

**VISUALIZATION IN PARTICIPATORY PROGRAM
(VIPP)**

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DECLARATION

In accordance with the requirements of the degree of Bachelor of Computer Science in the division of Computer Science and Engineering, we present the following thesis entitled 'Visualization In Participatory Program (VIPPP)'. This work was performed under the supervision of Abdussamad Ahmed Muntahi.

We hereby declare that the work submitted in this thesis is our own and based on the results found by ourselves. This thesis, neither in whole nor in part, has been previously submitted for any degree.

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ABSTRACT

We use several programming language for our project. like we use MySQL server for the database system. For the SMS sending and receiving we use ActiveXpert software. For report generating we use Crystal report. We use string matching algorithm for the opinions grouping. We have a server which is used for SMS sending and receiving. When all the SMS comes to the server they store into the server and using the subgroups all the opinions grouped. The subgroups are selected by the client who asks the questions. The client selects some subgroups which is related with the opinions. After matching all the opinions they grouped and the automated report generate which is the summery of all the opinions.

CHAPTER I

1. INTRODUCTION

Mobile phone has improved our lives in every aspect. Now every one use mobile phones. It changes our lives. Now SMS is very popular medium for communication.

Visualization in participatory program, which is popular in worldwide. Here the participants can give their opinions very lively. That's why world's most powerful organization UNICEF uses this method for direct communication with the people. Here in our thesis, we use SMS instead of cards.



Fig 1.1: Traditional System

The current system:

The visualization in participatory program is a program where people can give their opinions directly. This program helps those people who are unable to give their opinions to the right person. In the current system there is a person who asks a questions or a topic. That person asks a question to the people or the participants. All the participants have cards, pen, pencils or marker for write their opinions. After get the questions, all the participants write their opinions on cards. After that all the cards are collected. A board is used to attach the cards. One by one all the cards show to the participants and then attached to the boards. Then the cards or opinions are grouped using the similarities of meaning. There may be many groups by the criteria of the cards. Headings give to every group. And at last a summery of the opinions comes out. By this way for a question or topic maximum number of solutions or opinions comes out.

Statement of the Problem

- The current system includes the following problem:
- The current system suffers with lack of information's.
- The process is lengthy and time consuming
- All participants may not participate
- Manual process, so it takes long times
- Every thing is visualize, so participants may not be interested

Purpose of the Study

Comparison of traditional system and our proposed system

The traditional system is lengthy process. After getting the opinions, the grouped is done by manuals. So it takes lot of times. Now for every thing time is very important. Lacking information for any project is not effective, so if we use the traditional system we suffer for time and information. That's why we were interested to do this. We use the original theme of the VIPP to make it automated. Our proposal is we will do it automated.

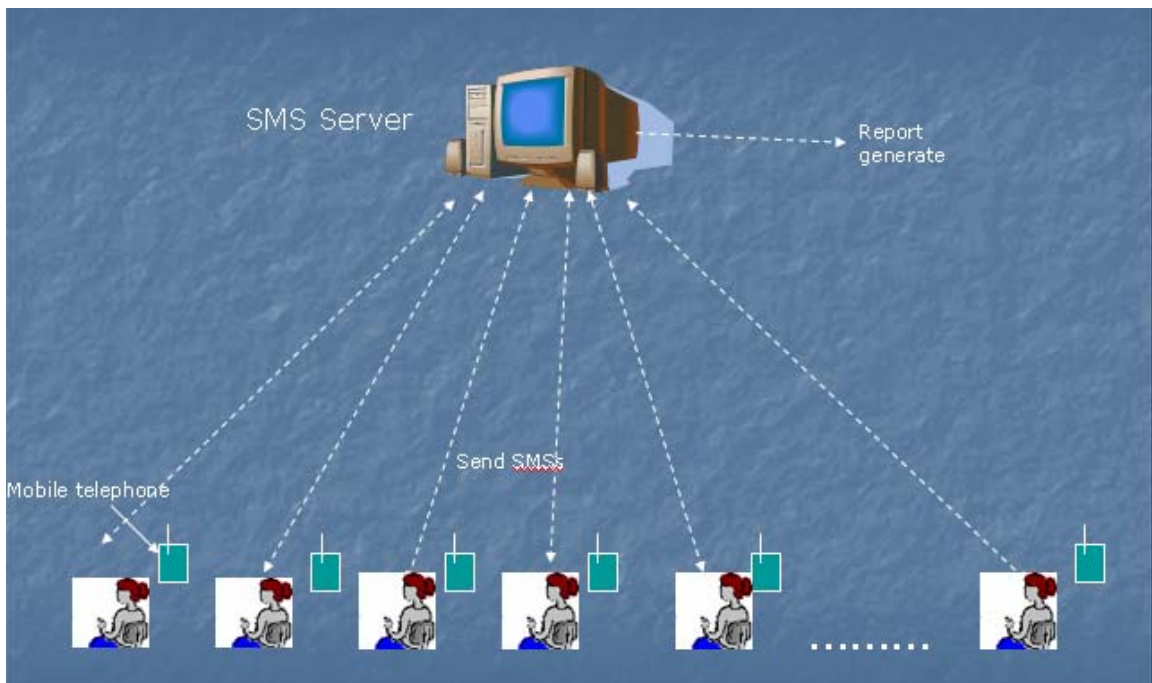


Fig 1.2: Our proposed system

1.3 Our Proposed System

We will use mobile telephones' Short Messaging Service or SMS. The participants would of course need individual mobile sets with connection permitted to use SMS service. The SMS messages would directly interface with a central server (We will call it 'SMS Server') that would process the messages and show processed output to the presenter.

The client asks questions by the server to the participants. Our software contain all the information's to the participants. This is personal information's database system. The client select the participant's name, ID, dept, mobile number etc and then send the SMS. After get the SMS by the participants, they give their opinions by SMS. We give some related subgroups for sorting the opinions. After all the SMS comes to the server we select the opinions and also the subgroups. Our software matches the subgroups with the opinions and gives percentage of matching. Then all the opinions grouped by the percentage of matching. After the end our software is unable to generate the report. Which is generating automaticly. our report shows the summery of the total process.

Problems of our system:

In a Visualization In Participatory Program system, the total number of participants may be very large, so for one question huge number of opinions comes out. It would may not be possible for our system to sort huge number of opinions at the current time. This is our lacking. As we use subgroups for sorting there may also problems. Like we give the subgroups, so it may not be possible for us to give all the related subgroups. That's why there may be chance for mismatch of the opinions which create problems into the grouping of the opinions.

Why we do this?

- The real life processes involved in participations
- The process for collecting information's
- How to optimize a system
- Effectiveness of mobile phones
- Process of optimal solutions
- Effective planning process for a project.
- Maximum alternatives of opinions

CHAPTER II

2. PROJECT INITIALIZATION AND PLANNING

The project initiation and planning is an essential part in the life of a project. The objective of this process is to change an unclear system into a clearly focusing and the objective test plan, feasibility issues, benefits, cost and time scheduling for the project.

