COMPANY DETAILS

COMPANY NAME	**JINKA STYLES INVESTMENT CC**
REG .NO	**CC/2013/04983**

GENERAL INFORMATION

PRINCIPAL CONTACT PERSON	**MS ANGELIKA KASOMA/ MR. SYLVESTER MOFOKENG**
ADDRESS	**POSTAL: P.O BOX 7777 WINDHOEK**
	RES: ERF 8842 WILLIBALD KAPUNENE STREET
TEL /CELL	**+264 81 214 6086/+264 81 287 4044**
YEAR ESTABLISHED	**2013**
TYPE OF ORGANISATION	**PRIVATE**
TYPE OF BUSINESS	**CLOSE CORPORATION**
SUMMARY OF MAIN BUSINESS ACTIVITIES	**INSTALLATION OF AUTOMATED SECURITY SYSTEM,TRAINING AND CONSTRUCTION SERVICES (BUILDING AND ROADS), RENOVATION AND BUILDING MAINTENANCE, ROAD REHABILITATION AND ROAD MAINTENANCE, CLEANING OF REST PLACES AND ROADS RESERVES, SECURITY AND PROTECTION SERVICES SUPPLY AND DELIVERY OF CONSUMABLES AND NON- CONSUMABLE GOODS, LOADING AND OFFLOADING OF CARGO, PACING AND FILLING OF SHOP SHELVES INCLUDING GENERAL MARSHALING DUTIES OTHER RELATED BUSINESS ACTIVITIES**
NO. OF EMPLOYEES	**4 (FOUR)**
SOCIAL SECURITY NO:	**30084440**
INCOME TAX NO:	**6354059-01-1**
NAME OF ACCOUNTING OFFICER	**OFFIAS MUBAIWA, P.O BOX 8489 WINDHOEK KATUTURA**
COMMITMENT	**JINKA STYLES INVESTMENT CC IS A NEWLY ESTABLISHED 100% NAMIBIAN OWNED PROVIDE THE BEST SERVICES AND PRODUCTS TO OUR CLIENTS. WE STRIVE TO IDENTIFY OUR CLIENT'S PROBLEMS COMPLETION**

INTRODUCTION

Jinka Styles Investment cc is a Windhoek based company which was established in May 2013 and is a 100% Namibian owned company of Ms Angelika Kasoma. The establishment of this company was to add value to the Namibia economy in order to explore a wide range of business activities.
Having worked for Kentucky Fried Chicken, Namib Mills, Blinkogies Edu-Care Centre, Creative Welding, Oluzizi World of Commerce and Elohim Investment cc companies in different position for over 13 years, Ms. Angelika Kasoma decided to share her skills and experience through starting her own company called Jinka Styles Investment cc.

Currently, the company is involved in Computer trainings, Security System Installation and small projects, we also tender at different Ministries for Computer training and for Security Systems naming MOHSS and MET.

SERVICES

Main activities are: Training in Computer, Skills training in Speed typing, Secretarial training office Administration, Receptionist Basic Bookkeeping, Security System Installation and Nail Technician training, Supply and delivery of consumables and non-consumables goods, other related business activities.

MISSION

The mission of Jinka Styles Investment cc is to provide quality products and service at all times and become a market leader in penetrating existing markets for companies to diversify into wide range of business opportunities has shown a significant growth.

Jinka Styles Investment cc will endorse into the following value:

- **To penetrate other markets in other areas of Namibia in order to create a high investment return.**
- **To create high innovate products and service in their wide range of trading activities.**
- **Attract a wide range of large companies in order to build and sustain a loyal client based.**

THE MARKETS

Jinka Styles Investment cc will enter the market by specializing first in Security System and Training activities. The company will build a strong client relationship in order to become productive and loyal to our clients. Thus the company will tender different trading activities in order to enter the market by dominating and specializing into each unique market for the benefit of our clients.

KEYS TO SUCCESS

Besides the superior products, support services and extra attention to detail through our operation in providing a wide range of business activities to our clients, in Security system and Computer trainings market is booming at the moment. In order to achieve a defendable position in this environment Jinka Styles Investment cc will concentrate on the following:

- **Secure at least five commercial contracts over the next five years.**
- **Expand customer base through expanding into other geographical areas to retain a sufficient level of profitability.**

HEALTH AND SAFETY

The health, safety and welfare of all staff, sub-contractors, clients and visitors is significant important to Jinka Styles Investment cc, and it's our intention to strive for excellence in the effective health and safety management of all projects under our control.

We also aim to effectively mitigate all hazards arising from our facilities, activities and site specific environment.

We will also ensure to comply with all legal obligations, relevant standards and codes of practice with a commitment to developing a culture of safety within the all business activities the company will venture in.

ENVIRONMENT SUSTAINABILITY

At Jinka Styles Investment cc, we understand that environment sustainability is everyone's responsibility and as a newly established 100% Namibian owned company we prepared to lead the way in this regard. We also realize that a commitment to the environment is not just socially responsible, but also good business practice as we seek to explore more in various fields of business that the company is involved in and to create good reputation. For this reason we will ensure that all regulations relating to environmental issues as set out by the Local Council and the Department of Environmental Affairs are implemented throughout every facet of our business.

Simply put, our overall objectives is to carry out our operation in a way which manages and minimize any adverse environmental impact and to prevent any pollution.

MANAGEMENT AND PERSONAL

The structure of Jinka Styles Investment cc is as follows:

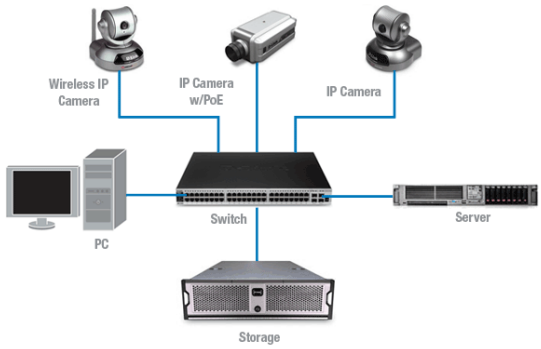
MANAGER
↓
***3 LABOURERS**

In order to deliver quality services to clients and to build good reputation Jinka Styles Investment cc believes in recruiting and hiring qualified personnel in certain areas of the company. In addition the company has 3 well skilled employees in the fields of Training and installing of Security System with years of experience –depending on the size of the project. Jinka Styles Investment cc determines on recruiting more staff.

At Jinka Styles Investment cc we fully believe the adage "Your staff are your most important asset." We realize that the personal and professional development of our team is imperative in ensuring the successful delivery of projects, and thus the success of our business. We therefore foresee investment in our staff through comprehensive training programs, monitoring and coaching. The rewards of this philosophy are inevitably shared with customers through increased satisfaction and better quality service.

