UNIVERSITY OF SIERRA LEONE (USL)

INSTITUTE OF PUBLIC ADMINISTRATION AND MANAGEMENT (IPAM)

Module Title & Code

SOFTWARE ENGINEERING II – ISM 322

Department

INFORMATION SYSTEMS

YEAR 3 – 2nd SEMESTER

BRAKEDOWN OF INDIVIDUAL CONTRIBUTION

NAME	CONTRIBUTION

Group A
 	
• Samuel Squire &
• Ophelia Collier
	• Login page:
	  ○ Admin page
	  ○ User page
	
	• Add record: id, fname, Lname, age, sex, address, height, eye color, crime and police station of a criminal

Group B
 	
• Ibrahim Sahid Bangura &
• Fatmata H kanu
	• Search Record:
	
	  ○ A button that will help the user to search for a criminal record.
	• Update Record:
	
	  ○ A page that will help the user to add record to an existing criminal name.
	
	• Create User: A page that will help the admin to create a user with the user Id, name, username and password

Group C
 	
• Ibrahim Samura &
• Gibril Mansaray
	• Modify User:
	  ○ The admin will be able to add or change any details pertaining to any user.
	• Delete User:
	  ○ A section that will help the admin to delete any user from the system.
	
	• Save Records: A button that will help to save all the records that have be taken on a particular event so that they can be able to store in the database

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PART 1

PROBLEM STATEMENT

The purpose of this system software is to facilitate Police Stations to improve the efficiency, controls, and records of file case for criminals. This is to enhance proficiency in all police stations right across the country. It will also help in uniting each of these stations and if criminals are transferred to a different location or prison, their information can easily be accessed without any time wasting. Police station Management System has been implemented as an accessible Web-based query application, which provides timely and accurate information on Offenders. The software implemented is a typical automated police station management system, based on client-server architecture allowing data storage and criminal record interchange between the police. Since manual crime records keeping by Sierra Leone police has been a problem with high cost of saving data, as it is mostly associated with paperwork, frequent case of missing files because records are not properly secured and lack of good storage media which makes retrieval of records quite stressful and has leads to data redundancy. Therefore, we develop an application that will help to improve the efficiency and effectiveness of the police security measures in keeping criminal records. The application is developed to eliminate paper-based information exchanges and to facilitate the electronic provision of criminal record to crime investigator(s). The design and implementation was carried out using the top down development approach (UML). The tools used to implement this project are visual studio 2010 with ASP.net framework and SQL server.

GLOSARRY OF TERMS

1. WEB BASED- A software you use over the internet with a web browser
2. Functional requirement -it describes what specifically needs to be implemented in a particular system or product and what actions users have to take to interact with the software
3. Nonfunctional- Its shows what properties and features a particular solution has, namely how the system will work and why.
4. Criminal- Is A Podcast About Crime. Stories of people who've done wrong, been wronged, or gotten caught somewhere in the middle
5.

PART 2

SYSTEM REQUIREMENTS:

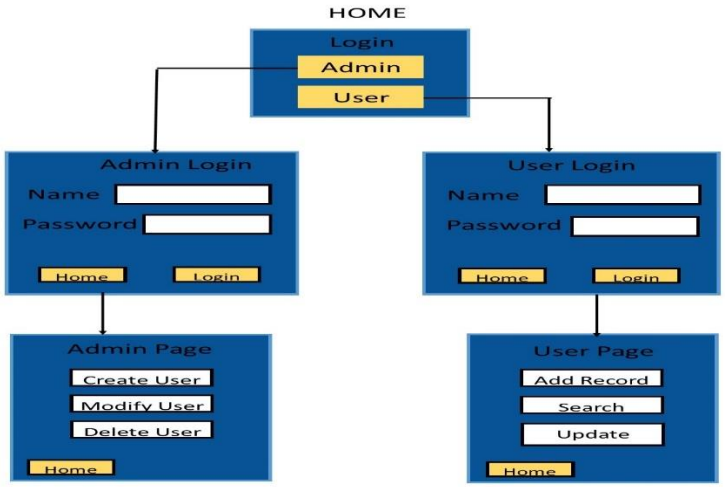
FUNCTIONAL REQUIREMENT

IDENTIFIER	REQUIREMENT
RQ1	Admin login with name and password
RQ2	User login with name and password
RQ3	Admin create user
RQ4	Admin modify user
RQ5	Admin delete user
RQ6	User add record of criminal
RQ7	User search for criminal details
RQ8	User update criminal records

NON-FUNCTIONAL REQUIREMENT

IDENTIFIER	NON FUNCTIONAL REQUIREMENT
RQ1	24*7 availability
RQ2	Password should be encrypted for safety
RQ3	Flexible service based architecture will be highly describe for future extension
RQ4	Software must be able to run on any computer
RQ5	The software must be easy to go through