2.1 System:

2.1.1 Project Name:

Visualization in participatory program using SMS system

2.1. 2 Business Need:

Organization needs to save time and get the proper information from the Participants

2.1. 3 Functionality:

Our system will be more effective because of the features

1. The client can easily ask questions to the participants
2. Participants do not need to meet with the client for giving opinions, SMS system makes it easy.
3. Keeps the records
 - Database of all the participants
 - Personal Information of participants
 - All the opinions

4. The client can view all the process very short time
5. All the information will be stored in the Server
6. Only the authorized person of the company will logon with ID and Password
7. Only Client can ask questions

2.1.4 Expected Value:

- It will improve management satisfaction.
- The system will provide better decision-making because lot of information's getting by the management
- It will take less time to generate reports

2.1.5 Feasibility Analysis:

Familiarity with Application

- The management are familiar with web-based and SMS system
- The participants also familiar with SMS system
- System is easy for understand
- User friendly

2.2 Information Gathering Plan:

Step	Technique	Specific Activities
Understand the Current System	Internet	<ul style="list-style-type: none"> We get the information by the Internet. We browse many web-sites for information
	Courses	<ul style="list-style-type: none"> We do system analysis and design course from that we get lot of information .
	Document Analysis	<ul style="list-style-type: none"> We find out related books and document to understand the current system
	Observation	<ul style="list-style-type: none"> We observe the current system by analyzing the gathered information.
Identify Improvements	Root Cause Analysis	<ul style="list-style-type: none"> The project team identify the problems of traditional system
	Duration Analysis	<ul style="list-style-type: none"> Identify the amount of time it takes to do the process i Include Duration Analysis in the study seasons.
	Activity-based Costing	<ul style="list-style-type: none"> Identify the major processes or steps and costs associated with them.

Table 2.1: Information Gathering Plan

2.3 Analysis Plan:

Step	Technique	Specific Activities
Understand the Current System	Gather Information	<ul style="list-style-type: none"> We get information from Internet, books and document analysis and produce an overview of the current system.
	Develop Process Model	<ul style="list-style-type: none"> We do DFD into behavioral model for current system.
	Develop Data Model	<ul style="list-style-type: none"> We identify data to develop a data/structural model for the current system.
Identify Improvements	Problem Analysis	<ul style="list-style-type: none"> We study about the system to find out the problems
	Root Cause Analysis	<ul style="list-style-type: none"> We find basic set of drawbacks of Current system that is going to be solved in the automated system.
	Duration Analysis	<ul style="list-style-type: none"> We do the complex process into Simplex way
	Activity-based Costing	<ul style="list-style-type: none"> Analyze the cost that is associated with the major processes or steps.
	Technology Analysis	<ul style="list-style-type: none"> We use several techniques for doing this project
Develop a New System Concept	Activity Elimination	<ul style="list-style-type: none"> We find out the problems of the current system and try to solve this problems
	Gather Information	<ul style="list-style-type: none"> Analyze the current system and use more techniques to the automated system
	Develop Process Model	<ul style="list-style-type: none"> We do the DFD for our system
	Develop Data Model	<ul style="list-style-type: none"> We develop a data / structural model for the new system.

Table 2.2: Analysis Plan

CHAPTER III

3. ANALYSIS

3.1 study Report

Study from: Web-sites, google,Books

Information collection by : Md. Shariful Alam, Rakib-UI-Hoque

Date: 2nd September-22nd September 2006

Purpose: To gather detail information about the current system of Visualization In Participatory Program.

Information

Q 1. What is VIPP?

Ans: Visualization In Participatory Program where the client can directly communicate with the participants. Here the client asks a question or a topic to the participants. The participants use cards to write their opinions. Then the client collect all the cards .a board is used where the cards are attached. Client first shows the cards and then attached. After that all the cards grouped using the similarities or the meaning of the opinions. after grouping all the cards a summery or headline is given.

Q 2. Why this system used?

Ans: When a decision taken by a organization where lot of people works, participations of the people play the vital role. And VIPP is the best way to encourage the people for participations.

Q 3. Usefulness of VIPP

Ans: participants can directly communicate with the client. For a topic or question maximum number of opinions or solutions comes out

Q 4. User of VIPP?

Ans: After study we find that worlds most powerful organization UNICEF use this system to communicate with the people for their opinions, suggestions etc.

Q 5. What is the major problem in this system?

Ans: The problem of this system is, it is very lengthy. Time consuming. Because to do grouped all the opinions manually it takes lots of times. The organization whose head office in one country and the branches are in other countries they couldn't participate into this system.

Q 6. Any other problems?

Ans. This system is done visually. So all the participants may not be interested for participations.

3.1.1 Notes from observation

From the study we find VIPP is very popular system. But there are some problems with the system. That's why we try to do this manual system into automated system.

1. We can keep all the records of the participants.
2. Personal information of the participants will be keep into database.
3. In our system SMS will be used as cards.
4. The manually grouping system will be automated.
5. Our system helps to save times, money and lot of important issue of the organizations.

