

# **Military Institute of Science & Technology** **(MIST)**

Department of  
Computer Science and Engineering (CSE)

Session : Level 4, Term I (Spring 2021)  
Batch : CSE-18  
Course Code : CSE 460  
Course Title : IDP-II  
Group : **Delta\_B**

## **AI Surveillance System** *System Development Report*

<b>ID</b>	<b>RANK</b>	<b>NAME</b>	<b>SEC</b>
201814003	Maj	Md. Nayeem Morshed Rumman	<b>B</b>
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201714127	Lt	Md. Naimur Rahman Hemal	













**Table of Contents**

**1. Required Platforms.....3**

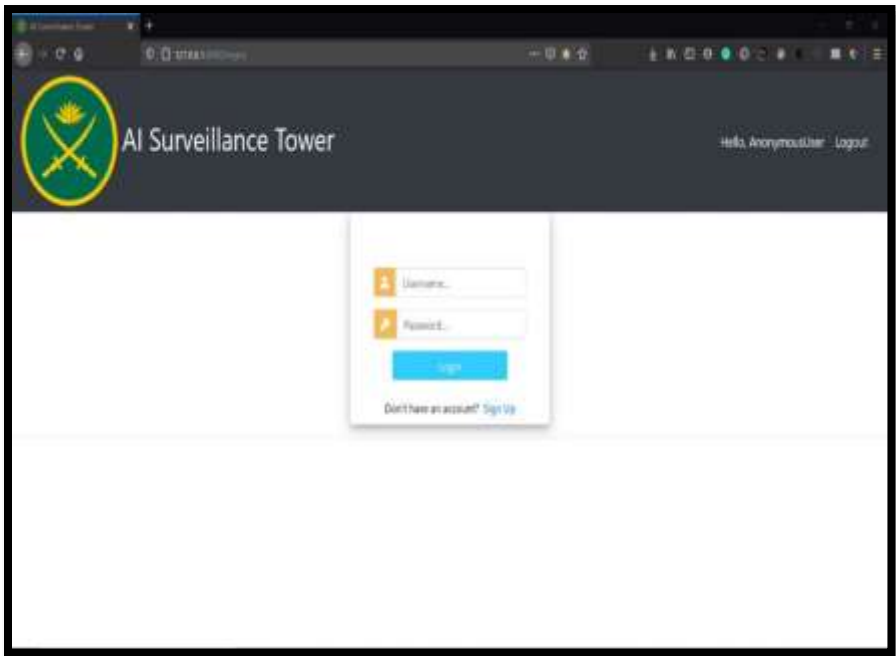
**2. UI Snapshots.....4**

**3. Scenarios .....8**

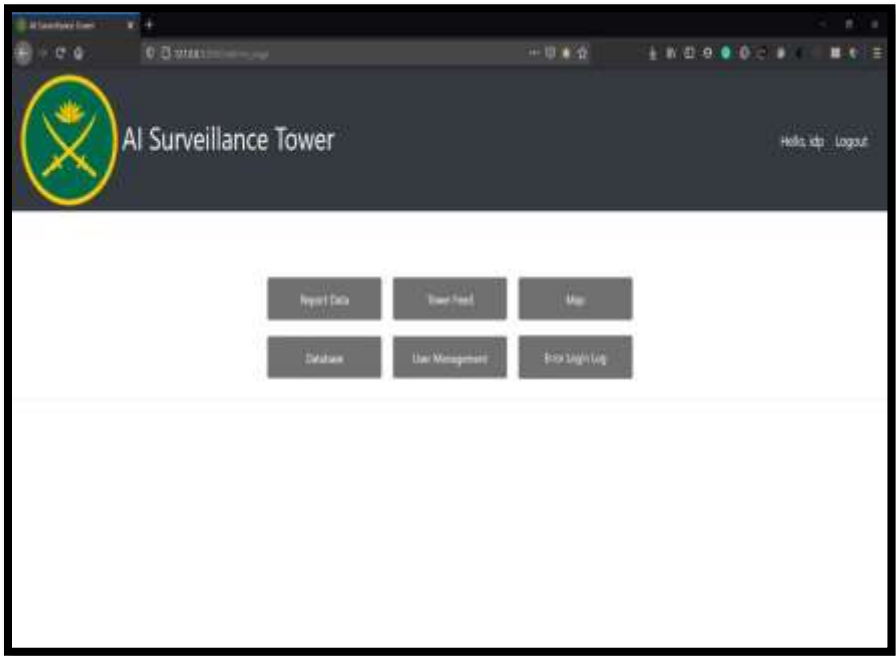
## 1. Required Platforms

Name	Description	Remarks
 Visual Studio Code	<b>VS Code</b> has been used as the code editor because of its vast features and suitability.	Code Editor
 Bootstrap	<b>Bootstrap</b> front-end framework has been used to create website.	Front-End
 HTML	<b>HTML</b> codes have been used for the front-end structuring in Bootstrap.	
 CSS	<b>CSS</b> codes have been used for the front-end design in Bootstrap.	
 python	<b>Python</b> has been used for the integral functionalities of image processing.	Back-End
 django python	<b>Django</b> is the back-end framework used for the website.	
 JavaScript	<b>JavaScript</b> has been used for the mapping at the back-end.	
 MySQL	<b>MySQL</b> database has been used for storing the data.	Database
 PostgreSQL	<b>PostgreSQL</b> graphical user interface (GUI) tools have been used for the designing purpose.	UI Design
 GitHub	<b>GitHub</b> , the code hosting platform, has been used while developing the project.	Code Hosting Platform
 Project	<b>Microsoft Project</b> has been used to manage the overall project scheduling and tasking.	Project Management Tool
 Jira Software	<b>Jira Software</b> has also been used to manage the overall project scheduling and tasking.	