Examples of studio rooms

Studio Room



Graphs of the network setup

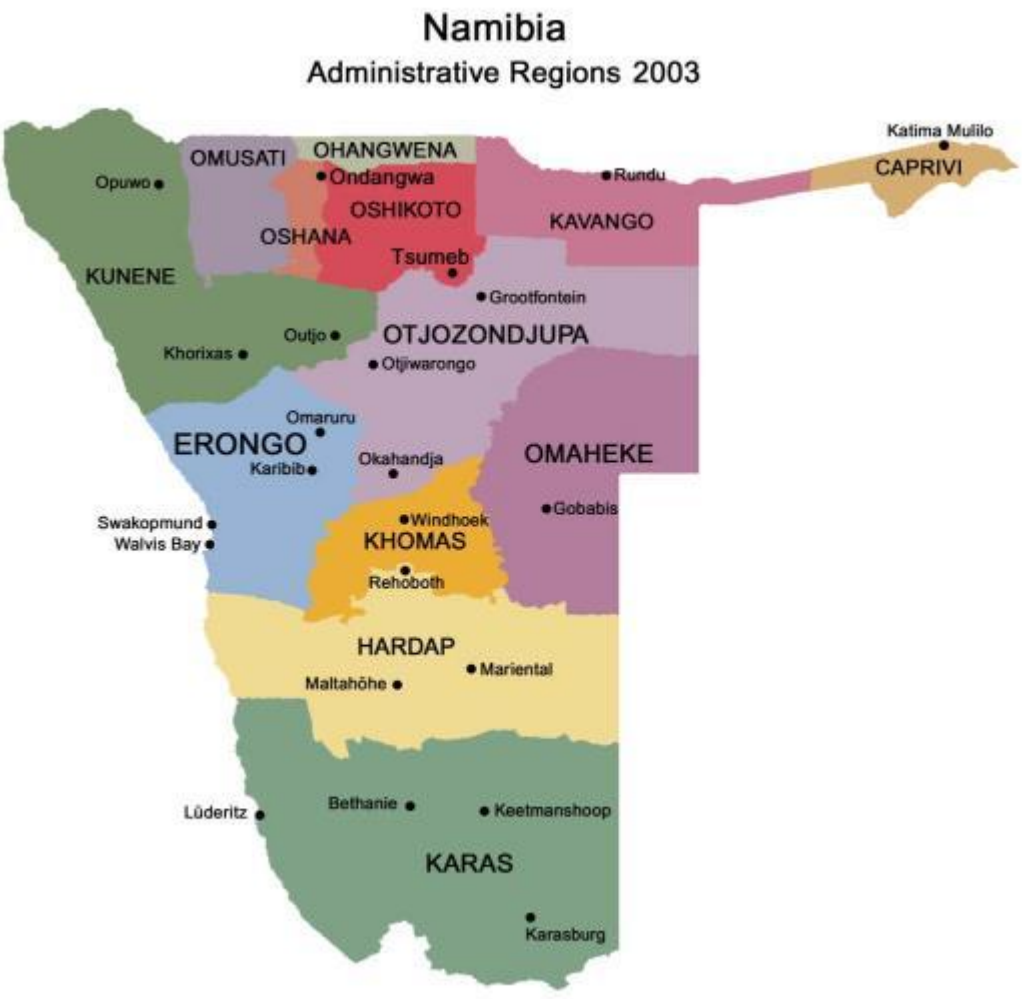
Data center for the recording all courts in Namibia

ALL CORNERS OF THE INSIDE OF THE COURT WILL BE RECORDED WHEN IT TAKES PLACE,MOVEMENT VIDEO AND ALL CONVESATION WILL BE RECORDED BEEN SAVED ON THE DATABASE OF EACH COURT IN NAMIBIA.

SUPREME COURT THERE WILL BE THE MAINFRAME DATABASE CCTV AND CRIMINAL ANALYST SOFTWARE

ALL COURTS WILL BE RUNNING SYSTEMS ON A DATABASE VIDEO AND VOICE RECORDING.

THE SOFTWARE OF THE COURTS WILL BE LINKED TO ALL COURTS, MINISTRY OF JUSTICE,POLICE, CITY POLICE,HOME AFFAIRS WILL BE LINKED



ALL REGIONS WILL BE CONNECTED TO THE MAINFRAME IN NAMIBIA

Software index

FILES

The Files: The Ministry of Justice database will be consists of 21 files. There are seven property files containing records of stolen articles, boats, guns, license plates, parts, securities, and vehicles. There are 14 persons files, including: Supervised Release; National Sex Offender Registry; Foreign Fugitive; Immigration Violator; Missing Person; Protection Order; Unidentified Person; Protective Interest; Gang; Known or Appropriately Suspected Terrorist; Wanted Person; Identity Theft; Violent Person; and National Instant Criminal Background Check System on the Ministry of Justice Denied Transaction. The system also contains images that can be associated with the Ministry of Justice records to help agencies identify people and property items. The Interstate Identification Index, which contains automated criminal history record information, is accessible through the same network

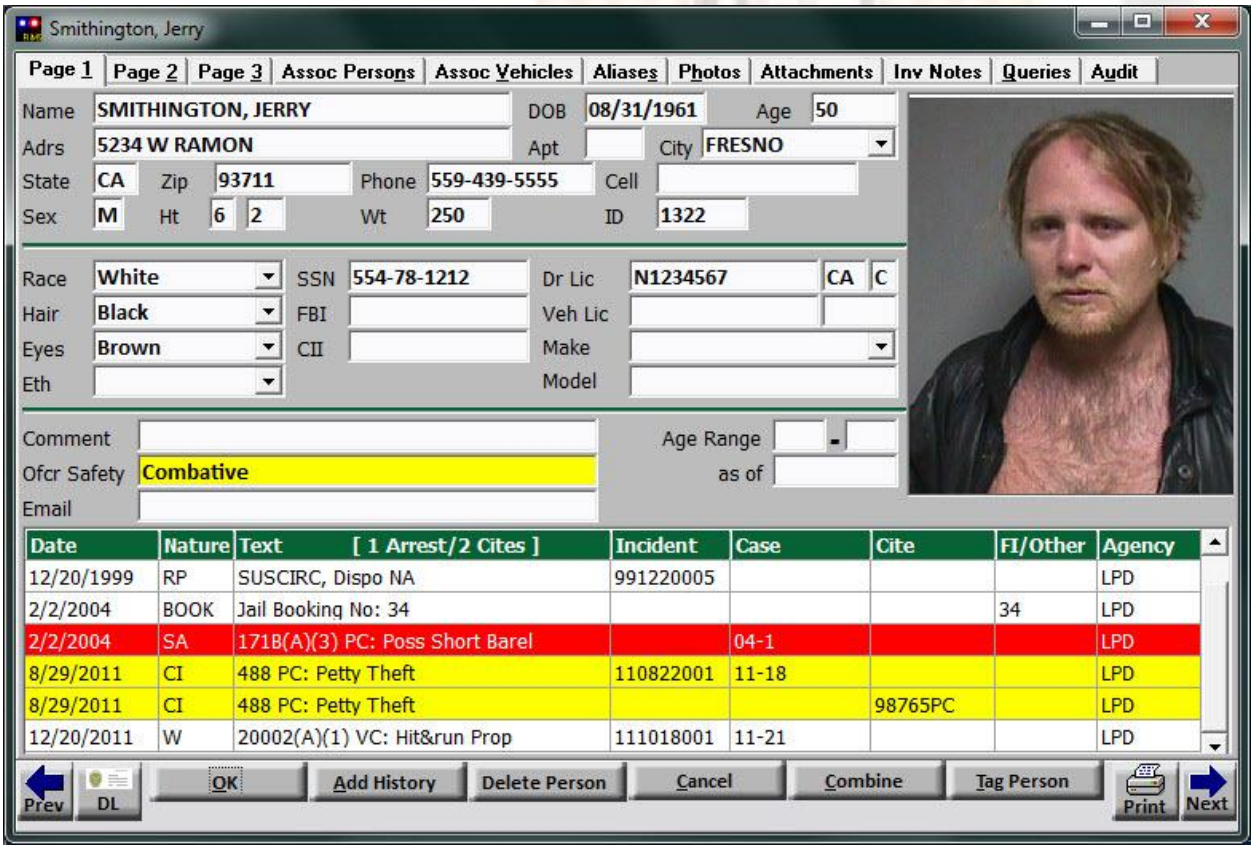
Namibian police Files

The Namibian police database includes 21 files (seven property files and 14 person files).

