

Online voting system project report

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ONLINE VOTING SYSTEM

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SYNOPSIS:

This is a small scale project for Online voting system. The basic idea is that the citizens of the country can vote for the candidates during election in the online. It consists of voter details, security system, status and exits. The administrator can enter the name and password and generate the reports and can perform operation like add citizens, search, delete the citizens in the database. In Online voting system we can get the result of the election based on polling.

In the voter details module various details like Card No, Name, Password, and Validation of the user are obtained. In the Display module the total database is displayed. In the User Login module, the user first select whether it is polling or admin login then by using the username and password the user can login and the database is displayed which shows the Card No, Name, Password and Validation of the particular user when it is polling login or otherwise the list of administrator operation like Add Citizens and Generate Report are displayed. By using the report Generation module we can get the result of the election and reset database after the report is generated.

Phase1: Project Analysis and Planning:

1.1 STUDY OF THE PROBLEM

The Current Voting System is critical to our Election Commission of India for conducting Elections and announcing the results because the money involved in employee remuneration and the complexity of the legal requirements is more. This is a small scale project for Online Voting System. The basic idea is that the Candidates can poll their votes from anywhere during election time by using their card number and password provided to them. The System will maintain the voter details along with personal information. The result of the election is published within a short time once the election is completed. This Online voting system involves with two types of users.

- **VOTER**
- **ADMINISTRATOR**

VOTER'S ROLE:

The voters can login/logout the System. He/ She can view his/her personal details and poll their vote. The voter can just view the information whereas he/she could not make changes in the database.

ADMINISTRATOR ROLE:

The administrator plays a vital role in the Online voting system. The administrator controls the entire database. The report of the election is generated by the administrator itself. The main role of the administrator is to safeguard the database and can add/delete the citizens from the database.

1.2 PROJECT SCOPE:

The supplementary specification applies to online voting system. This specification defines the non-functional requirement of the system such as:

Functionality:

Since it stand alone application, one or more user may use it at a time.

Usability:

Desktop interface

Windows 98/2000/XP/Vista

Reliability:

The system is available only at the Election time.

Performance:

The performance depends on hardware specification.

1.3 Objectives:

The purpose of this document is to define the requirements of online voting system. This supplementary specification lists the requirements that are not readily captured in the use case model. Supplementary specification and the use case model capture a complete set of requirement of the system.

Phase 2 Cost Estimation:

An estimate is a prediction based upon probabilistic assessment. It is the responsibility of the project manager to make accurate estimations of effort and cost. This is particularly true for project subject to competitive bidding where a bid too high compared with competitors would result in losing the contract or a bid too low could result in a loss to the organisation. This does not mean that internal projects are unimportant. From a project leader estimate the management often decide whether to proceed with the project. Industry has a need for accurate estimates of effort and size at a very early stage in a project. However, when software cost estimates are done early in the software development process the estimate can be based on wrong or incomplete requirements. A software cost estimate process is the set of techniques and procedure that organisations use to arrive at an estimate. An important aspect of software projects is to know the cost. The major contributing factor is effort.

Why SCE is difficult and error prone?

- Software cost estimation requires significant amount of effort to perform the correctly.
- SCE is effort alone hurriedly without an appreciation for the effort required.
- You need experience at developing estimates especially for large projects.
- The causes of poor and inaccurate estimation:
- New software projects are nearly always different form the last.
- Software practitioners don't collect enough information about past projects.
- Estimates are forced to match the resources available.

2.1 Cost And Pricing :

Our project is of high range and is highly efficiently which can satisfy payroll calculation for all the software companies.

- A team of 12 members is required for completing the task.
- It takes time span of 3 weeks to shape project.
- There are no environmental constraints.

Phase 3: Modelling The Requirements

3.1. Module description

3.1.1. Login

It is the login session for the administrator voter and exit.

3.1.2. Voter details

It is used to view voter details from database.

3.1.3. Add citizens

It is used to add a voter into database and it includes searching a voter and removing voter from database.

3.1.4. Polling

It is used to poll vote to candidates during election.

3.1.5. Report generation

It is used to get election results and also reset database after all process is completed.

