

# **Sikkha: An E-Learning Web Application**

Sanjida Binte Jalal (182014040) Supervisor: Professor Muhammad Golam Kibria

# Introduction

Sikkha is an e-learning web application that aims to provide high-quality education and exam preparation resources to students in Bangladesh and beyond. The platform is user-friendly and offers various educational materials, such as video lectures, interactive quizzes, and study guides. One of the critical features of Sikkha is its comprehensive library of educational content. It also includes an online exam system that allows students to practice and test their knowledge in a simulated environment. This is particularly useful for students preparing for important exams such as SSC or HSC.Additionally, Sikka provides community tool for students to connect and collaborate on their studies. This benefits students who may need access to traditional classroom settings or prefer to study independently. Overall, Sikka is a valuable resource for students seeking to improve their academic performance and reach their full potential.

#### **Motivation**

I developed Sikkha, an e-learning web application, as a response to the difficulties faced by students during the Covid-19 pandemic. The goal of Sikkha is to create a comprehensive platform where students can access all their course materials, engage in self-guided practice, take online exams, and seek help and support from their peers. The ultimate aim is to make the learning process more accessible and easier for all students. The platform will be user-friendly and easy to navigate, ensuring that students can learn effectively and efficiently. With the potential to improve the learning experience, Sikkha aims to provide students with convenient access to course materials and exams online and also to help them seek help and support from their peers.

### **Comparative Analysis**

- Sikkha offers a comprehensive suite of educational tools, including a learning management system, online exams, and a community platform.
- Other websites such as Study Press.com, Amarpathshala.com, Srijonshil.com, and Lekhaporabd.net offer a library of learning materials but do not offer online exams or community tools.
- Sikkha allows for a more interactive learning experience, as students can access online courses, tutorials, practice tests, and collaborate with peers, mentors, and teachers.
- In comparison, other websites do not offer the same level of interactivity.
- Sikkha is the better option for students who are looking for an interactive learning experience.

# **System Diagrams**

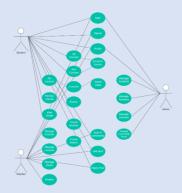


Fig: Use Case Diagram

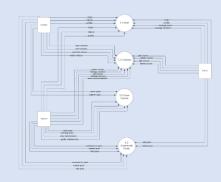


Fig: Data Flow Diagram

### **Development**

After login user will be able to view all the recorded and live courses and will be able to sort through many courses to find the ideal Course.



After enrolling in a course user will be able to view the course materials. Now they also eligible for reviewing the course



Users will be able to video the recordings and when they finish recording the video the system will mark the lesson green.



Users will be able to review the course and post their comments and ratings to share with other



Users will be able to post on the community where they can ask their peers for help for academic purposes



#### References

- Study Press (n.d.). Study Press. Retrieved from https://www.studypress.com/
- Amarpathshala (n.d.). Amarpathshala. Retrieved from https://www.amarpathshala.com/
- Srijonshil (n.d.). Srijonshil. Retrieved from https://www.srijonshil.com/
- Lekhaporabd (n.d.). Lekhaporabd. Retrieved from https://www.lekhaporabd.net/

# **Conclusion and Future Development**

The scope of further development for sikkha, a Bangladesh-based elearning web application with an online exam and community tool, focuses on creating a user-friendly interface, ensuring the security and accuracy of online exams, and improving the community tool and content. The platform should be designed to be intuitive and easy to navigate, with clear instructions and helpful visuals. The community tool should provide a safe and supportive environment for users to connect and discuss education-related topics.