3.2 Data Flow Diagram of Current System

3.2.1 DFD of VIPP

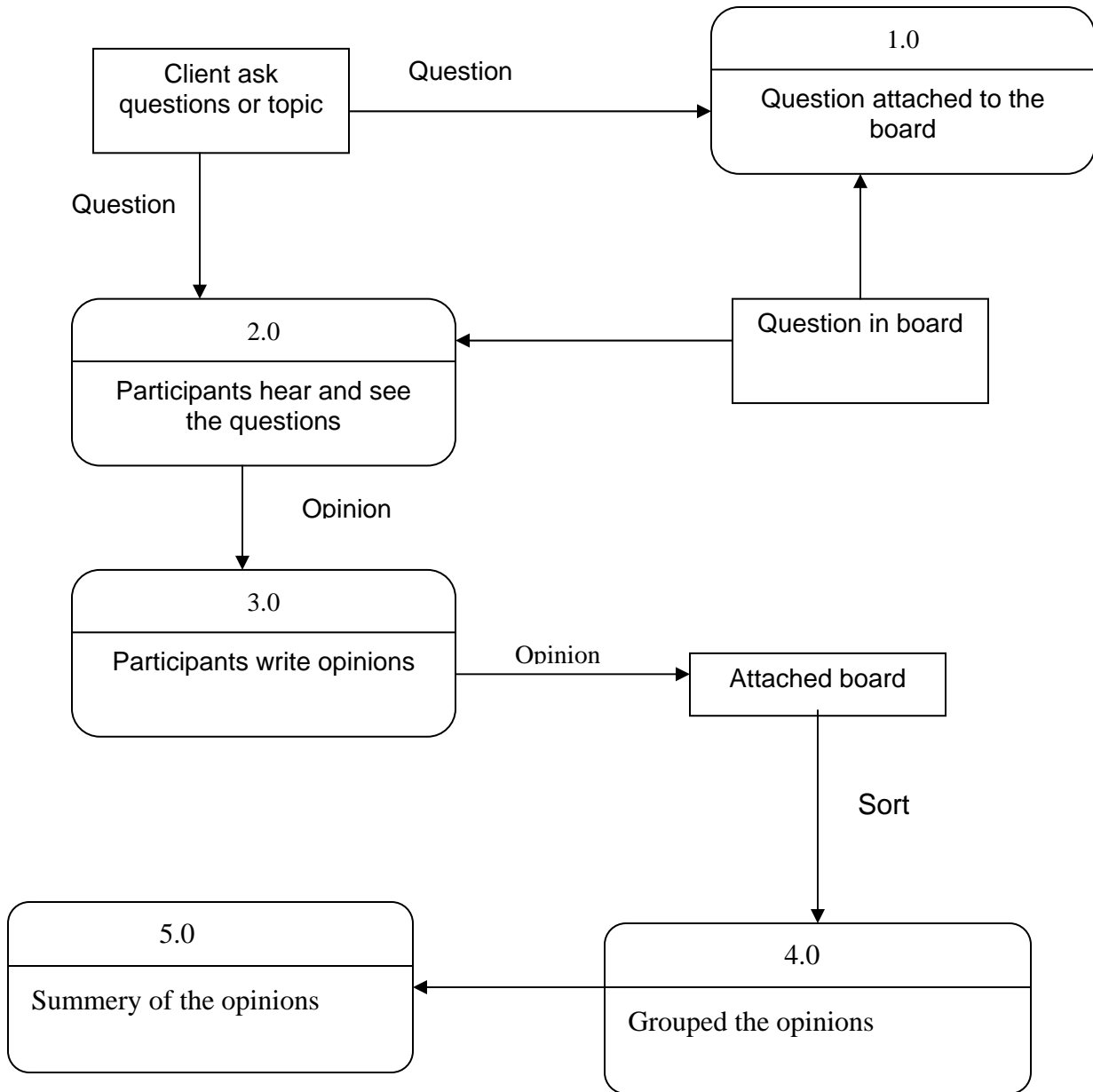


Fig 3.1: Data flow diagram (Physical Model)

Current system of VIPP

3.2.1.1 Thorough Description

Data flow diagram (Physical Model)

VIPP in the current system

1. Client ask questions or topic to the participants
2. Questions attached to the board
3. The participants see the questions or topic.
4. Participants write the opinions and then before attached to the board the client show it to the participants.
5. Then the topics are grouped using the similarities or the meaning.
6. Summery of the opinions comes out.

3.2.2 DFD of select questions or topics

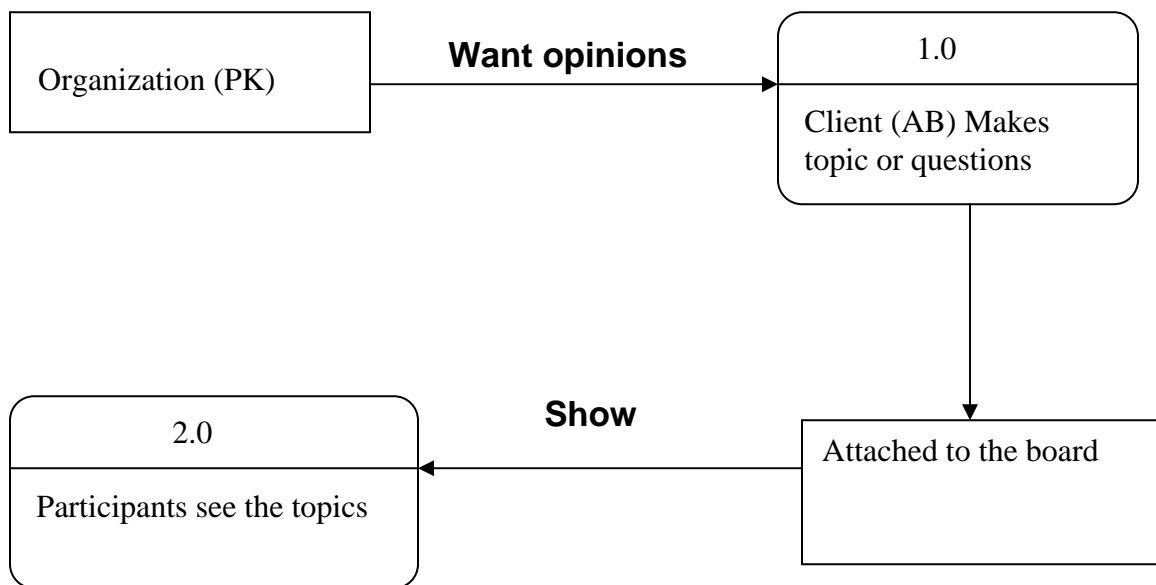


Fig 3.2: Data flow diagram (Physical Model)
Question or topic selections

3.2.2.1 Thorough Description

Data flow diagram (Physical Model)

Questions or Topic preparations in the current manual system

1. Let PK is the organizations who are going to make topics
2. Client (AB) makes questions or topic
3. Attached to the board
4. Participant get the topics or questions

