| **BSc (Hons) Computing Course 2021/22**  **Level 6 Production Project** | | |
| --- | --- | --- |
| **Name: Anan Rai** | **Student I.D.:** | |
| **Course:** BSc (Hons) Computing | **Supervisor’s Name:** | |
| **Final Project Individual Aim & Objectives** | | |
| **Title of my Project: Smart Doorbell With Enhanced Security Features** | | |
| **Aim of my Project: The main objective of this project is to create an intelligent doorbell system that incorporates an application managed facial by recognition using for RFID the and primary it access has control, a real battery time back video up processing. to versions The ensure will system that also comprises it include of is an secure always attempt door operational. to unlocking The incorporate future features such as break-in detection and notification system for the enhancement of security of homes.** | | |
| **Objectives of my Project: ### Objectives of my Project**  **### \*\*Objectives\*\*:**  **#### \*\*Main Objectives\*\*:**  **1. \*\*Develop a real-time video monitoring system”: This will allow the homeowners to be able to watch live videos of the visitors through a mobile application.**  **2. \*\*Implement facial recognition for secure access\*\*: To open the door for the intended users, based on facial recognition.**  **3. \*\*Integrate RFID-based unlocking\*\*: To also offer another means of letting people into the house, specifically through the use of RFID.**  **4. \*\*Enable remote control and monitoring\*\*: To enable the homeowners to be able to lock or unlock the door, control the visitors through the application.**  **5. \*\*Ensure continuous functionality with battery backup\*\*: To ensure that the system is operational even during power outage using a back up battery.**    **#### \*\*Secondary Objectives\*\*:**  **1. \*\*Add motion detection for proactive monitoring\*\*: To ensure that when a person comes near the door the camera is activated and the homeowner is notified.**  **2. \*\*Include tamper detection\*\*: To inform the homeowner if there is an attempt by another person to tamper with the doorbell.**  **3. \*\*Prepare the system for future break-in detection\*\*: To ensure that the architecture of the system is flexible enough to allow for integration of break-in detection and notification in the future versions of the system.**  **4. \*\*Log visitor activities\*\*: Sustain a secure history of all the access events, for instance, timestamps, faces and RFID.** | | |
| **Specification of my Product:**  \*\* Functional and Non Functional activities with MoSCoW | | |
| **Research: \*\* Focus mainly and describe the things you want 100 to 150 words**  **Evaluation: 100 words** | | |
| **Project Planning & Methodology** | | |
| **Project Planning:**  **\*\* what after the research or product**  **\*\* Project Timeline**  **\*\* Gantt chart**  **Methodology:\*\* RAD , waterfall, JAD, agile / Scrum or any other/ Use literature review**  \*\* | | |
| **Resources** | | |
| **The hardware and software I require to complete my Project successfully: \*\* List of tools/ software and Hardware compulsory** | | |
|  | |
| **Human Resource** | | |
| **I am working on my Project with the following people** | | |
| **Name: your name** | **Role: not needed**  Module Leader  Supervisor | |
|  |
| **Initial Bibliography** | | |
|  | | |