Example of building an access control system case study

Business, Management

ASSIGN BUSTER

The ACS (Access control system) system monitors the persons entering the dormitory all the time

PROJECT SCOPE STATEMENT

- PROJECT OVERVIEW.

This project is undertaken to promote security of this college using, the Access control system can unlock the doors automatically through an electronic system where the image of the person entering the dormitory is processed in order to identify the people. The image of the person unlocking the door is rotated so and scanned for identification if it corresponds with the recorded images for the cards used in unlocking the dormitory doors.

2. PROJECT PURPOSE

3. PROJECT SCOPE.

This is a fixed contract.

The contactors estimate is $100, 000. 00, upon completion the system will contain the following devices.

- Cameras (4 cameras with high mega pixel, self-rotating and adjustable lens.)

- Two computers

- Optical Character reader

- Metallic doors

- Movable-doors with a self-lock.

4. PROJECT MILESTONE

The project should be complete by the end of this year (31/12/2013). Progress milestone associated with project are:

- Architectural drawings complete and approved

- Building permit approved

TASKS

- Feasibility study

- Financial feasibility, total amount required for the system, including hardware and software is calculated and compared with what the administration is ready to spend on the system. If budget is within the managerial plan then the system goes to the next stage.

- Technical and organizational feasibility is there enough personnel for system maintaining, does the management ready to offer support in terms of requirements among others.

- System analysis

- Requirement modeling, collect data and other important information from users. Categories data into functional (inputs, outputs and data for the system operation e. g. students admissions.) and non-functional (type of hardware required, number of persons to enter at the same time, memory space required for the system and the environment (OS)).

- System requirement documentation, organize requirements clearly and validate that is the true information by liaising with the users.

- System design

- User Interface design; fix the components that will interact with user directly, e. g. cameras, movable-doors among others.

- Application Architecture design, break the system into modules for easy

coding and testing.

- System Implementation

- System coding, the programmer codes the system modules using a high-level language e. g. C++, Java etc.

- System evaluation, the system modules are tested and then integrated after all bugs eliminated, installed to the environment.

- System Operation, security and support.

- User support manual and system deployment, a guide manual is documented the system is configured if any errors occurred.

- Management and support staff training, system is protected from hacking and malicious programs like viruses and malwares.

GANTT CHART

Key

Complete work. Incomplete work.

A SEQUENCE DIAGRAM TO IMPLEMENT THE SAME

Object: Coming Person.: ACS

Records persons Image

User shows ID card

System extracts the code

Verifies information

Information correct

Allows user to enter by opening doors

USE CASE FOR THE SAME SYSTEM

REFERENCES

P. K. Kimemiah: System Analysis and design; Kenyatta University-2009

group. 2010.

Lucy Gracier: Object Oriented Analysis and Design; 2011.