3.2.3 DFD opinions methods

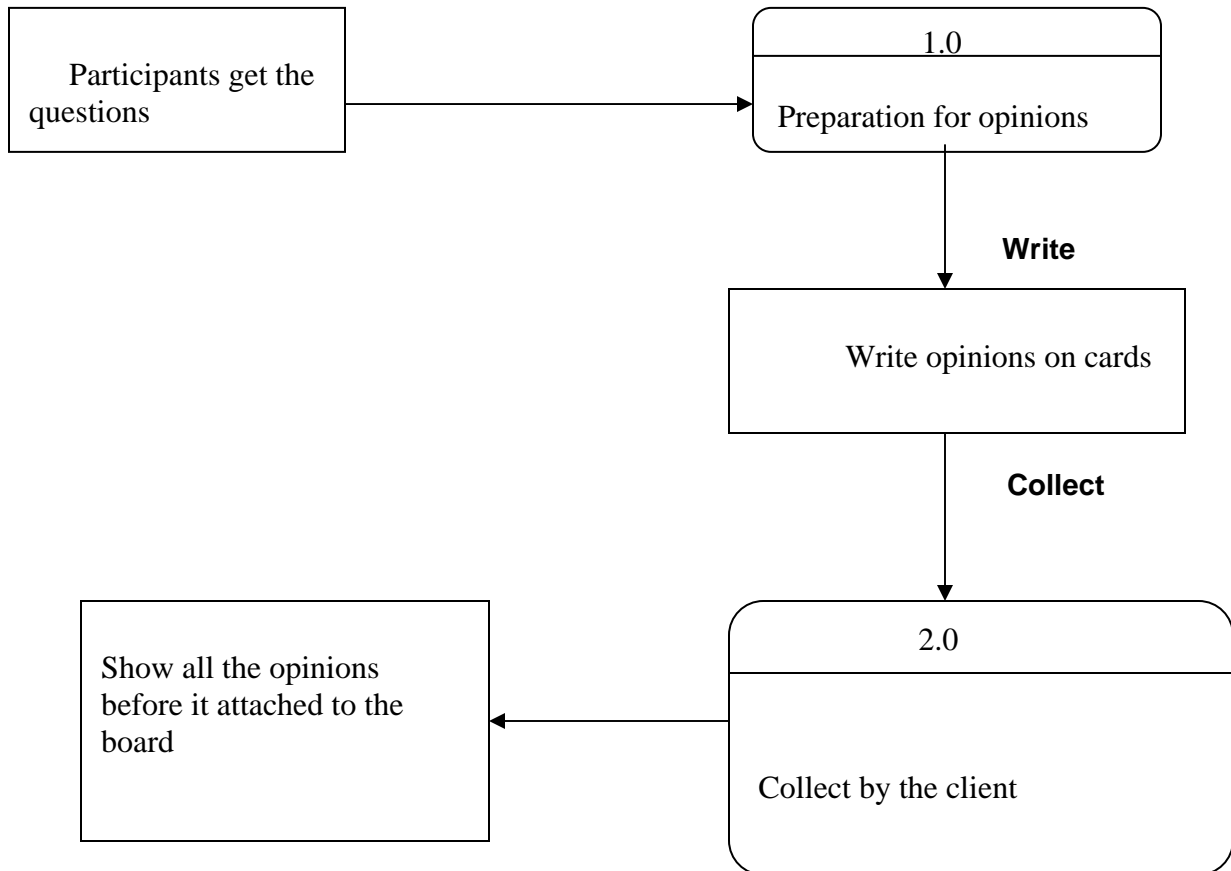


Fig 3.3: Data flow diagram (Physical Model)
Opinions method system in the current manual system

3.2.3.1 Thorough Description

Data flow diagram (Physical Model)

Opinions method system in the current manual system

1. Participants get the questions by the clients
2. The participants prepared themselves for answer or opinions
3. Opinions write by the participants
4. The client collect all the cards
5. The client show all the opinions before he or she attached to the board

3.2.4 DFD of grouping opinions

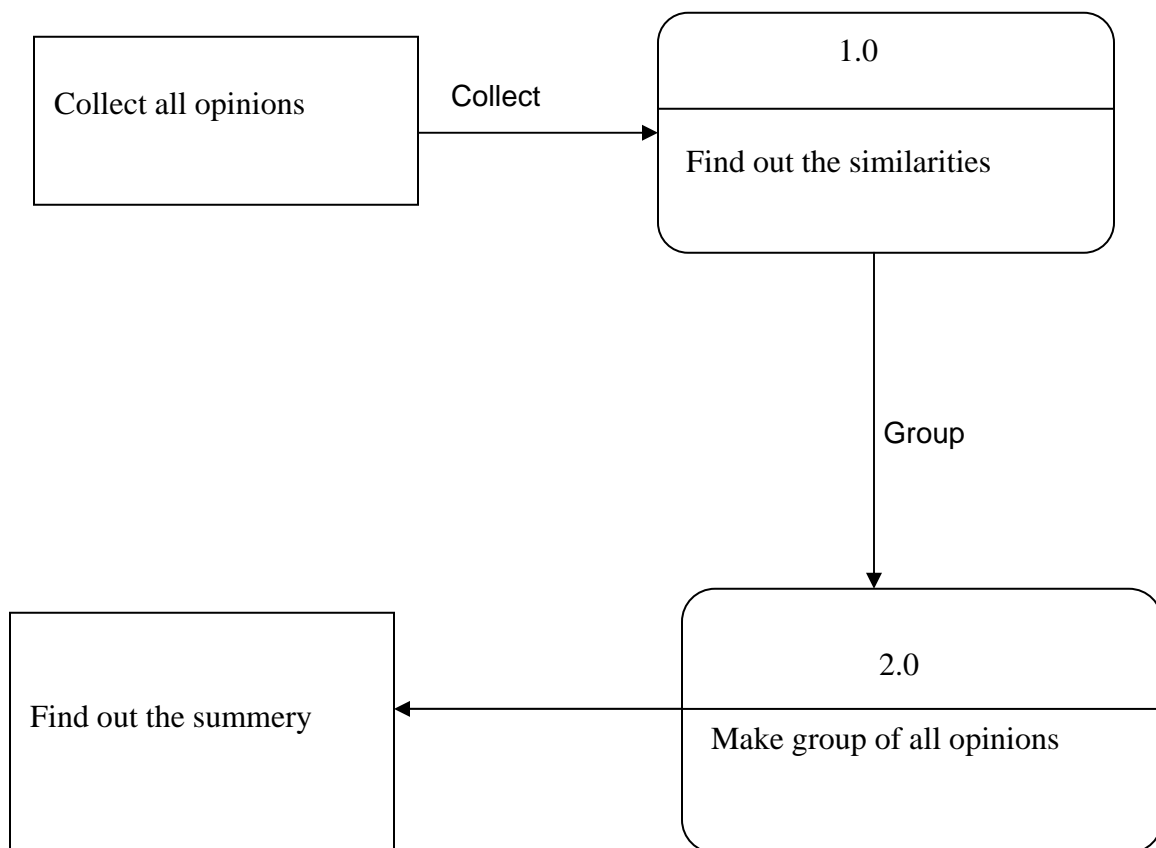


Fig 3.4: Data flow diagram (physical Model)
Grouping methods of opinions in the current manual system