USER INTERFACE REQUIREMENT



FUNCTIONAL REQUIREMENT SPECIFICATION

a) Stakeholders
   i. Government
   ii. Police workers (men and women)
   iii. Lawyers
   iv. System developers

b) Actors and goals

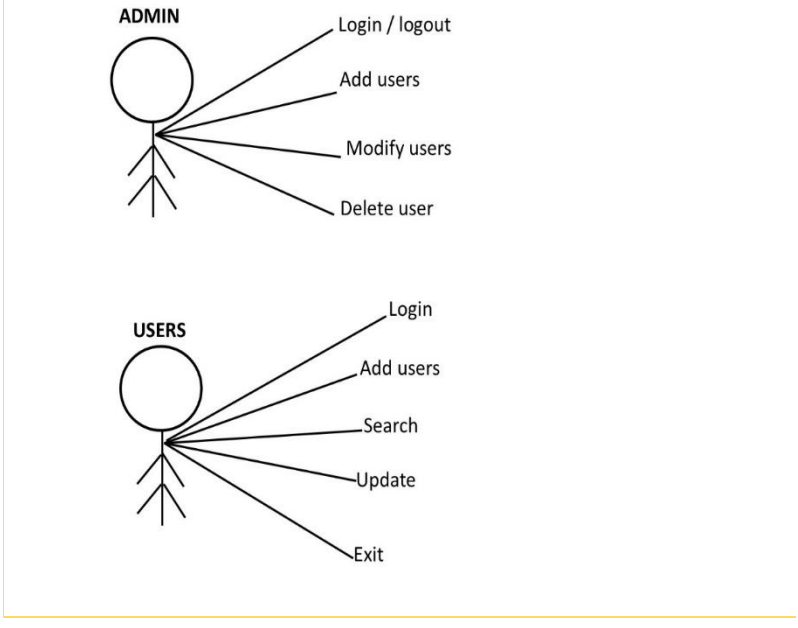
Actors	Goals
Admin	To add users
Admin	To delete users
Admin	To modify users
Admin	Should be able to login to the system
Admin	Should be able to assign roles to users
User	To find out for out for unauthorized users that access the system
User	Should be able to login to the system
User	To add records of criminals
User	To search for criminal
User	To update records

c) Use case

i. Casual description

Use Case	Casual Description
UC 1	Admin should be able to login to the system
UC 2	Admin will be able to create users
UC 3	Admin will be able to modify users
UC 4	Admin will be able to delete users
UC 5	Users should be able to login to the system
UC 6	Users should be able to add record of criminal
UC 7	Users should be able to search for criminal record
UC 8	User should be able to update and save criminal records

ii. Use case diagram



iii. Traceability matrix

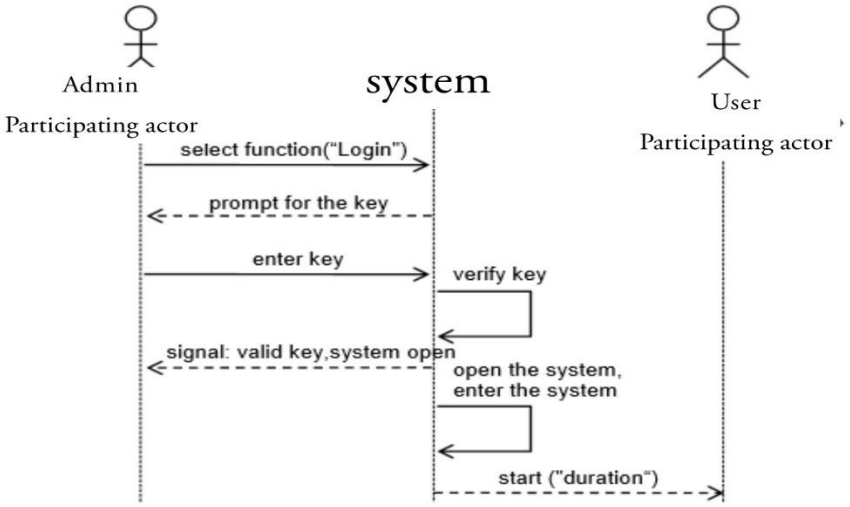
REQ	UC1	UC2	UC3	UC4	UC5	UC6	UC7	UC8	UC9
REQ1	*	*							
REQ2			*						
REQ3				*					
REQ4					*				
REQ5						*			
REQ6							*		
REQ7								*	
REQ8									*

