HUMAN COMPUTER INTERACTION

PROJECT PROPOSAL

IRIS BASED ATTENDENCE SYSTEM

GROUP MEMBER:

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Introduction

Biometric authentication is a process of identifying an individual based on behavioral characteristics. The ophthalmologist Frank Burch in 1936 proposed the idea of pattern recognition for personal identification purpose. In 1980 the pattern recognition was used in the film of James Bond but it was miracle at that time. This process of pattern recognition was firstly developed by John Daugman. An iris system has a function of most secure identification. That is why it is the most popularly used recognition system. Uniqueness, stability, permanency are the features that makes the iris recognition system more popularly. It uses the images of iris which is taken from the camera for the unique identification.

Description of Iris System:

Iris recognition verification is one of the most reliable personal identification methods in Biometrics. With the rapid development of iris recognition verification, Iris is present inside the eye and it is protected with different layers. System based biometrics and wireless technique solves the problem of spurious attendance. It can make the users' attendances more easily and effectively.

TASK ANALYSIS:

PATTERN MATCHING:

This is the next step to the iris localization method. Bringing the recent iris pattern which is taken from the camera is then transferred into spatial alignment with a candidate data base which is already saved. An aligned iris pattern represents the distinctive apparent pattern. Evaluating the goodness of the iris and matching the pattern between the recent acquired image of iris and data base of iris representations. If the recently acquired image of iris and the saved images of iris in the data base were derived from the same iris; then the goodness of the iris is matched. The Iris Code which is derived from this process is compared with previously generated Iris Code which is referred as pattern matching. Using integer XOR logic, a long vector of each iris code is XORed to generate a new integer. Each bit shows the mismatch between the vectors being compared.

TRANSMISSION USING WIRELESS TECHNIQUE:

There are mainly two kinds of iris recognition attendance management system in the market. On-line system may have power failure etc. so It will be easy with development of wireless such as WIFI, GPS, Mobile application etc.

FUNCTIONS AND COMPOSING OF THE SYSTEM:

• Take the task of users' attendances. • Transmit the information of attendances to the managing PC. • As a terminal of information, display useful information transmitted by PC on LCD.

TRANSMISSION PROTOCOL DESIGN:

Transmission protocol design Uncertain outside factors may occur in wireless transmission such as electromagnetic interference, power and noise interference. So we must supply a wireless transmission protocol which can do error correcting and detecting effectively.

CONTROLLING SOFTWARE DESIGN:

Attendances operations and system menu setting operations are carried out in keyboard processing program by the way of users or manager press keys to send keyboard interrupt message to system program. Operations of registering, deleting, modifying irises are in the system setting menu. Only manager has the right to enter system setting menu after verifying his/her iris recognition.
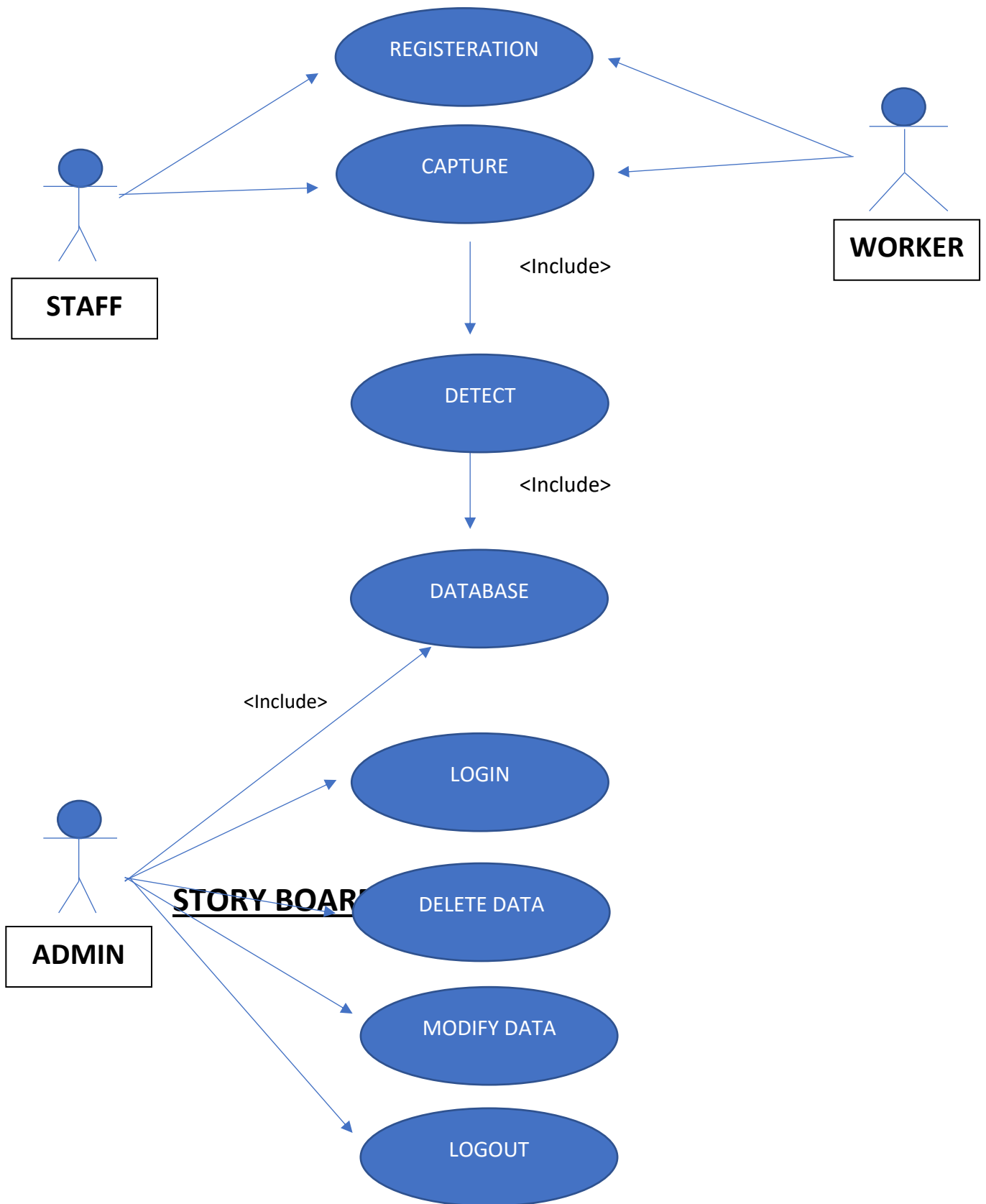
METHOD:

A typical iris recognition system generally consists of the following basic methods: I. Image acquisition, iris location, and pre-processing, II. II. Iris texture feature extraction and signature encoding,
III. III. Iris signature matching for recognition or verification.

CONCLUSION:

This system possess the functions of iris recognition, verifying, checking on attendances independently, and wireless communication and so on. The performance of this system meets the needs of daily attendance management in various enterprises and institutions. It has good market prospects. While the rapid development of chip and computer technologies, many new methods should be used in such system e.g. RFID technology.
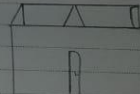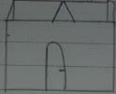
USE CASE DIAGRAM:

REGISTERATION

CAPTURE

STAFF

WORKER

<Include>

DETECT

<Include>

DATABASE

<Include>

LOGIN

STORY BOARD

DELETE DATA
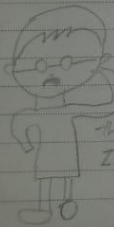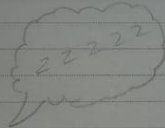
ADMIN

MODIFY DATA

LOGOUT

Company 1

company 02

Ahsan Salman has 2 companies. In which he personally work in company 1.

due to absence of owner, employees did not come on time, sometime they were absent but they get proper salaries due to poor attendence system.

