AFIA TASNIM RIA

1B, Nikunjo-2, Khilkhet, Dhaka

01724040786

aria2231058@bscse.uiu.ac.bd

GitHub: https://github.com/afiatasnimria

Career Objective:

Aspiring professional currently enrolled in an undergraduate program in BSCSE, seeking an assistant role to develop my administrative and research skills. Dedicated to providing excellent support to faculty and staff, while gaining valuable insights and experience in a collaborative work environment.

Employment History:

Grader,

Course: Object Oriented Programming,

Trimester: Fall-2023

United International University

Awards:

6th Runners up

UIU CSE Project Show Spring-25

Course: Advanced Object Oriented Programming,

Trimester: Spring-25

United International University

Projects:

❖ Multilevel Puzzle Solving Game

(Award winning project in **UIU CSE Project Show Spring-25**)

(*JavaFX, Scene Builder, MySQL, IntelliJ IDEA, Java Socket Programming*)
A team-based puzzle-solving desktop application featuring five distinct games, with integrated progression logic, persistent database tracking, and real-time group chat support.

- **JavaFX + Scene Builder**: Provides an interactive and visually appealing GUI for all puzzle levels including Tower of Hanoi, Number Guess, Jigsaw, Color Mapping, and Crossword. Each puzzle has a uniquely designed interface and game logic.

- **Level Unlocking System**: Teams of 3 players collaborate to solve puzzles. Completion of a level by *any team member* unlocks the next level for the *entire team*. This ensures collective progress and shared achievement.

- **MySQL Database**: Stores player credentials, team assignments, level completion status, and timestamps. Enables dynamic game state tracking and team-based progression.

- **Multithreaded Group Chat (Socket Programming)**: Implements real-time team communication using Java sockets. Each player connects to a central chat server, and messages are broadcasted to team members using multithreaded socket handling for smooth concurrent communication.

- **Integrated Game Levels**:

- **Tower of Hanoi**: Classic recursive disk puzzle with animated interaction.
- **Number Guess Game**: Players guess a number based on logic and hints.

- **Jigsaw Puzzle**: Image-based puzzle requiring correct tile placement.

- **Color Mapping**: Logic-based color assignment puzzle.

- **Crossword Puzzle**: Word-guessing based on thematic clues.

- **Team Management**: Players log in, join existing teams, or create new ones. Game state is synchronized for all team members.

- **Development Tools**: Built using IntelliJ IDEA for backend logic and FXML-based layouts. Scene Builder used for drag-and-drop GUI creation.

GitHub Link: https://github.com/afiatasnimria/PuzzleSolving-Game

❖ PatientCare System

A comprehensive healthcare platform designed to connect patients with essential medical services, providing real-time emergency support, appointment scheduling, and vital health alerts.

Core Features

- **Doctor & Nurse Booking:** Allows patients to search, filter, and schedule appointments with a wide range of medical professionals based on specialty, availability, and location.
- **Find Hospital:** A map-based utility for locating nearby hospitals, clinics, and pharmacies, complete with service details, ratings, and navigation.
- **SOS Emergency:** A dedicated one-touch emergency button that instantly alerts emergency contacts and services with the user's live location.
- **Ambulance Service:** An on-demand feature for requesting an ambulance, including dispatch confirmation and real-time ETA tracking.
- **Epidemic Alerts:** A public health module that pushes critical, geo-targeted warnings and updates about local outbreaks or health advisories.

Figma UI/UX Design

High-fidelity, interactive prototypes for both the mobile (iOS/Android) and responsive web versions of the application were created using **Figma**. This design phase included building a complete component-based design system, mapping all user-centric flows for booking and emergencies, and creating clickable prototypes to simulate the full user journey for testing and demonstration.

GitHub: https://github.com/afiatasnimria/PatientCare_System

❖Voice Assistant

(Python, SpeechRecognition, Pyttsx3, Google API)

Voice Assistant is an intelligent, voice-powered system that helps users interact with their computer using natural speech commands.

- **SpeechRecognition**: Enables voice command processing by capturing and interpreting spoken words.
- **Pyttsx3**: Facilitates text-to-speech synthesis, allowing the assistant to respond audibly.
- **Google Custom Search API**: Used for web search functionality, fetching relevant results efficiently.
- **OS Integration**: Supports opening and closing applications like Notepad, Calculator, Chrome, and VS Code.
- **Reminders System**: Allows users to set and retrieve reminders for tasks.
- **Joke Generator**: Fetches and narrates jokes using PyJokes for entertainment.

GitHub Link: https://github.com/afiatasnimria/VoiceAssistant

❖TournyMate

(PHP, MySQL, HTML, CSS, JavaScript, Bootstrap)
TournyMate is a tournament management system designed to streamline the organization of competitive events, player statistics, and user profiles. It provides an intuitive platform for managing tournaments efficiently.

- **PHP & MySQL**: Backend built with PHP and MySQL for secure and scalable tournament data management.
- **User Profiles**: Enables player registration, profile creation, and statistics tracking.
- **Tournament Management**: Allows users to create, manage, and monitor tournaments in real time.
- **Player Statistics**: Tracks and updates player performance, rankings, and match history.
- **Live Score Updates**: Real-time match scoring system to keep users informed of ongoing games.
- **Responsive Design**: Frontend built with HTML, CSS, and JavaScript for a seamless user experience across devices.
- **Automated Match Scheduling**: Ensures fair and organized match fixtures with automated scheduling.

GitHub Link: https://github.com/afiatasnimria/Tourny_mate

❖ Automated Fish Pond (IoT-Based)

(Arduino, C++, Sensors, Servo Motors, L298N Motor Driver)
An intelligent **water quality monitoring system** designed for automated fish pond management. This system ensures optimal aquatic conditions by continuously monitoring and adjusting environmental parameters.

- **Arduino-based Control**: Uses **Arduino** for real-time data collection and automation.
- **Sensor Integration**: Monitors **temperature (DS18B20), pH levels, turbidity, and gas concentration** for water quality assessment.
- **Automated Actions**: Implements **servo motors and L298N motor drivers** to control water exchange, pH balancing, and food dispensing.
- **Decision-Making Algorithm**: Uses efficient control logic to ensure environmental stability.
- **Scalability**: Can be expanded for larger aquatic systems and commercial fish farming.

This system optimizes water conditions, reducing manual labor and improving fish health. GitHub Link: https://github.com/afiatasnimria/Automated-FishPond

Academic Qualification:

Concentration/Major	Institute	Result	Pas.Year
SSC	BN College, Dhaka	5.00	2018
HSC	Shaheed Bir Uttam Lt. Anwar Girls College, Dhaka	5.00	2020
BSCSE	United International University	CGPA:3.85 out of 4	Continuing Completed Credit:100

Personal Details :

Father's Name : MD RAFIQUL ISLAM

Mother's Name	: ISRAT ZAHAN Reba
Date of Birth	: 9 December, 2002
Gender	: Female
Marital Status	: Single
Nationality	: Bangladeshi
Religion	: Islam
Permanent Address	: Vill: Singherakathi, Bauphal, Bauphal, Patuakhali 8620
Current Location	: Dhaka
Blood Group	: B+