Attendance Management System --- Overall solution

Use FingerPrint

- When entering the class, the fingerprint will be used to confirm the student's entry into the class.
- When the system confirms the student's fingerprint, it will start counting the time the student is in the class. When the student leaves the class and needs a fingerprint, the system will not count the time the student is in the class.
- At the end of the class, the teacher will output a file containing the student's name, student ID, and class attendance time. If any student does not attend the required amount of time → absent.
- Fingerprint Scanner Hardware:

- Minimum: 1,200,000 VND

- Maximum: 4,800,000 VND

- Software Development:

- Minimum: 48,000,000 VND

- Maximum: 120,000,000 VND

Maintenance: 12,000,000 VND per year

Quiz Local IP

- Create a quiz attendance service, using only local ip
- The teacher sets the question and answer in multiple choice style; the teacher will choose 1 answer and the student must choose within the next 20 seconds; this ensures that only students in the class know the answer
- The system only accepts answers and requests from local ip, this will cause students from requests from other ips to not be accepted.
- Mesh Network Setup (Router + 2-3 Nodes):

- Minimum: 3,000,000 VND

- Maximum: 7,000,000 VND

- Ethernet Cables and Additional Nodes (if necessary):

- Minimum: 500,000 VND

- Maximum: 1,000,000 VND

- Software Development for Quiz System:

- Minimum: 48,000,000 VND

- Maximum: 120,000,000 VND

- Maintenance (Annual): 12,000,000 VND