3.2.4.1 Thorough Description

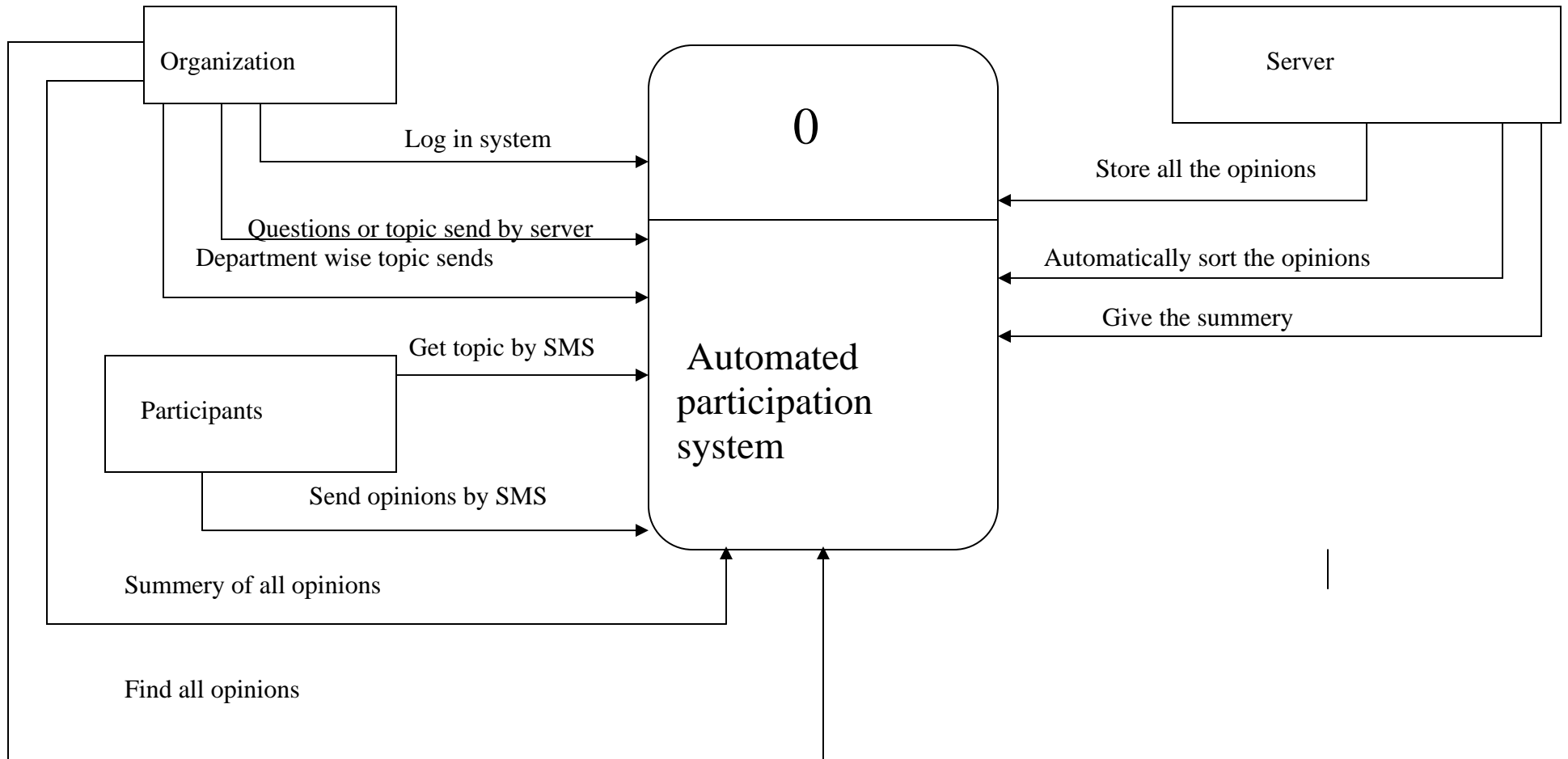
Data flow diagram (physical Model)

Grouping methods of opinions in the current manual system

1. All the opinions collect by the client
2. Then the client try to find out the similarities of the opinions
3. Makes group of all opinions using their meaning or similarities