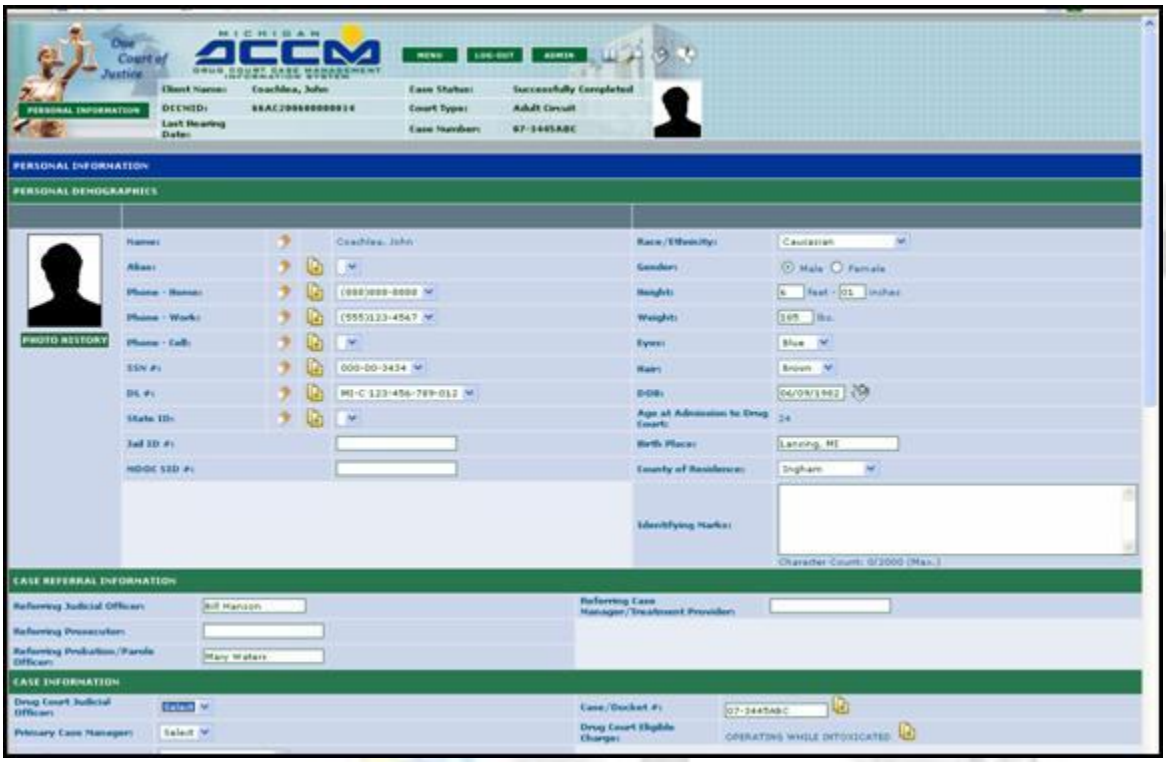
- **Article File**: Records on stolen articles and lost public safety, homeland security, and critical infrastructure identification.
- **Gun File**: Records on stolen, lost, and recovered weapons and weapons used in the commission of crimes that are designated to expel a projectile by air, carbon dioxide, or explosive action.
- **Boat File**: Records on stolen boats.
- **Securities File**: Records on serially numbered stolen, embezzled, used for ransom, or counterfeit securities.
- **Vehicle File**: Records on stolen vehicles, vehicles involved in the commission of crimes, or vehicles that may be seized based on federally issued court order.
- **Vehicle and Boat Parts File**: Records on serially numbered stolen vehicle or boat parts.
- **License Plate File**: Records on stolen license plates.
- **Missing Persons File**: Records on individuals, including children, who have been reported missing to law enforcement and there is a reasonable concern for their safety.
- **Foreign Fugitive File**: Records on persons wanted by another country for a crime that would be a felony if it were committed in the United States.
- **Identity Theft File**: Records containing descriptive and other information that law enforcement personnel can use to determine if an individual is a victim of identity theft of if the individual might be using a false identity.
- **Immigration Violator File**: Records on criminal aliens whom immigration authorities have deported and aliens with outstanding administrative warrants of removal.
- **Protection Order File**: Records on individuals against whom protection orders have been issued.
- **Supervised Release File**: Records on individuals on probation, parole, or supervised release or released on their own recognizance or during pre-trial sentencing.
- **Unidentified Persons File**: Records on unidentified deceased persons, living persons who are unable to verify their identities, unidentified victims of catastrophes, and recovered body parts. The file cross-references unidentified bodies against records in the Missing Persons File.

- **Protective Interest**: Records on individuals who might pose a threat to the physical safety of protectees or their immediate families. Expands on the Namibian police Service Protective File, originally created in the acts
- **Gang File**: Records on violent gangs and their members.
- **Known or Appropriately Suspected Terrorist File**: Records on known or appropriately suspected terrorists.
- **Wanted Persons File**: Records on individuals (including juveniles who will be tried as adults) for whom a federal warrant or a felony or misdemeanor warrant is outstanding.
- **National Sex Offender Registry File**: Records on individuals who are required to register in a jurisdiction's sex offender registry.
- **Violent Person File**: Once fully populated with data from our users, this file will contain records of persons with a violent criminal history and persons who have previously threatened law enforcement.