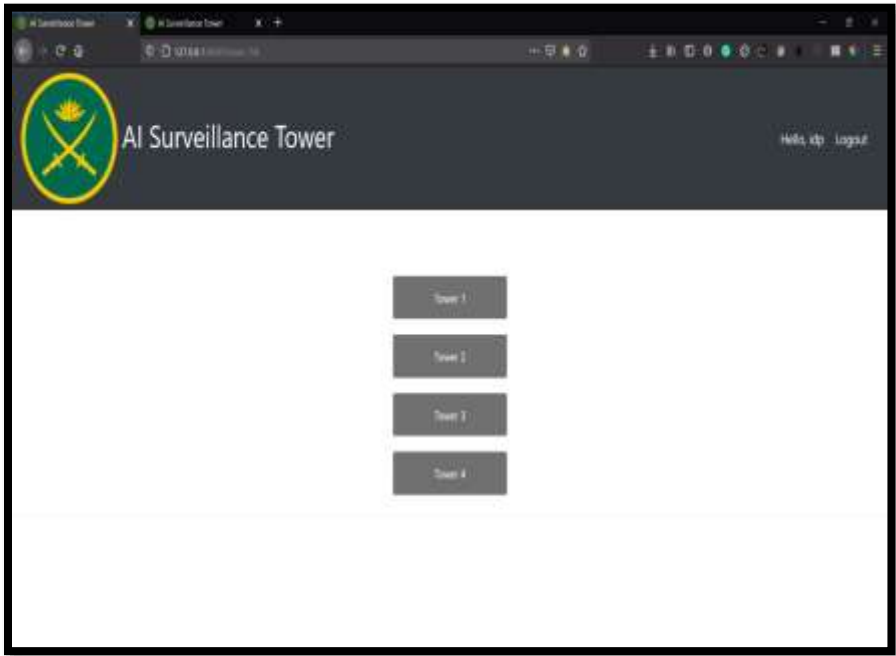
2. UI Snapshots



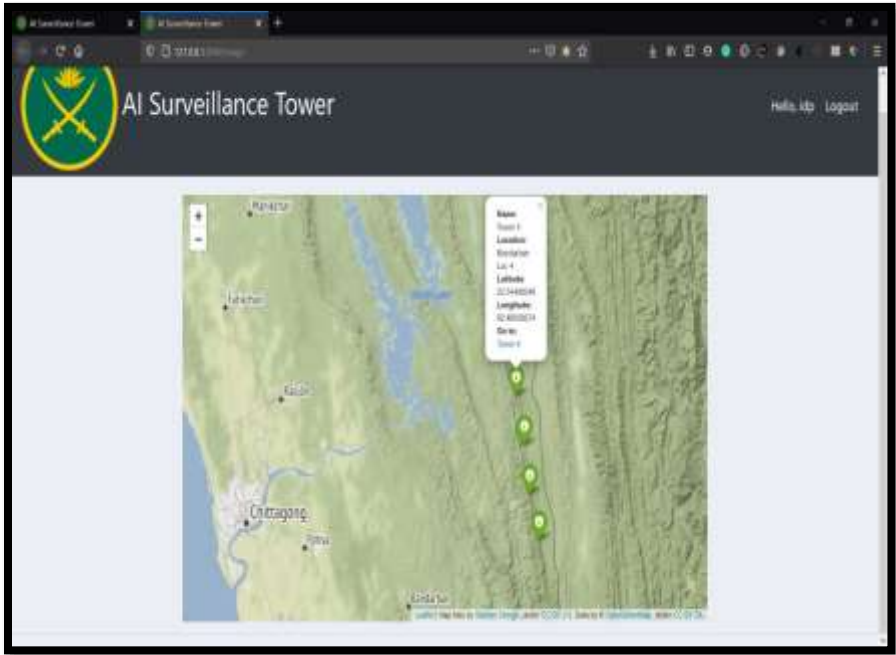
User/Admin Login  
Page



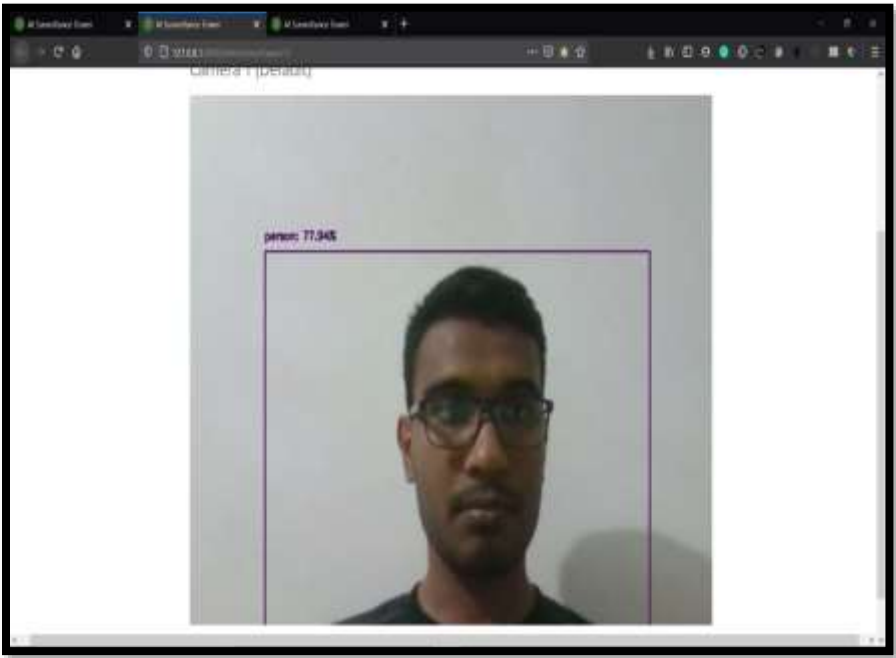
Features



**A. List of  
Surveillance Towers**



**B. Positional Map of  
Towers**

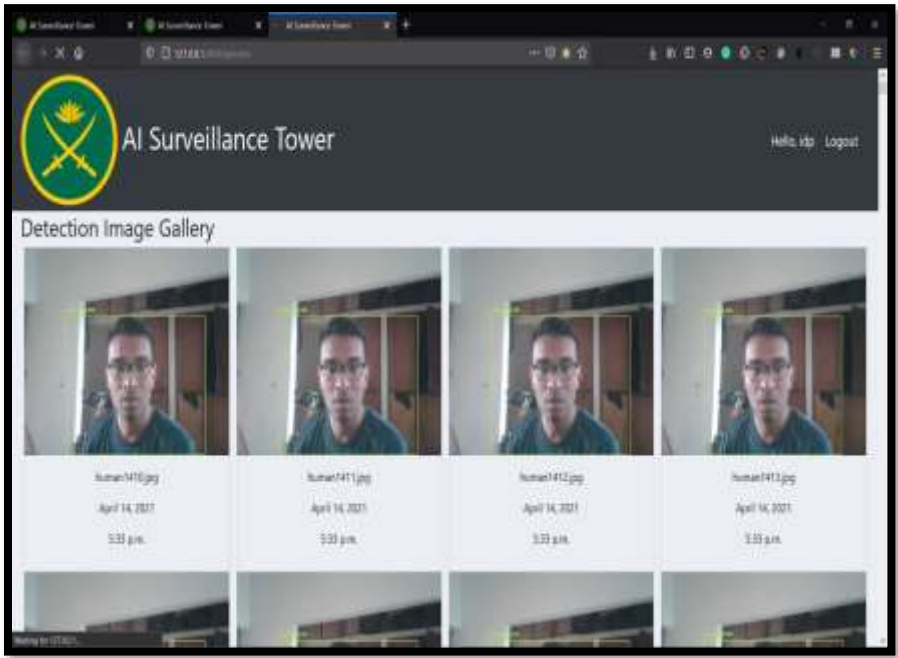


C. Live feed of the  
Camera

A screenshot of the 'AI Surveillance Tower' web application. The header features a logo with a green circle and a yellow sword, the text 'AI Surveillance Tower', and a user profile 'Hello, idp' with a 'Logout' link. Below the header is a table with four columns: 'Name', 'Detection Date', 'Detection Time', and 'Image'. The table contains 13 rows of detection logs.