Z Z Z Z Z

Ahsan Salman was very worried about his companies then he think to introduce IRIS attendence system.
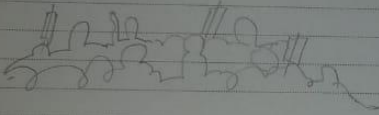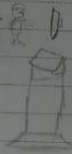
Ahsan Salman hired Talha and Mubashir to make IRIS attendence system, and they made it brilliantly.

Ahsan Salman gathered all the
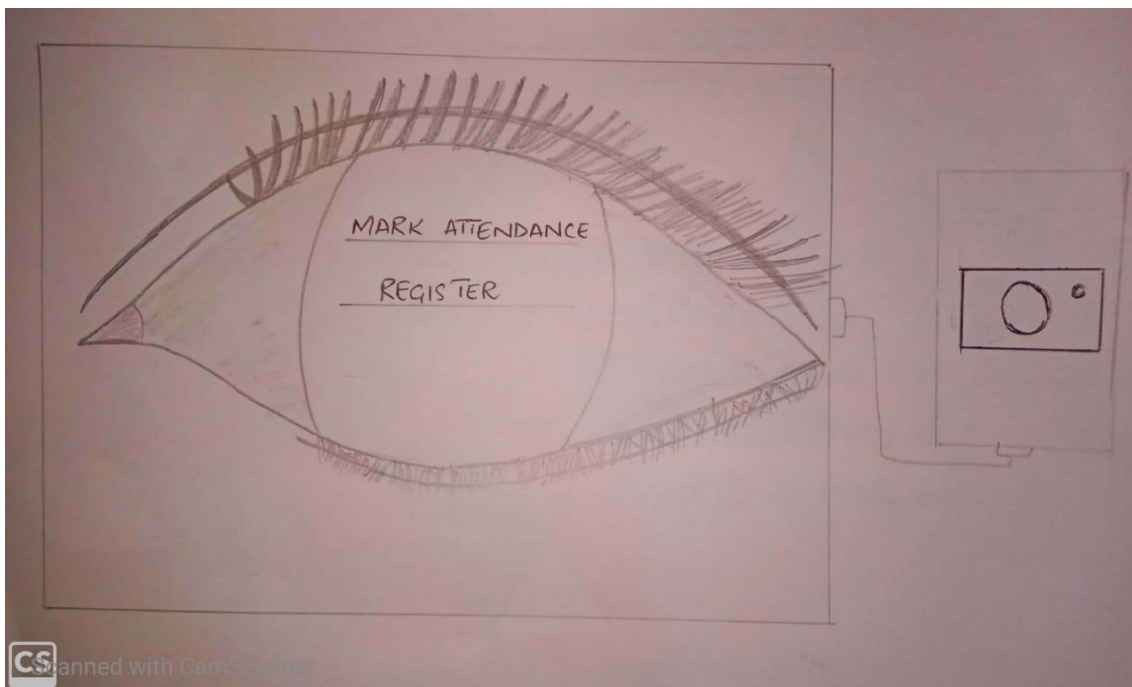employees, and collect their eye
data one by one for
proper attendence.

Dated: _____

After IRIS attendence
system come on time,
and got their salaries
according to their attendence

Ahsan Salman is
very happy to
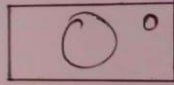see his company
run properly by
IRIS attendence
system.

PROTOTYPE:

REGISTRATION

NAME	ABC
ADDRESS	ABC
PHONE NO.	ABC
D.O.B	ABC
SEX	ABC
EMAIL	ABC

REGISTERED

RECORD

NAME	XYZ
ADDRESS	XYZ
PHONE NO.	XYZ
D.O.B	XYZ
SEX	XYZ
EMAIL	XYZ

DETECTED

ATTENDANCE MARKED!

PERSONAS

What is your name ?

Ans : My name is Talha Saghir

What is your Father name?

Ans : My father name is Sheikh Saghir Mohammad .

What is your age?

Ans: I am 21 years old .

What is your hobbies?