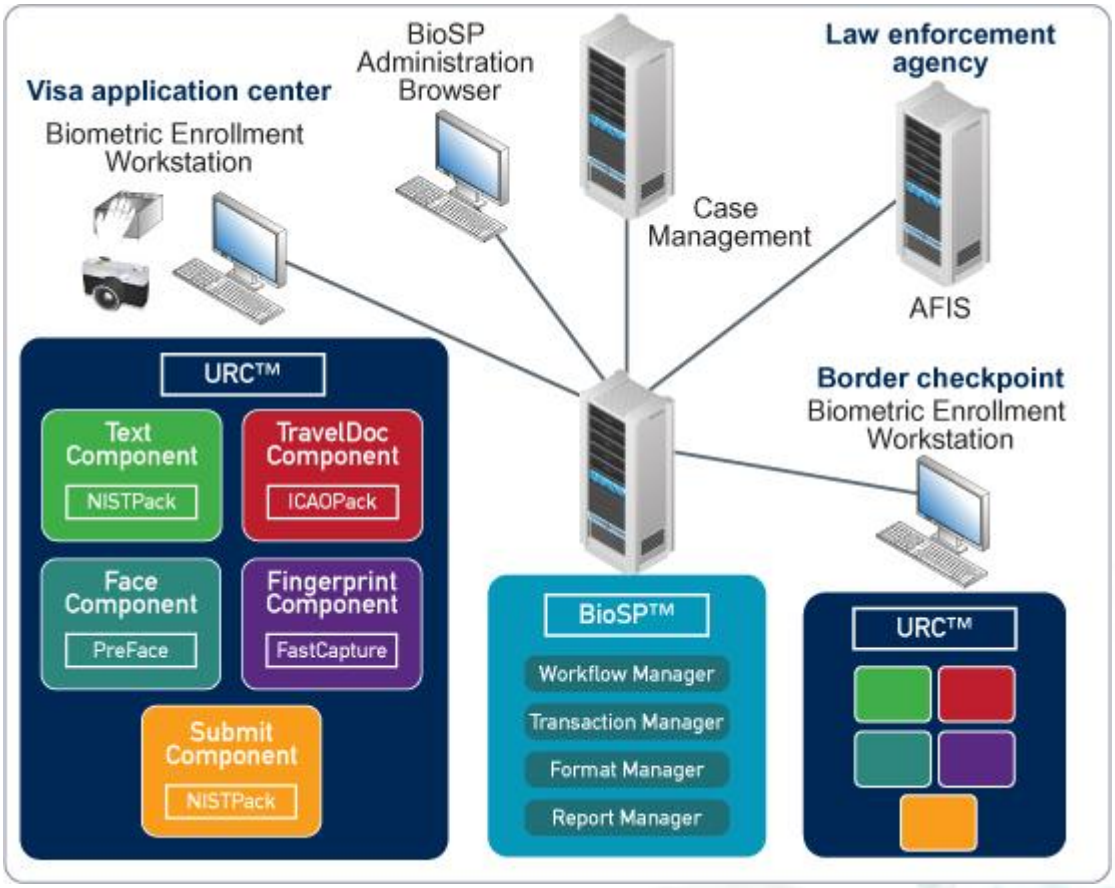
Outlooks of the software



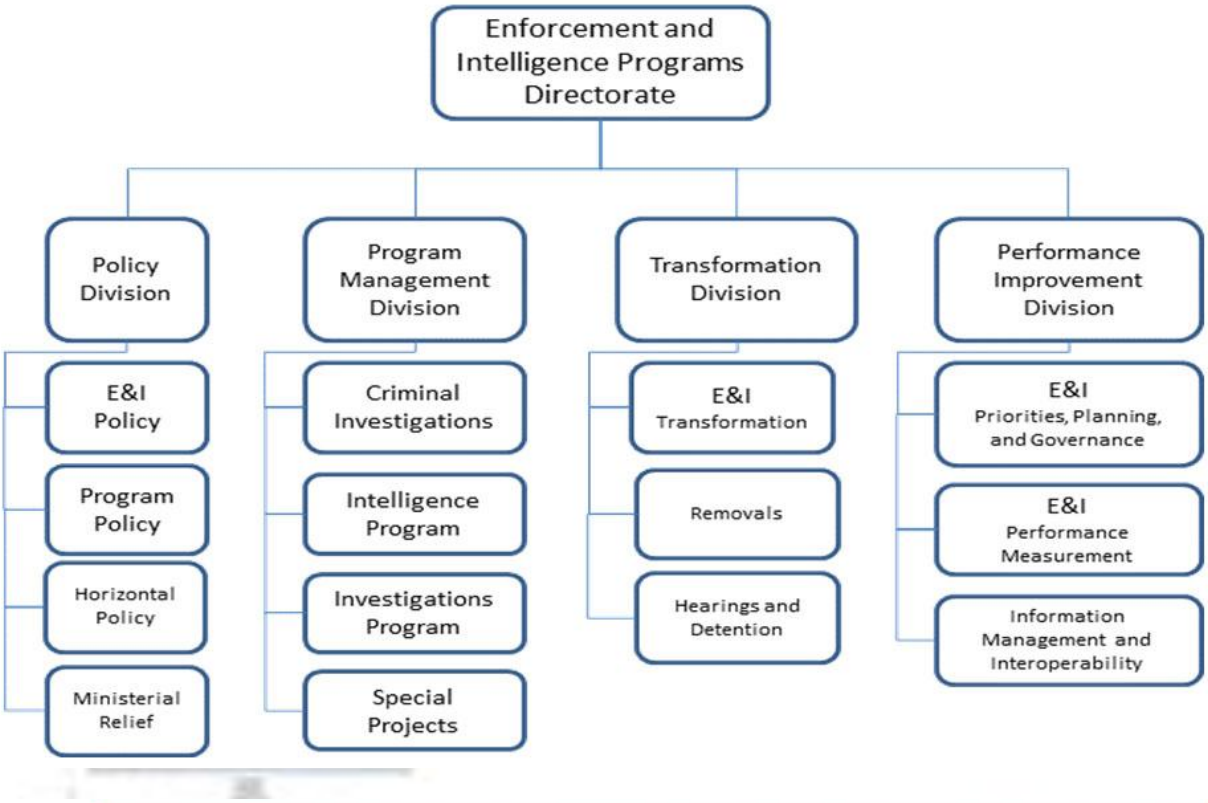
Training will be done to the information and technology of justice, it will be easy to trace the person with this stem weather he or she has criminal record, according to the statistics of crime will be controlled and it will be down with percentage each year. The defendant will be contacted with mobiles by sms, reminded of the case which will take place. The software will be connected to some Ministry database such as Ministry of Justice, Ministry of Home Affairs, Ministry of Safety and security and city police database. This can be controlled base on the crime rates of Namibia.

