Md.Emon Akter Sourov

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EXPERIENCE

FANFARE BANGLADESH LTD.

Oct. 2023 – May 2024

Software Engineer Intern

Banani, Dhaka

- Collaborated with QA and Backend teams to test video upload modules using Express.js and Multer.
- Designed and executed test cases, reported bugs, and worked closely with developers and project managers to resolve issues.
- Contributed to test documentation including test plans, scenarios, and reports to streamline QA processes.
- Participated in daily standups and agile sprint planning to synchronize QA efforts with development cycles.
- Developed GraphQL APIs integrated with MongoDB to handle and store data from the Fanfare applications.
- Worked on the Admin Panel backend; responsible for creating REST APIs to support the mobile development team.

Tech Stack: Manual Testing, Postman, API Testing, Nest.js, Express.js, MongoDB, GraphQL

Projects

Manual Testing - ECommerce Platform (Evershop)

Ostad Online Platform

Tools: Postman, Browser DevTools, Google Drive, Test Case Documentation

May 2025

- Designed and executed comprehensive test cases based on user requirements to validate search functionality.
- Tested the implemented search feature on Evershop, generated structured bug reports, and logged defects.
- Performed both UI and API-based testing.
- Used Postman to create and export API test collections, and generated detailed test analysis and reporting.
- Worked to test documentation including test plans, scenarios, and reports.
- Project Link: Google Drive Link (Report and API Collection)

Automation Testing - ECommerce Platform (SauceDemo)

Ostad Online Platform

Tools: WebdriverIO, Mocha, Chai, Selenium, Allure Reports, GitHub

June~2025

- Implemented three separate automation test scenarios for an e-commerce web app saucedemo using WebdriverIO and Selenium.
- Tested login with locked_out_user and verified proper error handling.
- Simulated end-to-end user flows: cart operations, checkout, price validation, and successful order confirmation using standard_user and performance_glitch_user.
- Used Page Object Model (POM) design pattern and generated Allure reports after each test execution.
- Ensured tests ran both independently and sequentially as per assignment guidelines.
- Project Link: Automation Testing Assessment Github Link

Expense-Management-System | Expressis, MongoDB, tailwind CSS, Reactis

GitHub

- Built an Expense Management System using the MERN stack, allowing users to track and categorize expenses with secure authentication and real-time data updates.
- Implemented RESTful APIs and utilized MongoDB for efficient data management.
- This project highlights the effective use of modern web technologies and showcases strong skills in both frontend and backend development.

Food-Ordering-App | Nestjs, MongoDB, tailwind CSS

GitHub

- Developed a full-stack web application using with a REST API with Nextjs as the frontend
- Developed admin panel and frontend UI Design Where Admin can dynamically upload the food categories, price, name e.t.c.
- Users can order the food and have a payment gatway system.

TECHNICAL SKILLS

Languages and Paradigms: JavaScript, C/C++, Java, OOP

Databases: MongoDB, MySQL

Software Testing Skills: Manual Testing, Black-box Testing, Regression Testing, Smoke Testing, Bug Reporting, Test

Case Design, API Testing

Automation Tools and Frameworks: Selenium WebDriver, WebdriverIO, Mocha, Chai, Allure Reports, POM

Developer and QA Tools: GitHub, Jira, TestRail, Postman, Chrome DevTools

Backend: Nest.js, Express.js, Node.js **Frontend**: HTML/CSS, Tailwind CSS

Programming Profiles:

LeetCode: <u>LeetCode</u> (Rating: 1476)
CodeChef: <u>CodeChef</u> (Rating: 1683)
Codeforces: <u>Codeforces</u> (Rating: 1190)

- GeeksforGeeks: <u>GeeksforGeeks</u> (Rating: 300)

- Solved More than 850 problems

Certifications And Training

Ostad Online Platform

Feb. 2025 - june 2025

Manual Testing And Automation Testing

- Gained hands-on experience in writing and executing test cases, test scenarios, and bug reporting using industry-standard tools like Jira.
- Practiced black-box testing, regression testing, smoke testing, and exploratory testing techniques.
- Learning and applying automation frameworks and tools such as Selenium, WebdriverIO, Mocha, and Chai for end-to-end testing.
- Developed and executed automated test scripts using JavaScript following the Page Object Model (POM) pattern.
- Generated structured test reports using Allure and performed validation of functional flows through automated scripts.
- Familiar with CI/CD pipelines and integrating test automation into continuous testing workflows.

EDUCATION

Bangladesh University

Bachelor of Science in Computer Science and Engineering

April, 2021 – April, 2025 CGPA: 3.93 out of 4

Research Publications

An Explainable AI – Enhanced Machine Learning Approach for Cardiovascular Disease Detection and Risk Assessment

Md. Emon Akter Sourov, et al.

- Proposed a comprehensive ML framework combining classification and regression models for heart disease detection and risk prediction.
- Used real-world dataset with 1,035 cases and applied SMOTE to generate 100,000 synthetic data points to address class imbalance.
- Achieved 97.2% and 97.6% classification accuracy with Random Forest on real and synthetic data, respectively.
- Attained R² scores of 0.992 and 0.984 in regression tasks using Linear Regression on both real and synthetic datasets.
- Enhanced interpretability using Explainable AI techniques such as SHAP and LIME.
- Accepted at 2025 IEEE International Conference on Quantum Photonics, Artificial Intelligence, and Networking (IEEE QPAIN 2025)