**Department Of Computer Applications**

Case Tools Lab

Software Requirement Specification

on

Visitor Information System

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VISITOR   INFORMATION SYSTEM

The existing system records basic information about visitors to the institute in a log book.  The information taken in log book  visitor’s name, reason for the visit, date and check-in and check-out times.

From the security and usage standpoint, the existing system has some negative points. Visitors must write entries by hand, creating a logjam effect. Security personal must check each visitor’s credentials and manually initiate any further security checks.  Documentation requires either manually re-entering logbook information in a computer or keeping the logbook itself in storage.

* More often than not, the names are not legible, or are false.
* In an emergency (fire, etc.), it would be impossible to quickly determine who is still in the building (names aren't legible or check out times may not be required.)
* Information regarding who has visited the company is readily available for everyone to see; this information should be confidential.
* Paper logs and hand-written visitor badges present a poor image to visitors and a perception of lax security.
* To address these issues, we can have electronic visitor information system.

The systems stores the visitor's ID Number (business card, driver's license or passport, student ID), and name, company, title, contact information, etc. into a database file, name of the person being visited, reason for the visit, and entry and exit times.  
  
  
This project reduces paper works and negative points of exiting system can be checked.

VisitorInformationSystem

**Report on Configuration DefaultConfig**

Packages

com

Language: C++

Nested Packages:

VisitorInformationSystem

Globals:

VisitorInformationSystem

Language: C++

Object Model Diagrams:

# VisitorInformationSystem

****

Overridden Properties

Subjects:

Format

Metaclasses:

Class

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,34,84,148

Font.Size: 10

Line.LineColor: 121,122,0

Object

Properties:

Font.Underline@Child.NameCompartment@Name: 1

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,34,84,148

Font.Size: 10

Line.LineColor: 121,122,0

Sequence Diagrams:

# VisitorInformationSystem

****

Overridden Properties

Subjects:

Format

Metaclasses:

ReplyMessage

Properties:

Line.LineWidth: 0

Font.FontColor: 0,0,128

Font.Font: Arial

Line.LineStyle: 1

Font.Size: 10

Line.LineColor: 0,112,0

FreeText

Properties:

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1

Wordbreak: False

VertAlign: 0

HorzAlign: 0

Font.Font: Arial

Font.Size: 10

InstanceLine

Properties:

Line.LineWidth: 0

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 121,122,0

Message

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial

Font.Size: 10

Line.LineColor: 0,112,0

EnvironmentLine

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 0,0,96,437

Font.Size: 10

Line.LineColor: 0,0,0

Use Case Diagrams:

# VisitorInformationSystem

****

Overridden Properties

Subjects:

Format

Metaclasses:

Actor

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 0,26,84,168

Font.Size: 10

Line.LineColor: 111,0,107

FreeText

Properties:

Font.Height: 13

Fill.Transparent\_Fill: 1

Multiline: True

Line.Transparent: 1

Wordbreak: False

VertAlign: 0

HorzAlign: 0

Font.Font: Arial

Font.Size: 10

UseCase

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 0,21,129,92

Font.Size: 10

Line.LineColor: 111,0,107

System\_Border

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 0,0,228,240

Font.Size: 10

Line.LineColor: 111,0,107

Association

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,128

Font.Font: Arial

Font.Size: 10

Line.LineColor: 221,0,0

Globals:

Objects:

object\_0

Implicit, Multiplicity of 1

Classes:

# Display

Operations:

displayData

Primitive-operation , Public, Return type is void

Statechart



Overridden Properties

Subjects:

Format

Metaclasses:

DiagramConnector

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 152,158,231

DefaultSize: 0,0,55,24

Font.Size: 10

Line.LineColor: 0,0,0

DanglingTransition

Properties:

Line.LineWidth: 2

Line.LineColor: 0,0,0

State

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,96,60

Font.Size: 10

Line.LineColor: 0,112,0

ROOT

Or-state

Substates:

Off

On

Working

Off

Or-state

Out Transition

Target:

Done

On

Or-state

Default Transition

Target:

Working

Working

Or-state

Substates:

DisplayResult

GetQueryFromUser

SearchInDatabase

Default Transition

Target:

Off

DisplayResult

Or-state

Out Transition

Target:

Done

GetQueryFromUser

Or-state

Out Transition

Target:

SearchInDatabase

SearchInDatabase

Or-state

Out Transition

Target:

DisplayResult

Done

Diagram Connector

Done

Diagram Connector

# StudentAtLibrary

Objects:

student

Implicit, Multiplicity of 1

Operations:

currentStudentPresent

Primitive-operation , Public, Return type is void

makeEntry

Primitive-operation , Public, Return type is void

makeExit

Primitive-operation , Public, Return type is void

Attributes:

DateAndTimeIn

Type of int, Public, Multiplicity of 1

DateAndTimeOut

Type of int, Public, Multiplicity of 1

Name

Type of char, Public, Multiplicity of 1

RollNo

Type of void, Public, Multiplicity of 1

Statechart



Overridden Properties

Subjects:

Format

Metaclasses:

DiagramConnector

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 152,158,231

DefaultSize: 0,0,55,24

Font.Size: 10

Line.LineColor: 0,0,0

DanglingTransition

Properties:

Line.LineWidth: 2

Line.LineColor: 0,0,0

State

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,96,60

Font.Size: 10

Line.LineColor: 0,112,0

ROOT

Or-state

Substates:

Off

On

Working

Off

Or-state

Out Transition

Target:

Done

On

Or-state

Default Transition

Target:

Working

Working

Or-state

Substates:

CommitToDatabase

EnterInfoToSystem

GetInfoFromStudent

Default Transition

Target:

Off

CommitToDatabase

Or-state

Out Transition

Target:

Done

EnterInfoToSystem

Or-state

Out Transition

Target:

CommitToDatabase

GetInfoFromStudent

Or-state

Out Transition

Target:

EnterInfoToSystem

Done

Diagram Connector

Done

Diagram Connector

# VisitorAtGate

Objects:

visitor

Implicit, Multiplicity of 1

Operations:

currentVisitorPresent

Primitive-operation , Public, Return type is void

makeEntry

Primitive-operation , Public, Return type is void

makeExit

Primitive-operation , Public, Return type is void

Attributes:

DateAndTimeIn

Type of int, Public, Multiplicity of 1

DateAndTimeOut

Type of int, Public, Multiplicity of 1

IdNo

Type of char, Public, Multiplicity of 1

IdType

Type of char, Public, Multiplicity of 1

Name

Type of char, Public, Multiplicity of 1

Purpose

Type of char, Public, Multiplicity of 1

VehicleNo

Type of int, Public, Multiplicity of 1

Statechart



Overridden Properties

Subjects:

Format

Metaclasses:

DiagramConnector

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 152,158,231

DefaultSize: 0,0,55,24

Font.Size: 10

Line.LineColor: 0,0,0

DanglingTransition

Properties:

Line.LineWidth: 2

Line.LineColor: 0,0,0

State

Properties:

Line.LineWidth: 1

Font.FontColor: 0,0,0

Font.Font: Arial

Fill.FillColor: 255,255,255

Line.LineStyle: 0

DefaultSize: 0,0,96,60

Font.Size: 10

Line.LineColor: 0,112,0

ROOT

Or-state

Substates:

Off

On

Working

Off

Or-state

Out Transition

Target:

Done

On

Or-state

Default Transition

Target:

Working

Working

Or-state

Substates:

CommitToDatabase

EnterInfoToSystem

GetInfoFromVisitor

Default Transition

Target:

Off

CommitToDatabase

Or-state

Out Transition

Target:

Done

EnterInfoToSystem

Or-state

Out Transition

Target:

CommitToDatabase

GetInfoFromVisitor

Or-state

Out Transition

Target:

EnterInfoToSystem

Done

Diagram Connector

Done

Diagram Connector

Actors:

# Admin

Association Ends:

itsLogin

Association with Login, Multiplicity of 1, Bi-directional, Navigable

# Staff

Association Ends:

itsRegister Visitor & Student Information

Association with Register Visitor & Student Information, Multiplicity of 1, Bi-directional, Navigable

# Student

Association Ends:

itsGive Information to Entry & exit gate system

Association with Give Information to Entry & exit gate system, Multiplicity of 1, Bi-directional, Navigable

# Visitor

Association Ends:

itsGive Information to Entry & exit gate system

Association with Give Information to Entry & exit gate system, Multiplicity of 1, Bi-directional, Navigable

Use Cases:

# Entry & Exit Gate Visitor System

Association Ends:

itsGive Information to Entry & exit gate system

itsWrite to Database

itsRegister Visitor & Student Information

# Give Information to Entry & exit gate system

Association Ends:

itsStudent

itsVisitor

itsLibrary Visitor System

itsEntry & Exit Gate Visitor System

# Library Visitor System

Association Ends:

itsGive Information to Entry & exit gate system

itsWrite to Database

itsRegister Visitor & Student Information

# Login

Association Ends:

itsAdmin

itsView Database

# Register Visitor & Student Information

Association Ends:

itsWrite to Database

itsLibrary Visitor System

itsEntry & Exit Gate Visitor System

itsWrite to Database\_1

itsStaff

# View Database

Association Ends:

itsWrite to Database

itsLogin

# Write to Database

Association Ends:

itsRegister Visitor & Student Information

itsLibrary Visitor System

itsEntry & Exit Gate Visitor System

itsView Database

itsRegister Visitor & Student Information\_1

Default

Language: C++

Globals:

Object Model Diagrams

# Model1

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Overridden Properties

Subjects:

Format

Metaclasses:

DiagramFrame

Properties:

Line.LineWidth: 1

Fill.Transparent\_Fill: 1

Font.FontColor: 0,0,255

Font.FontColor@Label.Stereotype: 0,0,255

Font.Font: Arial

Fill.FillColor: 255,255,255

DefaultSize: 20,20,590,500

Font.Size: 10

Line.LineColor: 0,0,255

Components

DefaultComponent

Language: C++

Component Settings:

Build type: Executable

Configurations:

# DefaultConfig

Scope type: Explicit

Instrumentation type: None

Time-model type: Real-time

Statechart generation type: Flat

Files and Folders:

**Data Flow Diagram of Visitor Information System**

Staff

Archive

Admin

Report

0 Level DFD

UserName &PassWord

Admin

1.0

Login

UserName&PassWord

Staff

New Visitor Info VPass

2.0

RegisterVisitor

Visitor

Current Visitor

3.0

Display

Archive

4.0

Search

**Data Flow Diagram 0 Level**

Admin

1.1

Validate Login

1.2

Navigate To Main Page

Staff

2.1

GetVisitorPassId

PASS ID

2.2

LoadVisitorInfo

2.3

LoadVisitorInPremise

3.3

Display Visitor

Archive

4.0

GenerateSearchResult

**Data Flow Diagram 1 Level**

ARCHIVE

HAS

LOGIN

STAFF

ADMIN

VISITOR

Archive

Has

Reg.AtLibrrary

STUDENT

RegAtGate

VPASS

AssignWith

**Entity Relationship Diagram Of Visitor Information System**