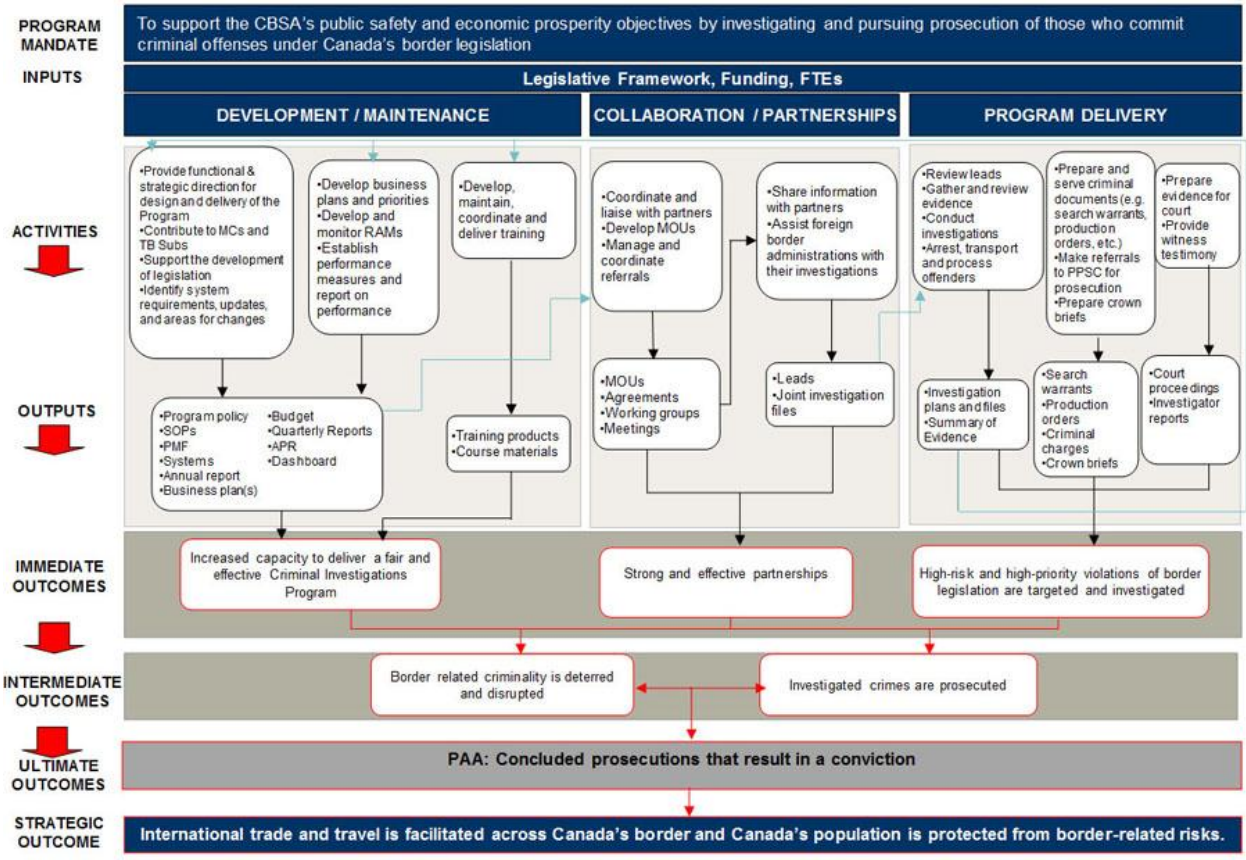


Database of the court (software)- entry will be done while the court is taking place.

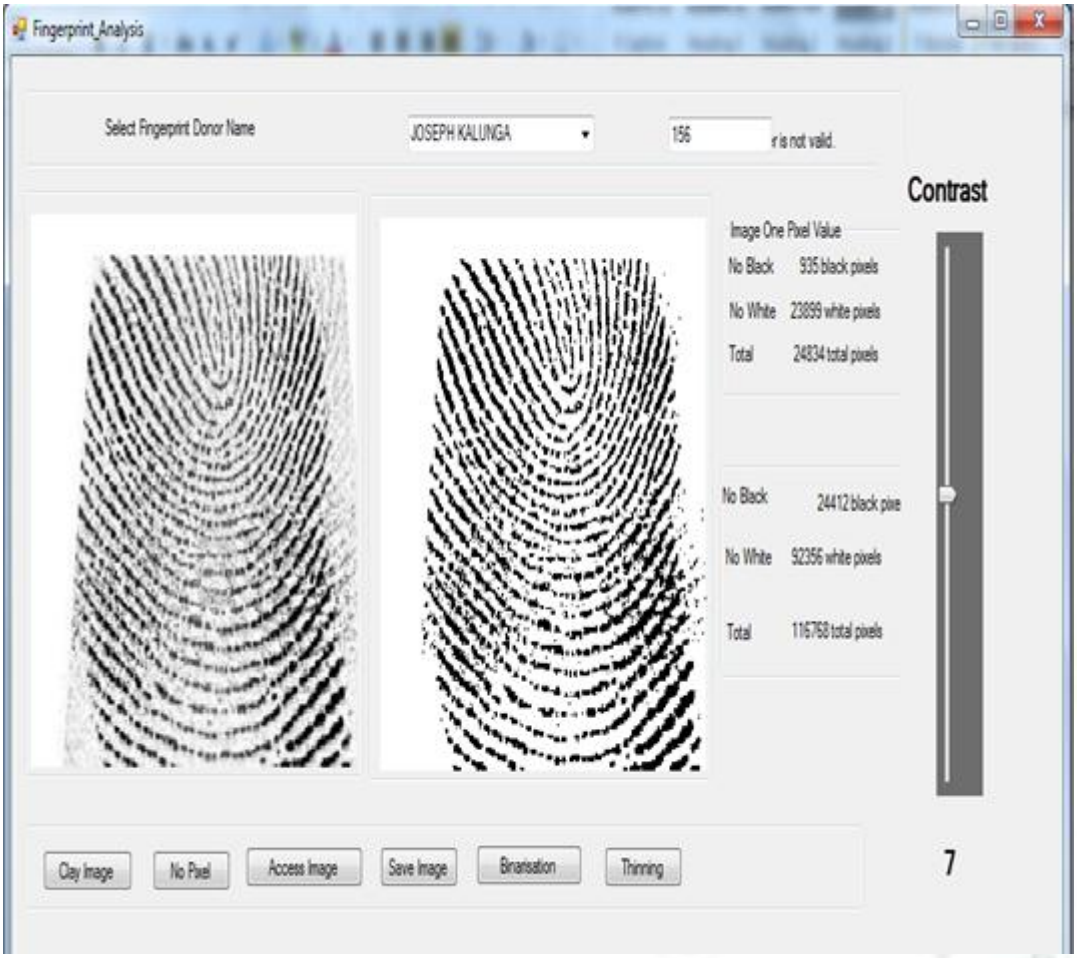


Netframe of the border airport software and hardware police linked to the Home Affairs.


Enforcement and Intelligence Programs Directorate
Policy Division
E&I Policy
Program Policy
Horizontal Policy
Ministerial Relief
Program Management Division
Criminal Investigations
Intelligence Program
Investigations Program
Special Projects
Transformation Division
E&I Transformation
Removals
Hearings and Detention
Performance Improvement Division
E&I Priorities, Planning, and Governance
E&I Performance Measurement
Information Management and Interoperability


PROGRAM MANDATE
To support the CBSA's public safety and economic prosperity objectives by investigating and pursuing prosecution of those who commit criminal offenses under Canada's border legislation
INPUTS
Legislative Framework, Funding, FTEs
DEVELOPMENT / MAINTENANCE
COLLABORATION / PARTNERSHIPS
PROGRAM DELIVERY
ACTIVITIES
•Provide functional & strategic direction for design and delivery of the Program
•Contribute to MCs and TB Subs
•Support the development of legislation
•Identify system requirements, updates, and areas for changes
•Develop business plans and priorities
•Develop and monitor RAMs
•Establish performance measures and report on performance
•Develop, maintain, coordinate and deliver training
•Coordinate and liaise with partners
•Develop MOUs
•Manage and coordinate referrals
•Share information with partners
•Assist foreign border administrations with their investigations
•Review leads
•Gather and review evidence
•Conduct investigations
•Arrest, transport and process offenders
•Prepare and serve criminal documents (e.g. search warrants, production orders, etc.)
•Make referrals to PPSC for prosecution
•Prepare crown briefs
•Prepare evidence for court
•Provide witness testimony
OUTPUTS
•Program policy
•SOPs
•PMF
•Systems
•Annual report
•Business plan(s)
•Budget
•Quarterly Reports
•APR
•Dashboard
•Training products
•Course materials
•MOUs
•Agreements
•Working groups
•Meetings
•Leads
•Joint investigation files
•Investigation plans and files
•Summary of Evidence
•Search warrants
•Production orders
•Criminal charges
•Crown briefs
•Court proceedings
•Investigator reports
IMMEDIATE OUTCOMES
Increased capacity to deliver a fair and effective Criminal Investigations Program
Strong and effective partnerships
High-risk and high-priority violations of border legislation are targeted and investigated
INTERMEDIATE OUTCOMES
Border related criminality is deterred and disrupted
Investigated crimes are prosecuted
ULTIMATE OUTCOMES
PAA: Concluded prosecutions that result in a conviction
STRATEGIC OUTCOME
International trade and travel is facilitated across Canada's border and Canada's population is protected from border-related risks.

Biometrics tested at the border on criminal record, running on the database system on the other mainframes.



Biometrics software to identify any person by scanning the passport it identify identity and show her/she criminal record weather she/he wanted.