3.2. UML diagram

3.2.1. Use case diagram

They show various activities the users can perform on the system. They model the dynamic aspects of system. It provides user's perspective of the system.

Actor:

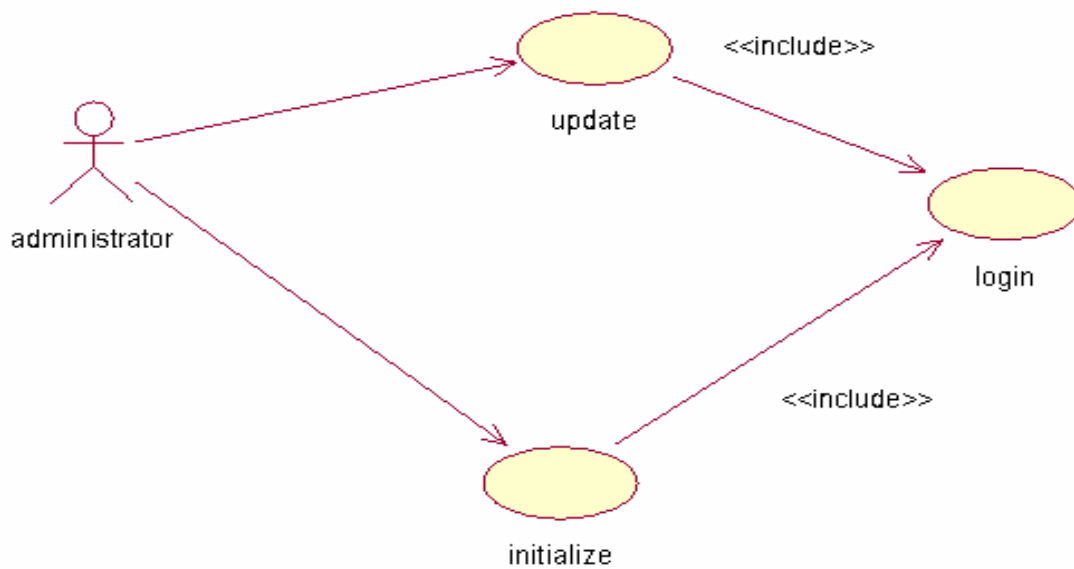
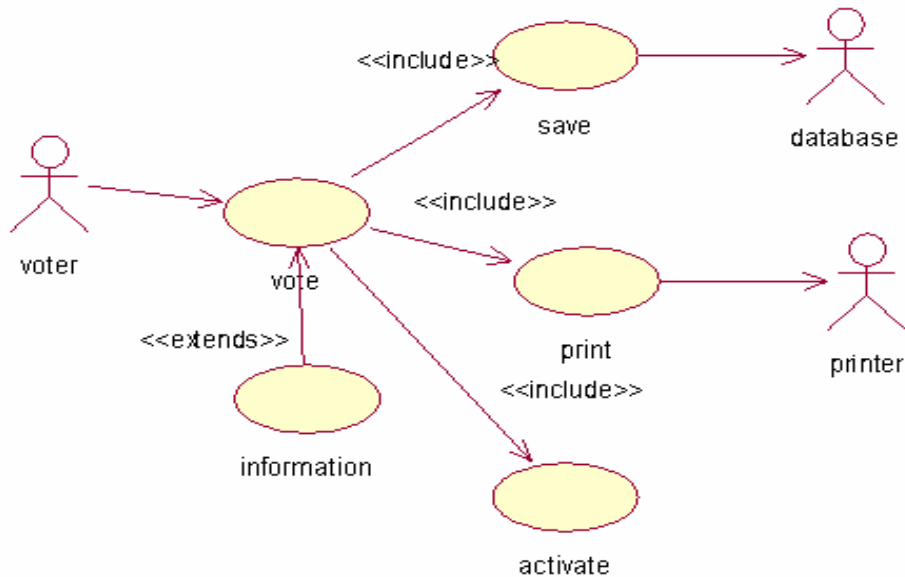
An actor is a user of system playing a particular role.

Use case:

Use case is particular activity a user can do on the system.