Ans : My hobbies is to develop new things ,new softwares and to work on unique ideas like the iris attendance system. These hobbies make me different from others software engineers.

What is your profession?

Ans : Basically I am a Software engineers by profession firstly I worked as a developer in a XOROXINSTA house now i have my own software house in which I have many employees and we all together work on our projects .

From where you get the idea of this unique IRIS ATTENDANCE SYSTEM?

ANS : Basically when I was an employee in XOROXNSTA house I never thought about that because I just work on my given project and never thought about the House system but when i open my sotware hosue I realize that many employees came late, some did'nt come office but they got their salaries on time without any investigation then I thought that I have to make any system through which all

employees come on time and never absent that's why i made this IRIS ATTENDENCE SYSTEM .

Do you think that your IRIS ATTENDANCE SYSTEM is successful?

ANS: Yes , my IRIS ATTENDANCE SYSTEM is successful because i record all the information of the employees in it .all the workers mark present if they are present physically infront f the IRIS ATTENANCE SYSTEM.

Do you think that you can make your system more succcessfull or more strict ?

ANS : Yes ,in future I can make my project more successful and advance according to the pastage of time.

Where we can use the IRIS ATTENDANCE SYSTEM ?

ANS : you can use it in your offices ,schools ,factories wherever you want to. This is the best and advance way of marking the attendance.

How long you take to develop this unique project ?

ANS : I took three months to develop this project completely because the basic idea was in my mind and I work on it with my idea and last I complete my project .

Did you done this project alone?

No , I done this project with the help of my partner.

What is your name ?
Ans : My name is Mubashir Ahmed.

What is your age?
Ans: I am 21 years old .

What is your hobbies?
Ans : My hobbies is to develop new things ,new softwares and to work on unique ideas like the iris attendance system. These hobbies make me different from others software engineers.

What is your profession?
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Did you done this project alone?
No , I done this project with the help of my partner.

What is your name ?
Ans : My name is Ahsan Salman

What is your age?
Ans: I am 19 years old .

What is your hobbies?
Ans : My hobbies is to learn new things and understand new softwares like they develop the IRIS ATTENDANCE SYSTEM. I think this is very unique and innovative idea.

What is your profession?
Ans : Basically I am Studenyt of of BSCS at PAF KIET UNIVERSITY (Noth Campus) and now wants to learn new things. That's why I prefer this IRIS ATTENDANCE SYSTEM.

Do you think this IRIS ATTENDANCE SYSTEM Is better than other attendance system ?
ANS : yes obviously , this is he best way to mark attendance and we can use it in wherever we want . thumb and signature sytem is the old system of attendance and people making fraud in it . but now no one can cheat through this system.
Do you think that we can make this system more succcessfull or more strict ?

ANS : Yes ,in future you can make this project more successful and advance according to the pastage of time.

Where you can use the IRIS ATTENDANCE SYSTEM ?
ANS : we can use it in your offices ,schools ,factories wherever you want to. This is the best and advance way of marking the attendance.

Do you think that IRIS ATTENDANCE SYSTEM is successful?
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COGNITIVE WALKTHROUGH:

In IRIS ATTENDANCE SYSTEM first we have welcome page on wich we write "WELCOME TO IRIS BASED ATTENDANCE SHYSTEM "

On next page we have three options

1. REGISTRATION

2.MARK ATTENDANCE

3. HELP

REGISTRATION:

one who want to register himself can use registration in which we can conduct his/her information like Name , Address , Phone number , Date of birth , Sex, Email and scan his/her eye for record .

MARK ATTENDANCE:

After registration ,one can easily mark his/her attendance easily without any problem . user can use registration option once for registration and then they can use mark attendance option to mark his attendance whenever the person present infront of the IRIS ATTENDANCE SYSTEM .

HELP :

On selecting help user can know better how to use this attendance system accurately without any problem and how to detect and register his eye without any problem .

PROTOTYPE LINK:

https://drive.google.com/file/d/1e3SEkxC46Z8t-hRF_4l0nnhc9BvaMoJR/view?usp=sharing