Namibian police and city police will be installed moving mobile as a form of a mini laptop with a finger scanner biometric equipment to identify the person who will be as eg. suspect

example of the system

CRIME RECORD MANAGEMENT SYSTEM PROJECT REPORT

Introduction

The crime record management system project is a web based application that provides facility for reporting online crimes. The proposed system specifically looks into the subject of Crime Records Management. User can register their complaints online. The system at any point of time can provide the details of existing charge sheets and their statuses. People can check missing persons details online using this system. The system at any point of time can provide the details of the police station and the employees. This system is also show most wanted person details online on the police website. The system at any point of time can provide the details of victims and the registered FIR's. Using this system any Number of clients can connect to the server. The system at any point of time can provide the details of evidence and their sequence. This system also allow user to view all most wanted persons which can be given by the administrator.

Existing crime record management system

In the existing crime management system, most of the operations are done manually like send complaints, taking actions against crimes, view status etc. This system need more man power to track the records of crimes. The existing system doesn't have system security. The existing system is time consuming and not very user friendly.So with the existing system if anybody wants to complaint against crimes he must do it through the police. Retrieving old crime records is very time consuming. In the current system all work is done on papers so it is very difficult to secure crime reports data. Error detection in the previous entries made and data cross verification

is another important function. These are done manually, and it would take time. the existing system has more workload for the authorized person, but in the case proposed System, the user can registered in our site and send the crime report and complaint about a particular city or person.

Proposed crime records management system

The proposed crime records management system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work. The efficiency of the police function and the effectiveness with which it tackles crime depend on what quality of information it can derive from its existing records and how fast it can have access to it. The existing system has several disadvantages and many more difficulties to work well. The proposed system tries to eliminate or reduce these difficulties up to some extent. It is proposed to centralize Information Management in Crime for the purposes of fast and efficient sharing of critical information across all Police Stations across the territory. The proposed system helps the user to work user friendly and he can easily do his jobs without time lagging.

Modules of the crime record management system Project

Police stations registration module:

This module maintains the information about all the police stations that are registered as per the jurisdiction of the system. . For the registration part each station enter their details like station name, address, phone no, station in charge etc. and get a User Id from the Software. It also gets integrated with the employees who are working in these stations along with their designation. Once the prospective station registers with the software they can avail the existing records.

Victims FIR registration module:

This module help the user to report online complaints. This module maintains the information related to the first investigation report of the crime sequences that have taken place. For the registration part each person enter their details like name, address, phone no., E-Mail ID etc. and get a User Id & password from the Software. This module help the user to report online crimes. Once the registration is complete, the citizen can sign-in to the website & register their complaint. The Fir registers all that a data that is necessary for the investigation to take place in proper length. This module allows us to view the status of all complaint that you have posted earlier. This module help the user to report online missing persons details. User can also upload missing person photo. User can also check the missing person details online. It identifies the crime category and the crime nature. This module is used for entering all details about the crime. It contains the date and time, police station where it is recorded, place, Nature of Crime, Location of the Crime etc. using ASP.Net

This project will also be able to provide reports of various cases, FIR report, charge sheet report, Most Wanted Criminals record, payroll, attendance reports and also Crime File Management System in java is a software application developed using VB.NET and SQL Server. The user can file a complaint, add a criminal report, upload the Crime File management Project in asp.net with project documentation.

Search module

In this module, we can search the crime in station wise, nature of crime.

Administrators Module

The administrator module includes,

The module will be protected by user ID and password. Using this module user can view and reply user's complaint details.
Ordinary users of the software will not be permitted to enter into this area of the software. Using this module admin can check and reply user's crimes details.
Using this module admin can add, delete and view most wanted person details.
Admin can also add, delete and view missing person details in this module.
Using this module admin can add and view criminal registrations.
Using this module admin can add and view Fir reports.
Crime Information Management System.
Our data includes more than criminal records, such as civil filings and traffic and other minor offenses, so people listed may not be actual criminals.

Level 1 DFD- User

Complete design Crime Records Management System using ASP.Net can be helpful. The main idea for developing this project is to develop a online application for improving complaint system. police software - crime star is a powerful records and investigation system designed to meet the needs of police, sheriffs and private security agencies at an affordable price. Crime record management system project Description: Crime record management system project is useful for police departments form managing criminal records.

Level 2 DFD- User

Crime Information Management System (CIMS) allows user to store police department's case details, Complaint Details, FIR Details, etc. A criminal record or police record is a record of a person's criminal history, generally used by potential employers, lenders etc. to assess his or her trustworthiness. This is a Crime Information Management System software for police station. Here in this software all the information of the police station will be stored here. RIMS Law Enforcement Records Management System is the most effective way to organize, track and access the vast amount of information that flows through.

Police will be using iPad, City Police, Government Lawyers and Judges, this will help the police with more information running on the database due to the further investigation, we are using dockets which disappeared especial where there is concrete evidence of the suspect is where corruption is taking place as we are fellow Namibian we will fight corruption.

CONTENTS

Introduction

1.1. Introduction to Project

Overview

The entire project has been developed keeping in view of the distributed client server computing technology, in mind. The specifications have been normalized up to 3NF to eliminate all the anomalies that may arise due to the database transaction that are executed by the general users and the organizational administration. The user interfaces are browser specific to give distributed accessibility for the overall system. At all proper levels high care was taken to check that the system manages the data consistency with proper business rules or validations. The authentication and authorization was crosschecked at all the relevant stages. The user level accessibility has been restricted into two zones namely. The administrative zone and the normal user zone.

Why new system?

- The system at any point of time can provide the details of the police station and the employees.
- The system at any point of time can provide the details of victims and the registered FIR's
- The system at any point of time can provide the details of evidence and their sequence
- The system at any point of time can provide the details of existing charge sheets and their statuses.

2.1. Analysis Model

The model that is basically being followed is the WATER FALL MODEL, which states that the phases are organized in a linear order. First of all the feasibility study is done. Once that part is over the requirement analysis and project planning begins. If system exists one and modification and addition of new module is needed, analysis of present system can be used as basic model.

The design starts after the requirement analysis is complete and the coding begins after the design is complete. Once the programming is completed, the

testing is done. In this model the sequence of activities performed in a software development project are: -

- Requirement Analysis
- Project Planning
- System design
- Detail design
- Coding
- Unit testing
- System integration & testing

Here the linear ordering of these activities is critical. End of the phase and the output of one phase is the input of other phase. The output of each phase is to be consistent with the overall requirement of the system. Some of the qualities of spiral model are also incorporated like after the people concerned with the project review completion of each of the phase the work done.

WATER FALL MODEL was being chosen because all requirements were known beforehand and the objective of our software development is the computerization/automation of an already existing manual working system.

2.2 Existing System:

The existing system contains the about all the police stations that are registered as per the jurisdiction of the system. It also gets integrated with the employees who are working in these stations along with their designation.

2.3. Problem Statement:

The existing system doesn't have system security. That means, the user can login in to system any where in the world. But the data in this system is not for public. To avoid this problem, the proposed system is developed as MAC enabled website. That means, the user can access the website in that system only, so that we can avoid the information leakage problem.

2.4. Proposed System

The system after careful analysis has been identified to be presented with the following modules:

- **Police stations registration module:** This module maintains the information about all the police stations that are registered as per the jurisdiction of the system. It also gets integrated with the employees who are working in these stations along with their designation.
- **Victims FIR registration module:** This module maintains the information related to the first investigation report of the crime sequences that have taken place. The Fir registers all that a data that is necessary for the investigation to take place in proper length. It identifies the crime category and the crime nature.
- **Investigating evidence registration module:** This module makes a collection of information related to all the evidences that become categorically important under the normal sequence of the investigation, this module dynamically concentrates upon the changes that take place while the system of investigation is under process.