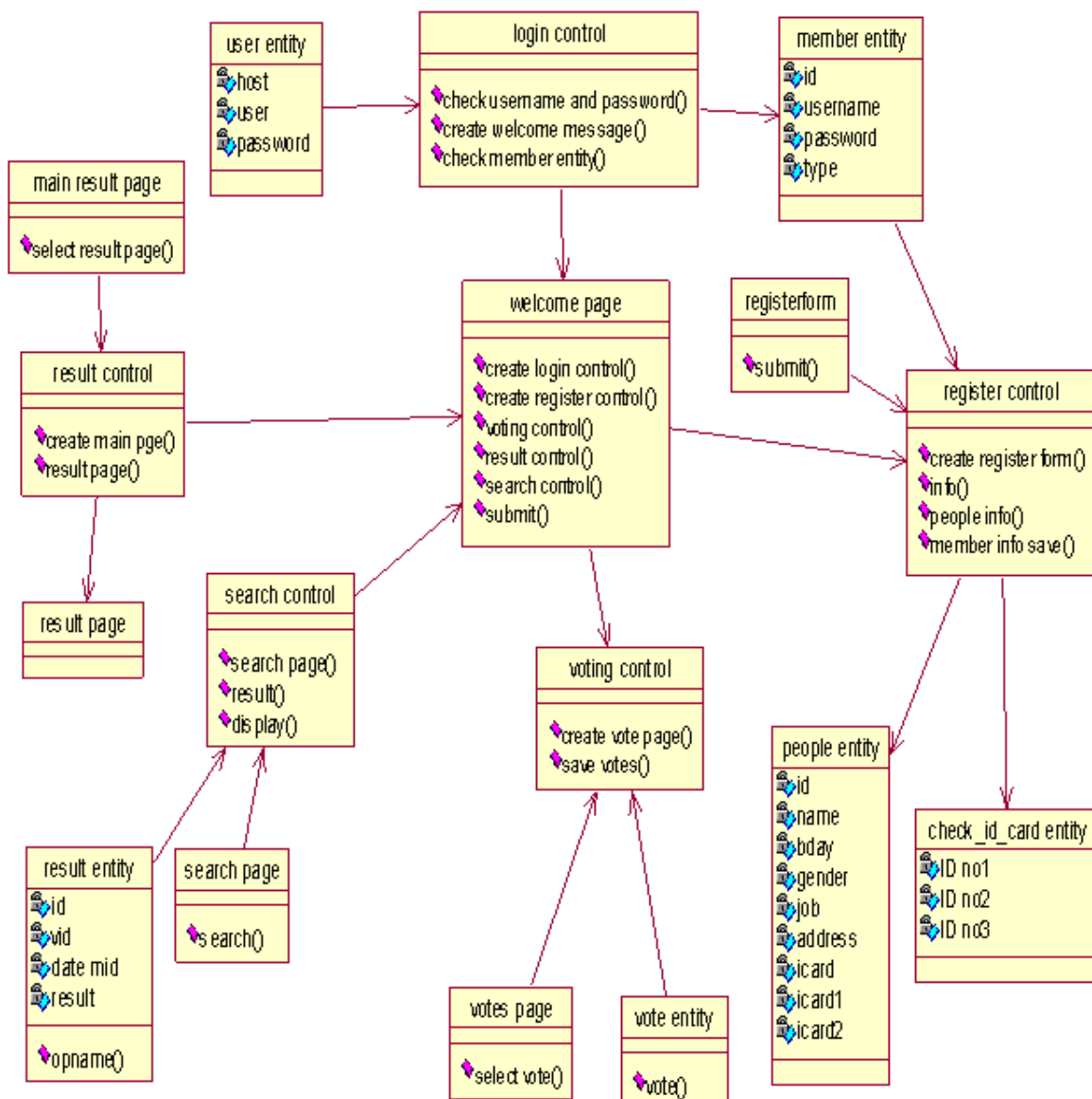
Relationship:

Relationship are simply illustrated with a line connecting actors to use cases.