And finally find out the summery of all the opinions

3.3 Context Diagram of Proposed System



3.3.1 Level 0 Data Flow Diagram of Client log in system

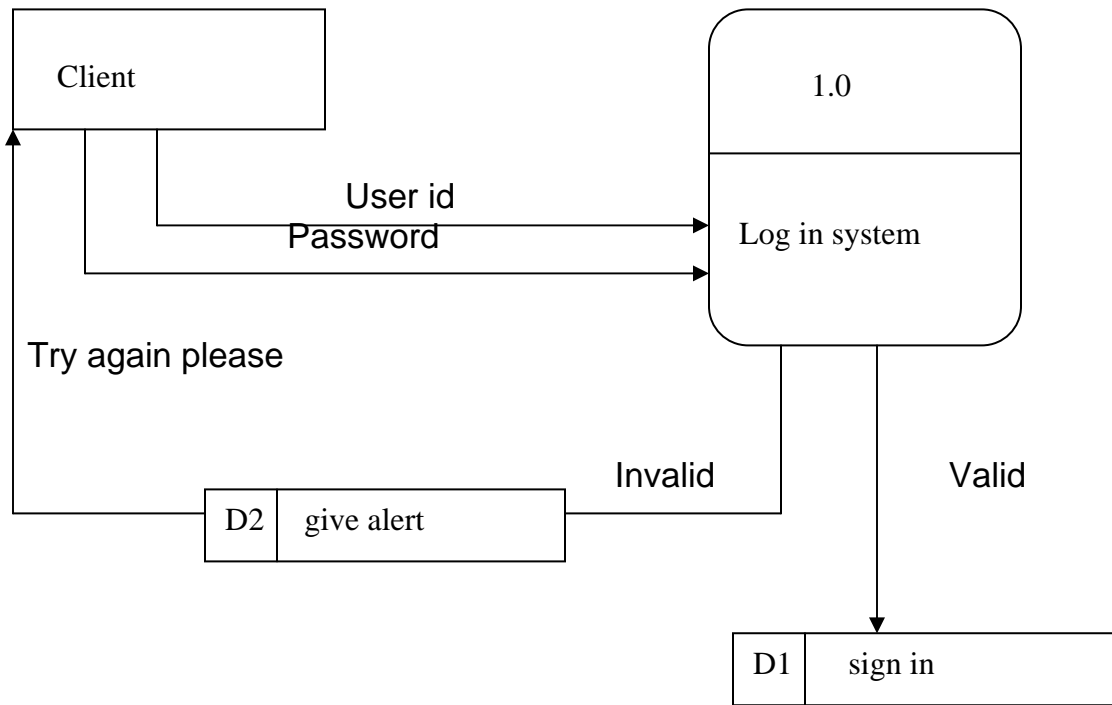


Figure 3.10: Level-0 Data Flow Diagram of Client log in system

3.3.1.1 Level 1 Data Flow Diagram of Question or topic send

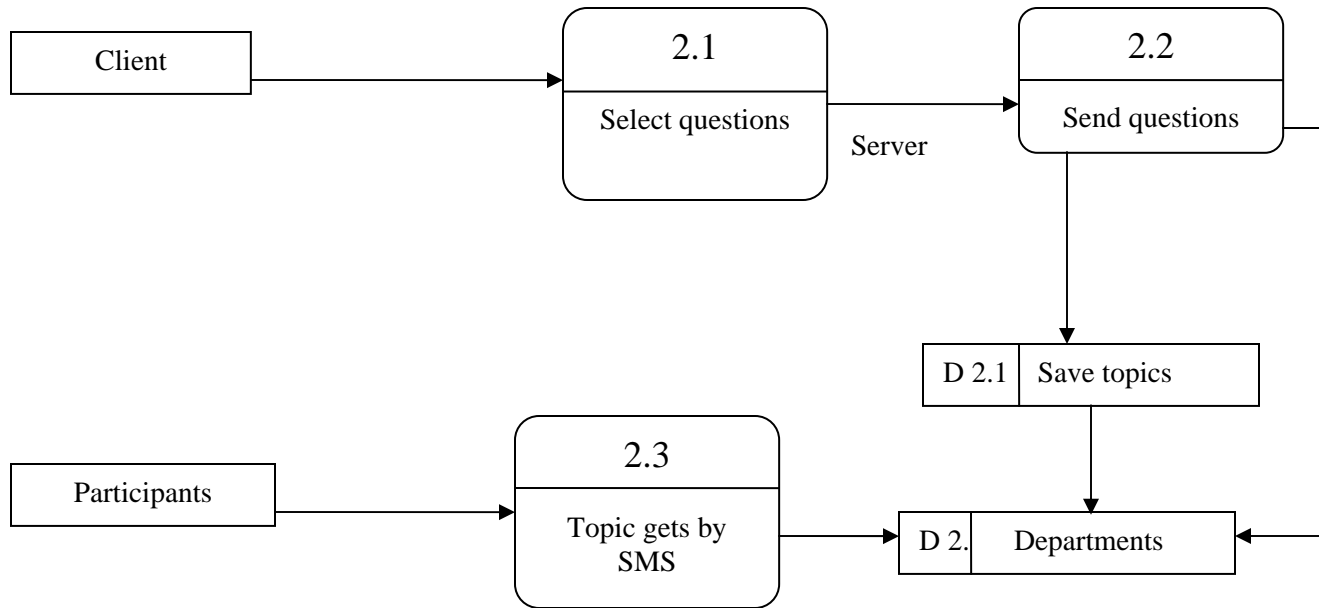


Fig 3.11: Level-1 Data Flow Diagram Of topic send

3.3.1.2 Level 1 Data Flow Diagram of opinions send

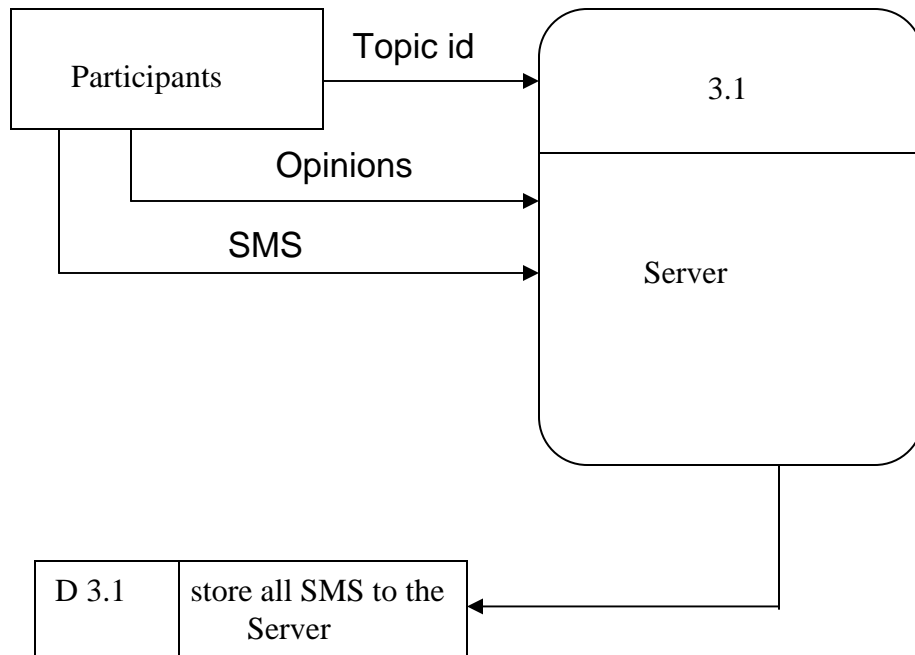


Fig 3.12: Level-1 Data Flow Diagram of send opinions

3.3.1.3 Level 1 Data Flow Diagram of opinions sorting

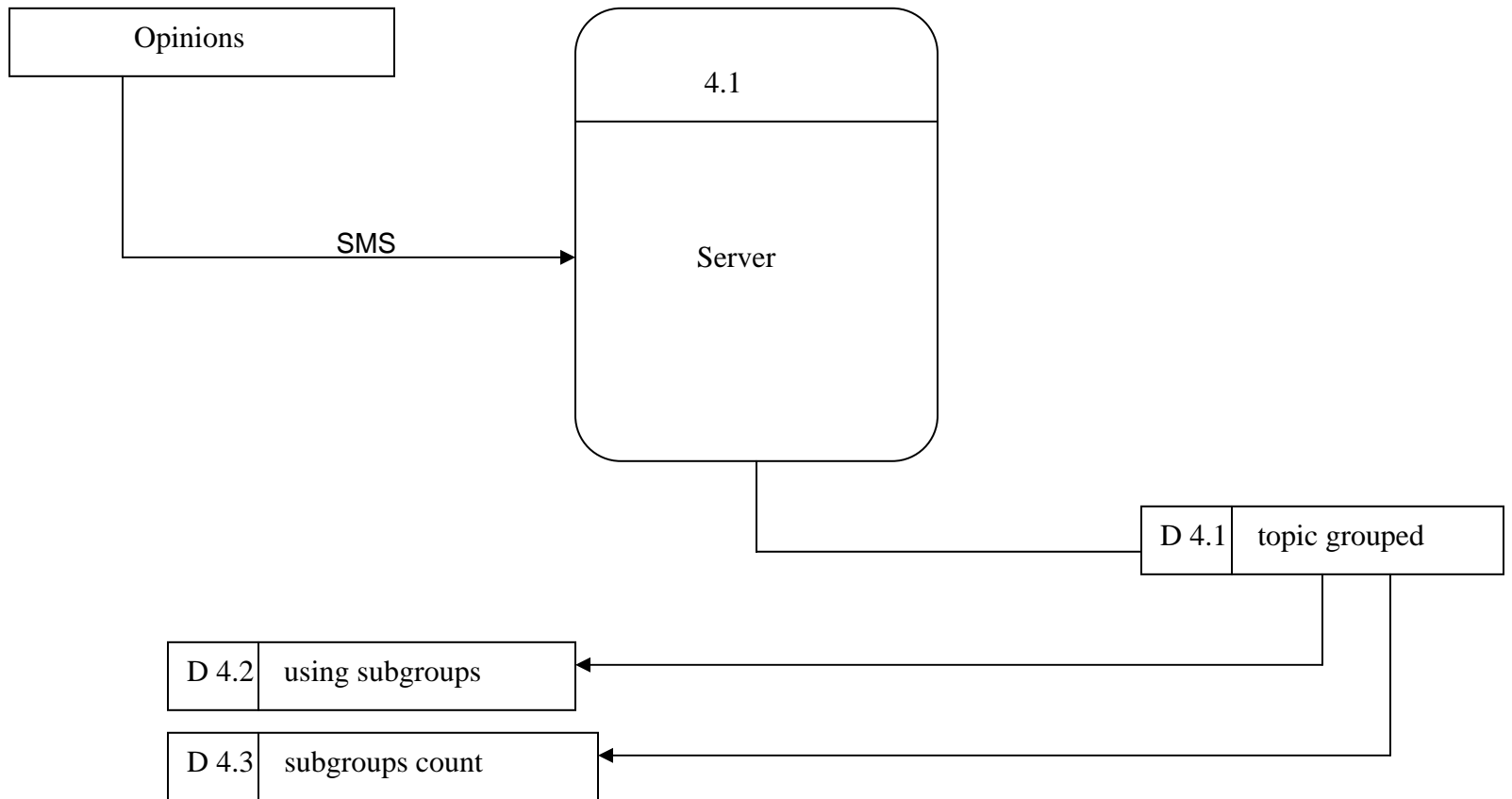


Fig 3.14: Level-1 Data Flow Diagram of opinions sorting

3.3.1.4 Level 1 Data Flow Diagram of report generating

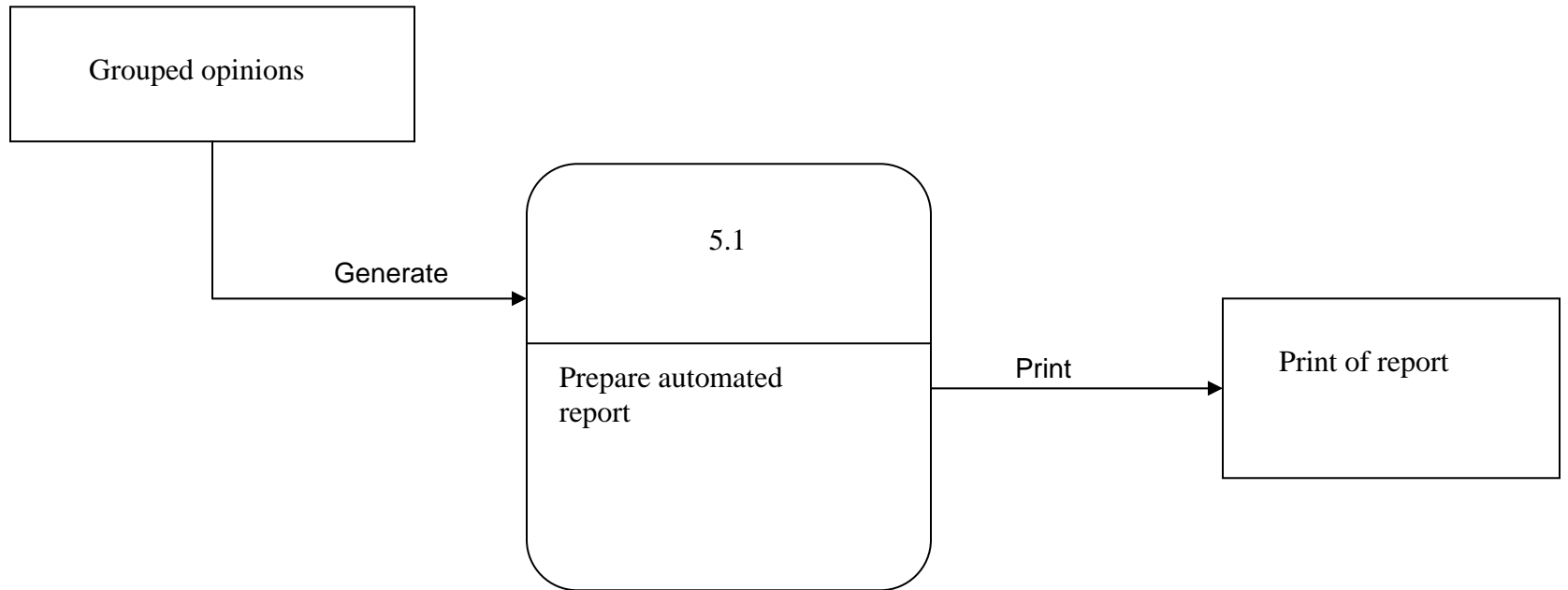


Fig 3.15: Level-1 Data Flow Diagram of report generating

3.4 Structured English representation of Context Diagram

3.4.1 Process 0: Automated VIPP system

DO

 GET login form by the client

 SELECT question or opinions

 SEND topics or questions by server to the participant

 RECEIVE SMS into the mobile phone

 SELECT topic id

 SEND answer or opinions

 STORE opinions to the server

 SORT opinions

 MAKE groups