3. Software Requirement Specification

3.1. Overview

Purpose: The main purpose for preparing this document is to give a general insight into the analysis and requirements of the existing system or situation and for determining the operating characteristics of the system.

Scope of the Development Project:

Database Tier: The concentration is applied by adopting the Oracle 9i Enterprise versions. SQL is taken as the standard query language. The overall business rules are designed by using the power of PL/SQL components like stored procedures stored functions and database triggers.

User Tier: The use interface is developed is a browses specific environment to have distributed architecture. The components are designed using HTML standards and Java server pages power the dynamic of the page design.

Developer Responsibilities Overview:

The developer is responsible for:

- Developing the system, which meets the SRS and solving all the requirements of the system?
- Demonstrating the system and installing the system at client's location after the acceptance testing is successful.
- Submitting the required user manual describing the system interfaces to work on it and also the documents of the system.
- Conducting any user training that might be needed for using the system.
- Maintaining the system for a period of one year after installation.

3.2. Hardware Requirements:

- PIV 2.8 GHz Processor I7
- RAM 8GB and Above
- HDD 2TB GB Hard Disk Space and Above

3.3. Software Requirements:

- WINDOWS OS (7/8.1 / 2010/ 2012 Server)
- Visual Studio .Net 2005 Enterprise Edition
- Internet Information Server 5.0 (IIS)

3.4. Performance Requirements:

Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely in the part of the users of the existing system to give the requirement specifications because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be designed according to

those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use.

The requirement specification for any system can be broadly stated as given below:

- The system should be able to interface with the existing system
- The system should be accurate
- The system should be better than the existing system

The existing system is completely dependent on the user to perform all the duties.

4. SYSTEM DESIGN

4. System design

4.1 Introduction

Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm and area of application. Design is the first step in the development phase for any engineered product or system. The designer's goal is to produce a model or representation of an entity that will later be built. Beginning, once system requirement have been specified and analyzed, system design is the first of the three technical activities - design, code and test that is required to build and verify software.

The importance can be stated with a single word "Quality". Design is the place where quality is fostered in software development. Design provides us with representations of software that can assess for quality. Design is the only way that we can accurately translate a customer's view into a finished software product or system. Software design serves as a foundation for all the software engineering steps that follow. Without a strong design we risk building an unstable system – one that will be difficult to test, one whose quality cannot be assessed until the last stage.

During design, progressive refinement of data structure, program structure, and procedural details are developed reviewed and documented. System design can be viewed from either technical or project management perspective. From the technical point of view, design is comprised of four activities – architectural design, data structure design, interface design and procedural design.

4.2 Data Flow Diagrams

A data flow diagram is graphical tool used to describe and analyze movement of data through a system. These are the central tool and the basis from which the other components are developed. The transformation of data from input to output, through processed, may be described logically and independently of physical components associated with the system. These are known as the logical data flow diagrams. The physical data flow diagrams show the actual implements and movement of data between people, departments and workstations. A full description of a system actually consists of a set of data flow diagrams. Using two familiar notations Yourdon, Gane and Sarson notation develops the data flow diagrams. Each component in a DFD is labeled with a descriptive name. Process is further identified with a number that will be used for identification purpose. The development of DFD'S is done in several levels. Each process in lower level diagrams can be broken down into a more detailed DFD in the next level. The lop-level diagram is often called context diagram. It consists a single process bit, which plays vital role in studying the current system. The process in the context level diagram is exploded into other process at the first level DFD.

The idea behind the explosion of a process into more process is that understanding at one level of detail is exploded into greater detail at the next level. This is done until further explosion is necessary and an adequate amount of detail is described for analyst to understand the process.

Larry Constantine first developed the DFD as a way of expressing system requirements in a graphical from, this lead to the modular design.

A DFD is also known as a "bubble Chart" has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design. So it is the starting point of the design to the lowest level of detail. A DFD consists of a series of bubbles joined by data flows in the system.

4.2.1 Dfd Symbols:

In the DFD, there are four symbols

1. A square defines a source(originator) or destination of system data
2. An arrow identifies data flow. It is the pipeline through which the information flows

3. A circle or a bubble represents a process that transforms incoming data flow into outgoing data flows.
4. An open rectangle is a data store, data at rest or a temporary repository of data

4.2.2 Constructing a DFD:

Several rules of thumb are used in drawing DFD'S:

Process should be named and numbered for an easy reference. Each name should be representative of the process.

The direction of flow is from top to bottom and from left to right. Data traditionally flow from source to the destination although they may flow back to the source. One way to indicate this is to draw long flow line back to a source. An alternative way is to repeat the source symbol as a destination. Since it is used more than once in the DFD it is marked with a short diagonal.

When a process is exploded into lower level details, they are numbered.

The names of data stores and destinations are written in capital letters. Process and dataflow names have the first letter of each work capitalized. A DFD typically shows the minimum contents of data store. Each data store should contain all the data elements that flow in and out. Questionnaires should contain all the data elements that flow in and out. Missing interfaces redundancies and like is then accounted for often through interviews.

4.2.3 Silent Feature of DFD's

1. The DFD shows flow of data, not of control loops and decision are controlled considerations do not appear on a DFD.
2. The DFD does not indicate the time factor involved in any process whether the dataflow take place daily, weekly, monthly or yearly.
3. The sequence of events is not brought out on the DFD.

4.2.4 Data Flow:

1) A Data Flow has only one direction of flow between symbols. It may flow in both directions between a process and a data store to show a read before an update. The later is usually indicated however by two separate arrows since these happen at different type.

2) A join in DFD means that exactly the same data comes from any of two or more different processes data store or sink to a common location.
3) A data flow cannot go directly back to the same process it leads. There must be at least one other process that handles the data flow produce some other data flow returns the original data into the beginning process.
4) A Data flow to a data store means update (delete or change).
5) A data Flow from a data store means retrieve or use. A data flow has a noun phrase label more than one data flow noun phrase can appear on a single arrow as long as all of the flows on the same arrow move together as one package.

ER-Diagrams

- The entity Relationship Diagram (ERD) depicts the relationship between the data objects. The ERD is the notation that is used to conduct the date modeling activity the attributes of each data object noted is the ERD can be described resign a data object descriptions.
- The set of primary components that are identified by the ERD are
  - ◆ Data object ◆ Relationships
  - ◆ Attributes ◆ Various types of indicators.
- The primary purpose of the ERD is to represent data objects and their relationships.

Unified Modeling Language Diagrams

- The unified modeling language allows the software engineer to express an analysis model using the modeling notation that is governed by a set of syntactic semantic and pragmatic rules.
- A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagram, which is as follows.
- **User Model View**

i. This view represents the system from the users perspective.
ii. The analysis representation describes a usage scenario from the end-users perspective.

Structural model view

◆ In this model the data and functionality are arrived from inside the system.
◆ This model view models the static structures
.

Behavioral Model View

- It represents the dynamic of behavioral as parts of the system, depicting the interactions of collection between various structural elements described in the user model and structural model view.

Implementation Model View

- In this the structural and behavioral as parts of the system are represented as they are to be built.

Environmental Model View

In this the structural and behavioral aspects of the environment in which the system is to be implemented are represented.