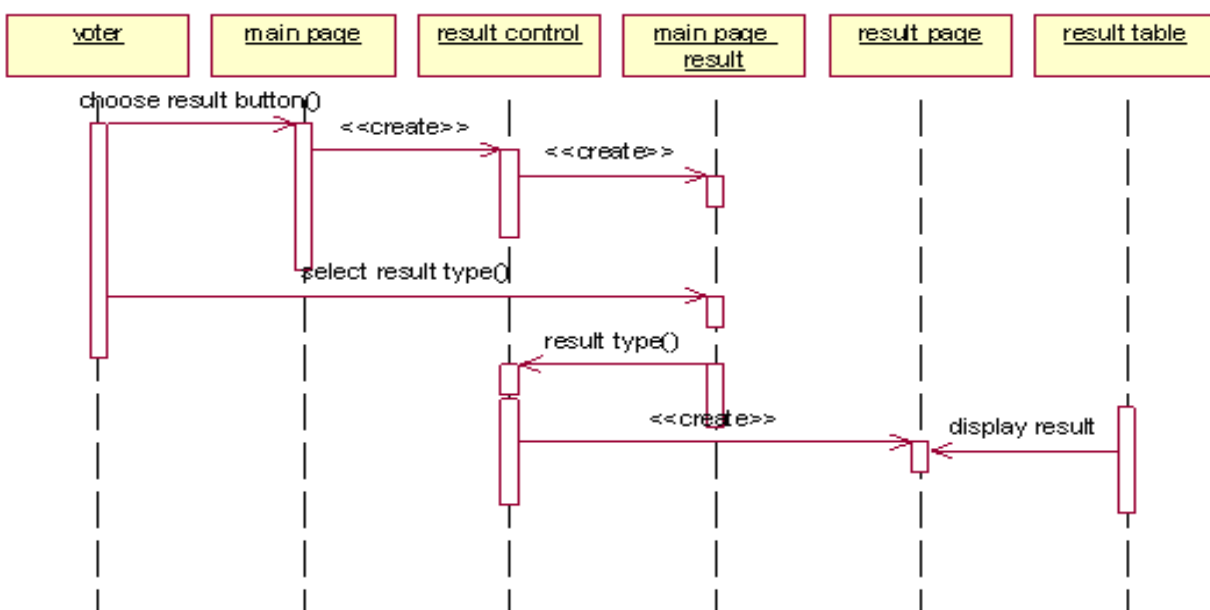
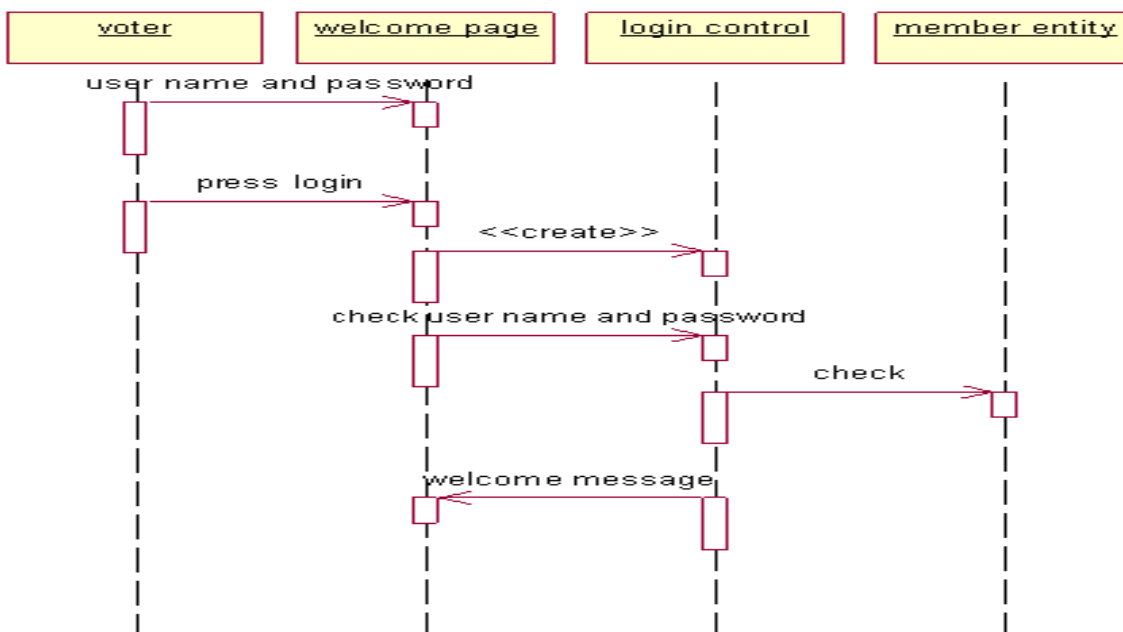
3.2.2. Class Diagram

A class diagram describes the types of objects in the system and the various kinds of static relationships that exist among them. i.e., A graphical representation of a static view on declarative static elements. A class is the description of a set of objects having similar attributes, operation, relationships and behaviour.



