some countries, is difficult to enforce and may limit educational opportunities.
- 70% agreed private tutoring helps students perform well.
- 25% opposed it due to increased inequality.
- 5% identified low teacher salaries and parental aspiration as leading causes.

Recommendations:

- Reduce reliance on private tutoring by convincing parents and students of the quality of mainstream education.
- Reform the assessment system to focus on learning rather than ranking.
- Support teachers in assisting struggling students through training and professional development.
- Raise public awareness to discourage excessive private tutoring.

Benchmark of products:

Features		Existing Products					
		tutorsheba.com	bdtutors.com	caretutors.com	dhakatutors.com	deshtutor.com	our product
	Admin	✓	✓	✓	✓	✓	✓
Roles	Tutor	✓	✓	✓	✓	✓	✓
	Students	✓	✓	✓	✓	✓	✓
	Guardian				✓		<
Ava	ilable Tuitions	✓	✓	✓	✓	✓	✓
-	ment System	✓	✓	✓	✓	✓	✓
Pren	mium Tutors Search	✓	✓	✓		✓	<
Affi	liate Partner	✓	✓				✓
Noti	ifications System	✓		✓			√
FAC	Q	✓	✓	✓	✓		√
Contact Us		✓	✓	✓	✓	✓	√
Tuto	or Request	✓	✓				√
_	ck Chat	✓	✓	✓	✓	✓	✓
Onli	ine tuition	✓					✓
Review & Rating		✓	✓	✓	✓	✓	✓
About us		✓	✓	✓	✓	✓	✓
Default auto-search							✓
Default auto-suggest							√
Blog Post							√
Dow	nload Books						√

Suggested nearest tutors or students			√
Provides suggestions			√

Feasibility Analysis

Feasibility Type	Description
Cultural and Political	Our project does not contradict any political or cultural code
Technical	Our project can be done by already exists hardware and software in the market.
Economic Feasibility:	Our project can be done with minimal budget and earn benefit in long run.
Organizational or operational	In our team, we have the required technical knowledge and resources to implement the project. So no external training would be required.
Legal Feasibility:	Our project does not break any social media lows. It hides users private data from public.

iii. Questionnaire for This Product:

- i. Why do you want to build this product?
- ii. How much logic is there in this approach to learning system development?
- iii. By adapting to modern technology, how much education will be able to progress through it?
- iv. In rural areas, is this system even possible to reach?
- v. What steps can be taken to cover the rural area in the future?

5. Specification Analysis:

i. Survey Report or User feedback:

- ✓ Teachers Satisfaction 75%.
- ✓ User Friendly UI 80%
- ✓ Responsive Design for overall device 90%
- ✓ Auto Searching system is 98% satisfaction
- ✓ Payment satisfaction is overall nice.

6. Features List (Functional & Non-Functional):

Functional Requirement: A Functional Requirement (FR) describes the features that a system must offer. A function is the description of the combinations of the inputs to the systems or its components, its behavior and the outputs. Functional requirements such as data manipulation, business process, calculations, technical details and other specific functionality define what a software system supposed to achieve. The functional requirements of this tuition management system are listing below:

- Users (teacher and student) can register, log-in to the system and update their profile
- Teacher can create post by filling up the post related information and giving a certain amount for creating a post (if he/she has no free posts. After creating their profile tutor will get 3/n-numbers of free posts.)
- Tutor can search for tuition and send request to a corresponding tutor searching post(posted by any student)
- Student can create post for free
- Student can search for tutor and send request to a corresponding tuition searching post(posted by any tutor)
- Tutor and student both can give ratings and reviews to each other's
- Tutor and student both will be able to download books
- Tutor and student both will be able to create, read, edit, delete blogs

- Admin can delete/block any user (student and Teacher) if the admin gets multiple complaints against the user
- Admin will be able to upload, download and delete books
- A searching mechanism will be provided by the system to get the post
- The system will be accessible to online users

Non-functional Requirement: Non-functional Requirements can be defined as a requirement that describes not what software will do, but how the software will do. Usually they are evaluated subjectively as they are difficult to test. Some of the non-functional requirements of our proposed system are listing below:

- Users' privacy should be protected
- The system should have high availability
- The system should be workable on different cross-platform web browsers like (e.g. Chrome, Safari, Mozilla, Opera, Edge)
- The system should be easy to learn by both sophisticated and novice users
- The system should be user friendly so that both sophisticated and inexperienced users can learn to use it at ease
- The system should have a maximum of 3 clicks to reach any content
- The system should have a single login to access all content
- The system should have a consistent user interface(UI)
- The system should have a UI which is intuitive (the behaviour of the system is according to the intuition of a standard end user)
- The system should have a standard graphical user interface that allows for the on-line data entry, editing, and deleting of data with much ease

7. UML Diagrams:

8. UI Design:

9. Tentative Implementation Schedule/Milestone:

10. Conclusions and Recommendations:

11. References:

i. Paper Based:

[1] https://www.researchgate.net/publication/349213058_The_Demand_for_Shadow_Education_Socioeconomic_Determinants_and_Implications

- [2] https://www.sciencedirect.com/science/article/abs/pii/S073805931830021X
- [3] https://link.springer.com/article/10.1007/s12564-014-9326-9
- [4] https://www.jstor.org/stable/3445504
- [5] https://www.tandfonline.com/doi/full/10.1080/13803610802246395
- [6] https://eric.ed.gov/?id=ED596924

ii. Information Based:

- Benchmarking learning and teaching: Developing a method (Link).
- Tutorsheba.com (Google search engine) (Link).
- Bdtutors.com (Google search engine) (Link).
- Caretutors.com (Google search engine) (Link).
- Dhakatutors.com (Google search engine) (Link).
- Deshtutor.com (Google search engine) (Link).