UML is specifically constructed through two different domains they are

- UML Analysis modeling, which focuses on the user model and structural model views of the system.
- UML design modeling, which focuses on the behavioral modeling, implementation modeling and environmental model views.

Use Case Diagrams

The actors who have been identified in the system are as follows:

1. **Investigating officer**
2. **Administrator**
3. **Writer**

Investigating officer: He is the actor who can practically work upon the existing data in the police station only for view purpose.

Administrator: He is the actor who has the full-length potentiality and privilege to carry out transactions upon the system. He is authorized to maintain consistency within the information.

Writer: He is the actor who can enter all the details of the crime or evidence. Once entered cannot be edited. Only the administrator can edit or delete the record from the database.

Use case Description:

Use case name	Login Information

Participating actors	Administrator, Investigator, Writer
Flow of events	Provides username and password
Entry Condition	Users must know the username and password
Exit condition	User successfully logged into the system
Quality Requirements	Should provide proper error messages while login into the system.

Use case name	Register Victims
Participating actors	Administrator, Writer
Flow of events	User will enter the Victims information
Entry Condition	User should know the details of the victim
Exit condition	Victim details are successfully inserted into the system.
Quality Requirements	Display proper error messages while insertion.

Use case name	Register Victims FIR
Participating actors	Administrator, Writer
Flow of events	User will register the FIR
Entry Condition	User should know the details of the FIR
Exit condition	FIR details are successfully inserted into the system.
Quality Requirements	Display proper error messages while insertion.

Use case name	Register Crime charge sheet

Participating actors	Administrator, Writer
Flow of events	User will register the crime charge sheet
Entry Condition	User should know the details of charge sheet.
Exit condition	Charge sheet details are successfully inserted into the system.
Quality Requirements	Display proper error messages while insertion.

Use case name	Register Investigation Evidence
Participating actors	Administrator, Writer
Flow of events	User will register the investigation evidence
Entry Condition	User should know the details of evidence.
Exit condition	Evidence details are successfully inserted into the system.
Quality Requirements	Display proper error messages while insertion.

Use case name	Register Police Station
Participating actors	Administrator
Flow of events	User will register the police station.
Entry Condition	User should know the details of police station.
Exit condition	Police station details are successfully inserted into the system.
Quality Requirements	Display proper error messages while insertion.

Use case name	View all crime details
Participating actors	Investigator
Flow of events	User can view all the crime details.
Entry Condition	Display the details of crime and evidences.
Exit condition	Evidence and crime details are successfully displayed.
Quality Requirements	N/A

6. Testing

1. The process of executing a system with the intent of finding an error.
2. Testing is defined as the process in which defects are identified, isolated, subjected for rectification and ensured that product is defect free in order to produce the quality product and hence customer satisfaction.
3. Quality is defined as justification of the requirements
4. Defect is nothing but deviation from the requirements
5. Defect is nothing but bug.
6. Testing --- The presence of bugs
7. Testing can demonstrate the presence of bugs, but not their absence
8. Debugging and Testing is not the same thing!
9. Testing is a systematic attempt to break a program or the AUT

Testing Methodologies:

• Black box Testing: is the testing process in which tester can perform testing on an application without having any internal structural knowledge of application.
Usually Test Engineers are involved in the black box testing.

• White box Testing: is the testing process in which tester can perform testing on an application with having internal structural knowledge.
Usually The Developers are involved in white box testing.

• Gray Box Testing: is the process in which the combination of black box and white box tonics are used.

6.1 STLC (Software Testing Life Cycle)

Test Planning:

- Test Plan is defined as a strategic document which describes the procedure how to perform various testing on the total application in the most efficient way.
- This document involves the scope of testing,
- Objective of testing.
- Areas that need to be tested.
- Areas that should not be tested.
- Scheduling Resource Planning.

Types of Testing:

- Regression Testing: is one of the best and important testing. Regression testing is the process in which the functionality, which is already tested before, is once again tested whenever some new change is added in order to check whether the existing functionality remains same.
- Re-Testing: is the process in which testing is performed on some functionality which is already tested before to make sure that the defects are reproducible and to rule out the environments issues if at all any defects are there.
- Static Testing: is the testing, which is performed on an application when it is not been executed.ex: GUI, Document Testing
- Dynamic Testing: is the testing which is performed on an application when it is being executed.ex: Functional testing.
- Alpha Testing: it is a type of user acceptance testing, which is conducted on an application when it is just before released to the customer.
- Beta-Testing: it is a type of UAT that is conducted on an application when it is released to the customer, when deployed in to the real time environment and being accessed by the real time users.
- Installation Testing: it is the process of testing in which the tester try to install or try to deploy the module into the corresponding environment by following

the guidelines produced in the deployment document and check whether the installation is successful or not.

Conclusion

Conclusions /Project Summary

The **Crime Records Managing System** is a web-based application for primarily providing training to the employees who provide customized solutions to meet organizational needs.

This application software has been computed successfully and was also tested successfully by taking "test cases". It is user friendly, and has required options, which can be utilized by the user to perform the desired operations.

The software is developed using Java as front end and Oracle as back end in Windows environment. The goals that are achieved by the software are:

✓ Instant access.
✓ Improved productivity.
✓ Optimum utilization of resources.
✓ Efficient management of records.
✓ Simplification of the operations.
✓ Less processing time and getting required information.
✓ User friendly.

FUTURE IMPROVEMENT

- This System being web-based and an undertaking of Cyber Security Division, needs to be thoroughly tested to find out any security gaps.

- A console for the data centre may be made available to allow the personnel to monitor on the sites which were cleared for hosting during a particular period.

- Moreover, it is just a beginning; further the system may be utilized in various other types of auditing operation viz. Network auditing or similar process/workflow based applications...

THE SAMSUNG PAD WHICH WILL BE USED BY THE INVESTIGATORS LAWYERS AND JUDGES THIS WILL BE LINKED TO THE DATA BASE SOFTWARE WILL BE INSTALLED IN THE TAB.

NET FRAME INFASTRUCTURE

V7000 IBM

Intel® Communications Chipset 89xx Series							
PRODUCT NUMBER	8955	8950	8925	8920	8910	8903	8900
Intel® QuickAssist Technology	Up to 50 Gbps	Up to 50 Gbps	Up to 25 Gbps	Up to 20 Gbps	Up to 10 Gbps	Up to 5 Gbps	None
• RSA 2K-bit exponent	Up to 40 K operations per second						None
• Compression	Up to 24 Gbps						None
Thermal Design Power	20 W	20 W	17 W	12 W	11 W	9.5 W	8.5 W
PCI Express* Gen 2.0 Endpoint	x16	x16	x16	x16	x8	x4	x4
PCI Express Gen 1.0	4x1, 2x2, 1x2/2x1, or 1x4	4x1, 2x2, 1x2/2x1, or 1x4	4x1, 2x2, 1x2/2x1, or 1x4	4x1, 2x2, 1x2/2x1, or 1x4	4x1, 2x2, 1x2/2x1, or 1x4	4x1, 2x2, 1x2/2x1, or 1x4	4x1, 2x2, 1x2/2x1, or 1x4
SATA Gen 2 ports (3 Gb/s)	2	2	2	2	2	2	2
HI-Speed USB 2.0 ports	6	6	6	6	6	6	6
Integrated Gigabit Ethernet Controller (MAC)	None	None	None	4	4	4	4
GPIO pins (multiplexed or dedicated)	68	68	68	68	68	68	68
Package	FCBGA: 27mm x 27mm with 0.7mm variable pitch						