3.2.3. Sequence Diagram

A sequence diagram in unified modelling language (UML) is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence chart. Sequence diagrams are sometimes called event diagrams, event scenarios, and timing diagrams.



Phase 4 Configuration Management:

Configuration management is also used in software development, where it is called Unified Configuration management (UCM). Using UCM, developers can keep track of the source code, documentation, problems, changes requested, and change made. An advantage of a configuration management application is that the entire collection of system can be reviewed to make sure any changes made to one system do not adversely affect any of the other systems.

4.1. S/W Requirements

OS: Windows

Language: Visual Basic

4.2. H/W Requirements

Intel PII Processor with 300 MHz speed.

64 MB RAM

10MB Hard disk space

4.3 TOOLS

DESIGN TOOL: Rational Rose suite.

4.4. SOFTWARE DEVELOPMENT

Form1:



Form 2

Form2

Frame1

USER LOGIN WINDOW

CARD NO:

PASSWORD:

Form 3:

Form3

Frame1

REGISTER YOUR VOTE

Card No:

Name:

Father's name:

DOB:

« Data1 »»

Project1
your vote has been registered

Form4

The screenshot shows a web browser window titled "Form4". Inside the browser, there is a frame labeled "Frame1" containing the following elements:

- The title *ADMINISTRATOR* is centered at the top.
- Below the title, there are two input fields:
 - The first is labeled "ADMIN NAME:" and contains the text "Ramji".
 - The second is labeled "PASSWORD:" and contains a series of asterisks "*****".
- At the bottom of the frame, there are two buttons:
 - A button labeled "LOGIN" with a dotted border.
 - A button labeled "MAIN MENU" with a solid border.

Form 5:

The screenshot shows a web browser window titled "Form5". Inside the browser, there is a frame labeled "Frame1" containing the following elements:

- The title *ADMINISTRATOR OPERATIONS* is centered at the top.
- Below the title, there are two buttons:
 - A button labeled "ADD CITIZENS" with a dotted border.
 - A button labeled "GENERATE REPORT" with a solid border.

Form6:

Form6

Frame1

USER INFORMATION

Voter_IDNO:

Name:

Father's Name:

DOB:

Gender:

Password:

Project1
inserted!

Form 7:

Form7

Frame1

RESULT ANNOUNCEMENT

Project1
ADMK WINS!!!

4.4.1 SCRIPT:

CODING FOR FORM1 (MENU):

```
Private Sub Command1_Click()  
    Userlogin.show  
End Sub  
Private Sub Command2_Click()  
    Admin.show  
End Sub
```

CODING FOR FORM2 (USERLOGIN):

```
Dim db As Database  
Dim rs As recordset  
Public n As Integer  
Private Sub Command1_Click()  
    Dim a As Integer  
    a=0  
    n=val (Text1.text)  
    rs.Move First  
    Do while Not rs.EOF  
    If(rs(0)=val(Text1.Text) And rs(5)=Text2.Text) Then  
        a=1  
        polling.show  
        Text1.Text=""  
        Text2.Text=""  
        GoTo X  
    Else  
        rs.MoveNext  
    End if  
    Loop  
    X:  
    If a = 0 Then  
        MsgBox("Invalid log in")  
        Text1.Text=""  
        Text2.Text=""  
    End if  
End Sub  
Private Sub Command2_Click()  
    Unload me  
End Sub  
Private Sub Form_Load()  
    Set db =OpenDatabase("Z:\SE LAB\LAB\LAB\vote.mdb")  
    Set rs=OpenDatabase("detail",dbOpenDynaset)  
End Sub
```