Name	Detection Date	Detection Time	Image
human1410.jpg	April 14, 2021	5:33 p.m.	images/output1410.jpg
human1411.jpg	April 14, 2021	5:33 p.m.	images/output1411.jpg
human1412.jpg	April 14, 2021	5:33 p.m.	images/output1412.jpg
human1413.jpg	April 14, 2021	5:33 p.m.	images/output1413.jpg
human1414.jpg	April 14, 2021	5:33 p.m.	images/output1414.jpg
human1415.jpg	April 14, 2021	5:33 p.m.	images/output1415.jpg
human1416.jpg	April 14, 2021	5:33 p.m.	images/output1416.jpg
human1417.jpg	April 14, 2021	5:33 p.m.	images/output1417.jpg
human1418.jpg	April 14, 2021	5:33 p.m.	images/output1418.jpg
human1419.jpg	April 14, 2021	5:33 p.m.	images/output1419.jpg
human1420.jpg	April 14, 2021	5:33 p.m.	images/output1420.jpg
human1421.jpg	April 14, 2021	5:33 p.m.	images/output1421.jpg
human1422.jpg	April 14, 2021	5:33 p.m.	images/output1422.jpg

D. Detection Log  
Storage

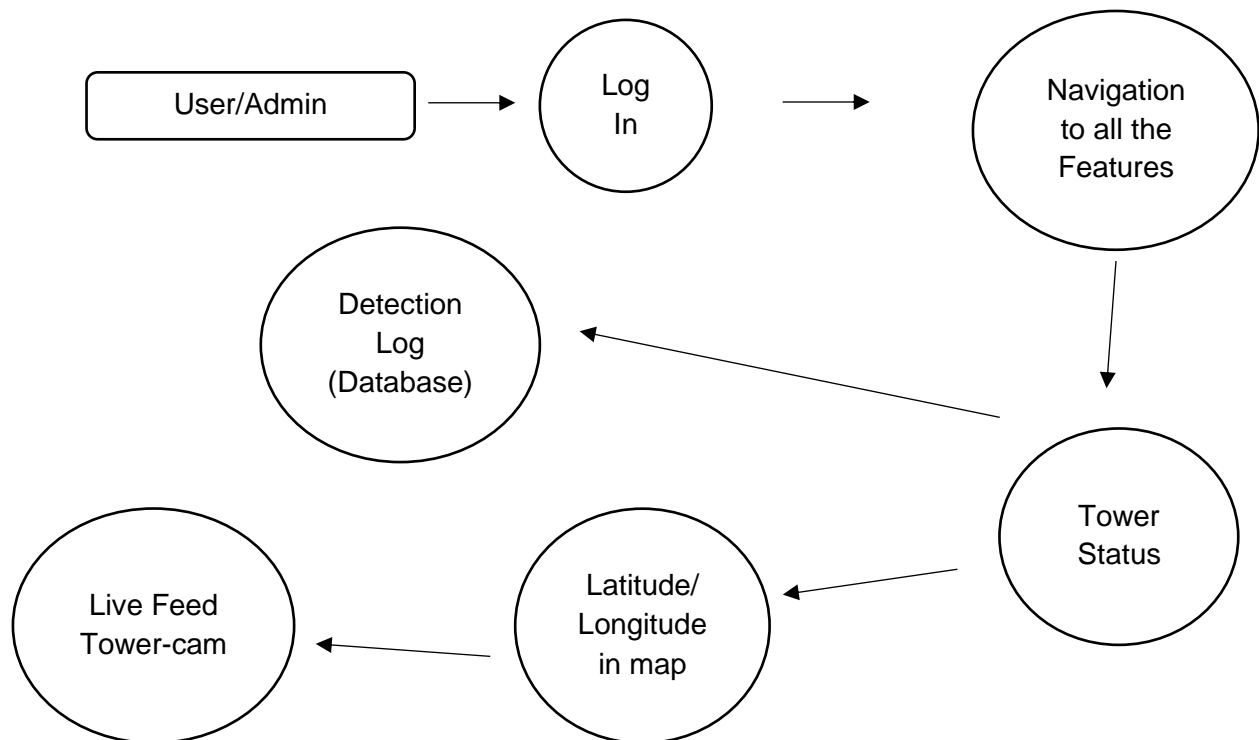


**E. Detected Images**

### 3. Scenarios

#### a. Scenario-1

A user/admin logged into his account and checked the status of all the towers. He can see the exact latitude and longitude of each tower and also can check the live feed. At the same time, he can also check the detection logs of the towers.





**b. Scenario-2**

An intruder was trying to pass by one of the AI Surveillance Tower in Rangamati and get inside the restricted area. While going that individual was caught by the AIST system and an alarm was generated and that individual was caught by the armed force. At the same time his face was saved in the detection log and auto generated notification was sent to authority.

