



UNIVERSITY OF DHAKA

Department of Computer Science and Engineering

CSE-3111 : Computer Networking Lab

Project Report

Submitted By:

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Submitted To :

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1 Title

Project Title: **Shahajjo**

2 Members

- Md. Sadman Sakib Mahib.
- Md. Imran Shorif Shuvo.

3 Objectives And Motivation

The primary objective of this project is to facilitate students' learning and monitoring processes, by the teacher. By enabling screen and camera sharing, the teacher can monitor students' lab performance, academic situation. Not only confined to academic or lab related problems also any other issues as needed. This platform aims to foster a supportive and collaborative learning environment for students and ease the monitoring experience of the teacher as well.

4 Technology we used

- Screen Sharing: Python Flask, Socket Programming , ByteIO ,Bootstrap CSS and JavaScript.
- File server: Threading Http Server and Client, BytesIO, CGI (Common Gateway Interface), Shutil for Archieving files.

5 Features we have built

- Client computers will be connected to the platform.
- Screen sharing feature will be implemented.
- Camera sharing feature will be implemented.
- File sharing feature will be implemented.

6 Networking concepts we have used:

- Socket programming: This will be used to establish connections between client computers.
- HTTP: Different versions of HTTP will be used to handle requests and responses in the platform.

7 Prospective Applications of the project

The prospective objective of the Shahajjo project is to enhance educational outcomes through seamless communication and collaboration between teachers and students. By providing features such as screen and camera sharing, as well as file sharing capabilities, the platform aims to empower educators to effectively monitor students' performance and address any academic or non-academic challenges they may face. Additionally, Shahajjo seeks to promote peer-to-peer learning among students, fostering a supportive environment where knowledge exchange and collaboration thrive. Through these functionalities, the project endeavors to create a conducive learning environment that facilitates both academic success and personal growth for students while streamlining the monitoring process for teachers.

References

- [1] Project proposal guidelines. Computer Networking CSE 3101 Google Classroom. [Online; accessed 2024-04-27].