CODING FOR FORM3 (POLLING):

```

Dim db As Database
Dim rs As recordset
Public i,j,k As Integer
Private Sub Command1_Click()
    Dim a As Integer
    a=0
    rs.Move First
    Do while Not rs.EOF
    If rs(0)=val(Text1.Text) And rs(6)=True Then
    a=1
    i=i+1
    rs.Edit
    rs(6)= False
    rs.Update
    msg=Msgbox("u r vote is registered", vbOKonly + vbInformation,
    successful polling")
    Call clear
    Unload me
    Unload userlogin
    GoTo X
    Else
    rs.MoveNext
    End if
    Loop
    X:
    If a = 0 Then
    msg = MsgBox("ur not able to vote", vbOKonly + vbCritical,"wrong
    polling")
    call clear
    Unload Me
    Unload Userlogin
    End if
End Sub

Private Sub Form_Load()
    i=0
    j=0
    k=0
    Set db =OpenDatabase("Z:\SE LAB\LAB\LAB\vote.mdb")
    Set rs=OpenDatabase("detail",dbOpenDynaset)
    rs.Move First
    Do While Not rs.EOF

```

```
If rs(0)=userlogin.n Then
Polling.Show
Text1.Text=rs(0)
Text2.Text=rs(1)
Text3.Text=rs(2)
Text4.Text=rs(3)
GoTo x
Else
Rs.MoveNext
End if
Loop
x:
End Sub
Private Sub clear()
Text1.Text=""
Text2.Text=""
Text3.Text=""
Text4.Text=""
End sub
```

CODING FOR FORM4 (ADMIN LOGIN)

```
Private Sub Command1_Click()
If Text1.Text="Administrator" And Text2.Text="Info" Then
Text1.Text=""
Text2.Text=""
Adminoperation.Show
Text1.Setfocus
Unload Me
Else
Msg=Msgbox("Access Denied",Vbokonly+Vbcritical,"Login")
Text1.Text=""
Text2.Text=""
Text1.Setfocus
End If
End Sub

Private Sub Command2_Click()
Unload Me
End Sub
```

CODING FOR FORM5(ADMIN OPERATIONS):

```
Private sub command1_click()
Userinfo.show
End sub
```



```

Private sub command2_click()
End sub

```

CODING FOR FORM6(RESET):

```

Dim db as database
Dim rs as recordset
Private sub command1_click()
    If polling.i>polling.j and polling.i>polling.k then
        Msg=msgbox("AIDMK R>RAJENDRAN IS A
        WINNER",vbokonly+vbinformation,"winner")
    Else
        If polling.j>polling.k then
            Msg=msgbox("DMK S.PANNERSELVAM IS A
            WINNER",vbokonly+vbinformation,"winner")
        Else
            Msg=msgbox("CONGRESS S.VENUGOPAL IS A
            WINNER",vbokonly+vbinformation,"winner")
        End If
    End If
End Sub
Private Sub Command2_Click()
    rs.MoveFirst
    Do While Not rs.EOF
        rs.Edit
        rs(6)=True
        rs.Update
        rs.MoveNext
    Loop
End Sub
Private Sub Form_Load()
    Set db=OpenDatabase("Z:\SE LAB\LAB\LAB\vote.mdb")
    Set rs=db.OpenRecordset("detail",dbOpenDynaset)
End Sub

```

Phase 5 Software Testing:

5.1. Preparing test plan:

Preparing test plan is the first step in the last phase of software development cycle. The test plan consists of all the activities that had to be done in the software testing phase. This test plan has been documented using the rational test manager software.

5.2. Perform Validation Testing:

Software is completely assembled as a package interfacing errors have been uncovered and final series of software test validation testing may begin Validation successive when the customer is satisfied.

5.3. Validation Test Criteria:

Software validation is achieved through a series of black box test that demonstrates conformity with requirements.

5.4. Coverage analysis:

Coverage analysis is used to identify untested code. Using rational pure coverage, untested code can be easily identified.

5.5. Memory leaks:

Memory leak testing has been done using rational purity software.

Result:

Based on the system requirements specification ONLINE VOTING INFORMATION SYSTEM has been designed and implemented.

References and bibliography

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