iv. Fully-Dressed description

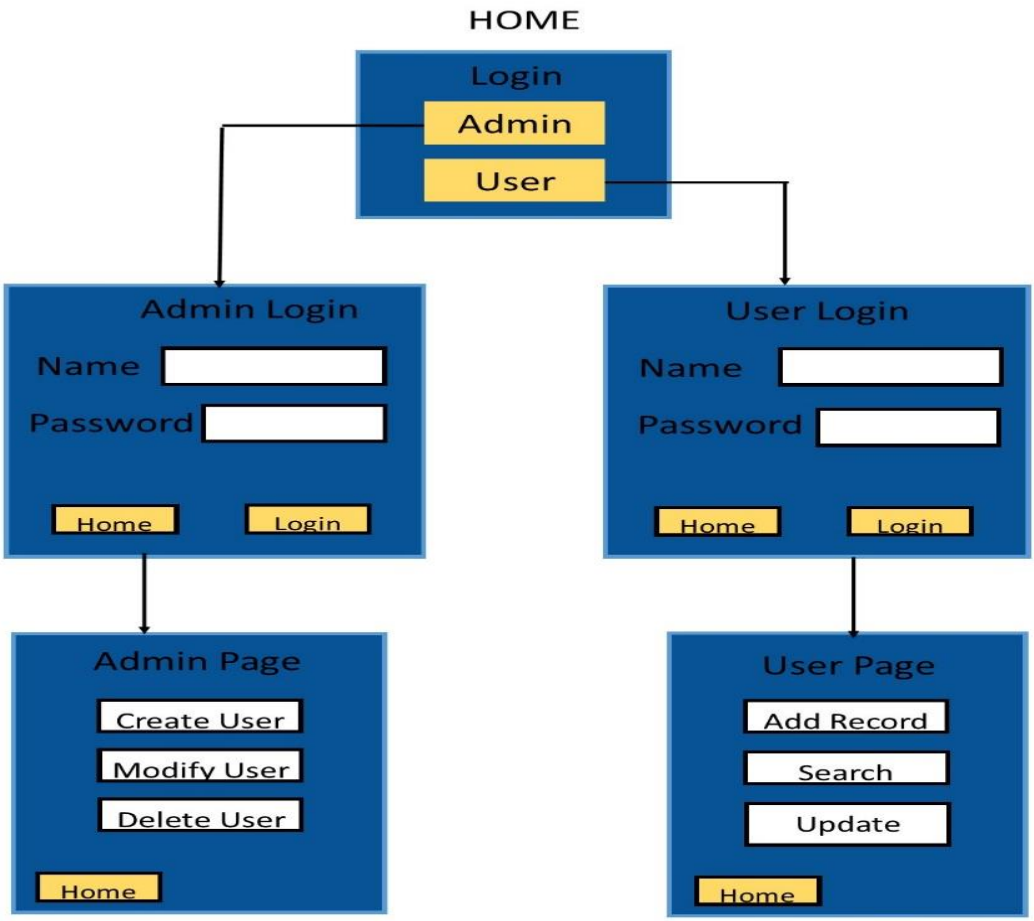
- Admin will be able to add user when he clicks on the + icon in the user area. In the add user section, he can input the user registration number, name and password and then click on save. He can also click on the back button after saving the new inputted user or if he wants to cancel.

- Users will be able to access the system. Users should be able to add, modify, update and delete records of criminals and after adding them they also save those records.

v. System sequence diagram



USER INTERFACE SPECIFICATION



PART 3

DOMAIN ANALYSIS

- Concept definition: Is the set of system activities in which the problem space and the needs and requirements of the business and stakeholders are closely observed
- Association definition: means that a class will actually contains a reference to an object, or objects of the other class in the form of an attribute.
- Attribute definition: is a changeable characteristic of some component of a program that can be set to different values.

PROJECT ROAD MAP

ID	TASK NAME	DURATION	June				July				August			
			1	2	3	4	5	6	7	8	9	10	11	12
1	INITIATION	4 Weeks												
1.1	Research	1 week												
1.2	Develop project proposal	2 weeks												
1.3	Perform feasibility study	1 week												
2	PLANNING	5 weeks												
2.1	Create project plan	1 week												
2.2	Create resource plan	6 days												
2.3	Create risk plan	1 week												
2.4	Create communication plan	9 days												
2.5	Perform review	2 days												
3	ANALYSIS	5 WEEKS												
3.1	Requirements analysis	14 days												
3.2	Requirement specification	14 days												
3.3	Analysis of current system	7 days												

3.4	Perform review	1 day												
2.8	Create procurement plan	5 days												
2.9	Contract suppliers	3 days												
2.10	Perform review	1 day												
4	DESIGN AND DEVELOP	6 WEEKS												
4.1	Architecture design	3 days												
4.2	System design	5 days												
4.3	Logical design	3 days												
4.4	Physical design	3 day												
4.5	Build deliverable	28 days												
4.6	Perform review	1 day												
5	IMPLEMENTATION AND TESTING	3 WEEKS												
5.1	Implementation	7 days												
5.2	Testing	3 days												
5.3	Training	12 days												
5.4	Review	1 day												
6	MAINTENANCE AND EVALUATION	2 WEEKS												
6.1	Perform review	1 day												
7	PROJECT DOCUMENTATION	12 WEEKS												
8	CLOSURE	1 WEEK												
8.1	Perform project closure	4 days												
8.2	Perform project completion	3 days												

REFERENCES:

Miles, R and Hamilton, K. (2006). Learning UML 2.0 . United State of America: O'Reilly