 VIEW summery of the opinions

 VIEW reports

 PRINT reports

Proposal

UNTIL End- of-Process

3.4.2 Process 1.0 organization login system

DO

 READ Next Company Information from Company

 CHECK for the valid Company-info

 BEGIN IF

 IF the Company Information is valid

 THEN DISPLAY generated report to the Company

 ELSE DO nothing

 END IF

UNTIL End-of-file

3.4.3 Process 2.0: Send questions or topic

```
DO
    SEND Questions or topics
    SAVE Questions or topics
    READ anything else
UNTIL End-of-file
```

3.4.4 Process 3.0: Get SMS by participants

```
DO
    READ questions or topic
    CHECK question or topic ID
    SEND SMS
UNTILL End -of -file
```

3.4.5 Process 4.0: receive SMS

```
DO
    RECEIVE SMS
    SAVE SMS to the server
UNTILL End -of- file
```

3.4.6 Process 5.0: SORT SMS

```
DO
    GET SMS
    CHECK similarities of SMS
    CHECK subgroups
UNTILL End -of-file.
```

3.4.7 Process 6.0 Grouped

```
DO
    MATCH SMS
    DISPLAY groups
```

```
UNTIL End-of-file
```

3.4.8 Process 7.0: report

```
DO
    READ process
    DISPLAY grouped
    PRINT report
UNTIL End-of-file
```

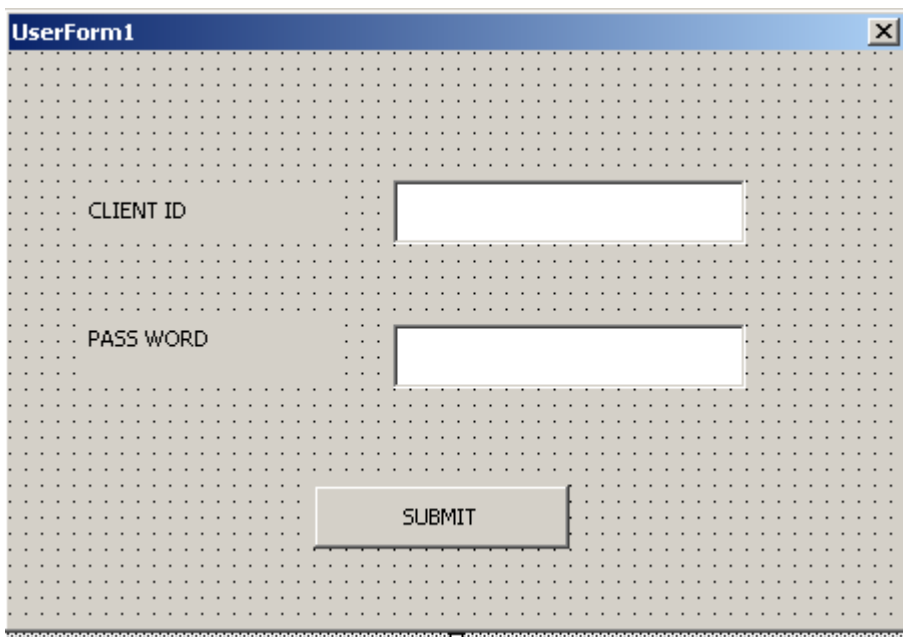
3.5 Prototype Design of the System

3.5.1 Form Name: CLIENT Login

User: Administrative person

Purpose:

- In this form client can login with the USERID and PASSWORD.
- If the ID or the PASSWORD miss match then it gives a message for try again



The image shows a screenshot of a software form titled "UserForm1". The form has a blue title bar with a close button (X) on the right. The main area has a light gray background with a fine grid pattern. It contains two input fields: "CLIENT ID" and "PASS WORD", each with a corresponding text box. Below these fields is a "SUBMIT" button.

Fig 3.19: Client Login Form

3.5.2 Form Name: CLIENT Operate

User: CLIENT

Purpose:

- Client send topics or questions to the participants
- Receive form is used by the participants
- Repots generate

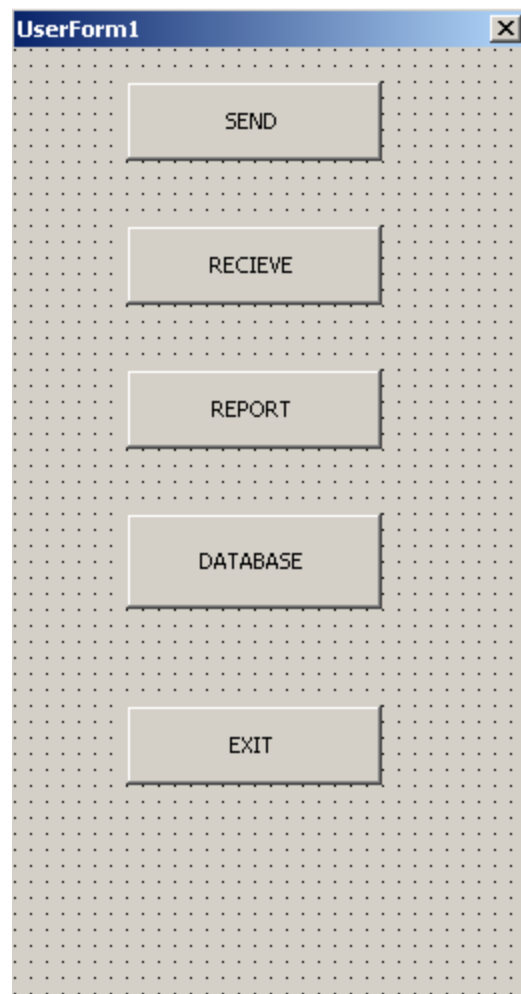


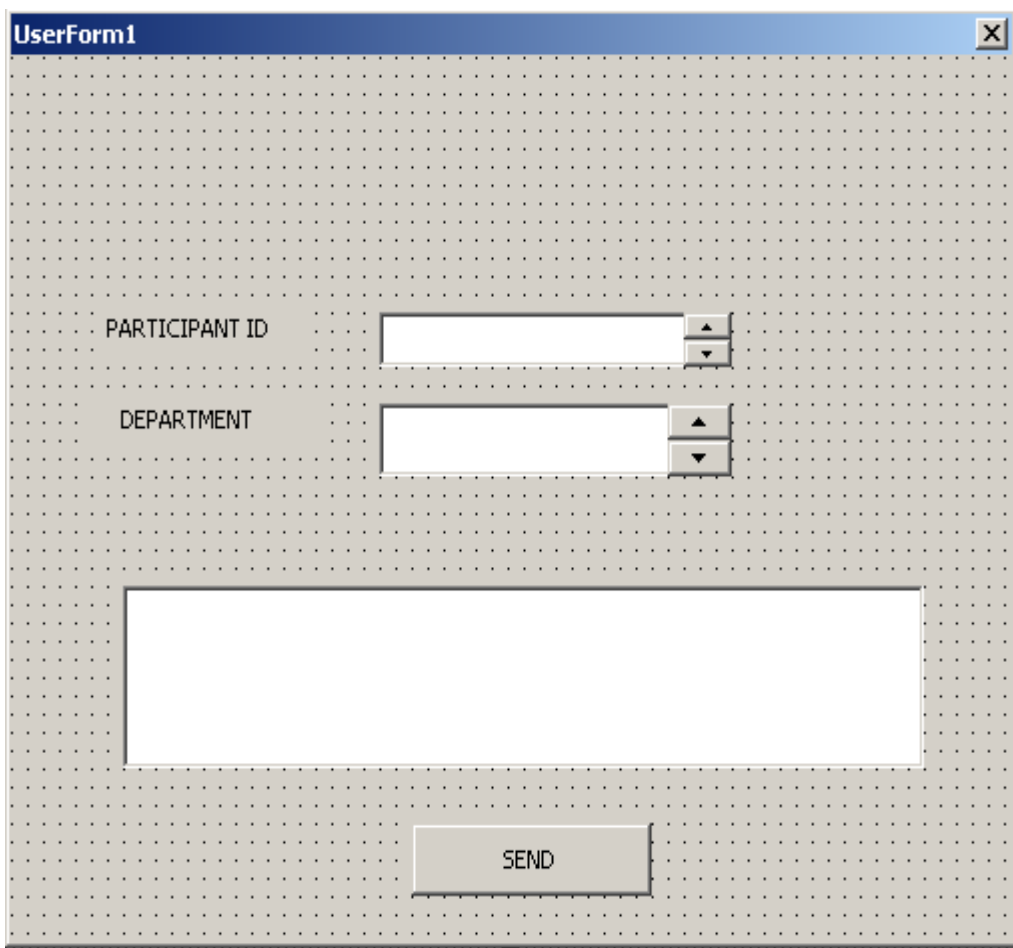
Fig 3.20: Client user Form

3.5.3 Form Name: SMS SEND

User: CLIENT

Purpose:

- Here the client select participants ID, department and write SMS
- There is a text message box where the client write message



The image shows a screenshot of a software application window titled "UserForm1". The window has a blue title bar with a close button (X) in the top right corner. The main area of the window has a light gray background with a dotted grid pattern. There are two dropdown menus: "PARTICIPANT ID" and "DEPARTMENT". Below these is a large, empty text box for writing a message. At the bottom center, there is a button labeled "SEND".

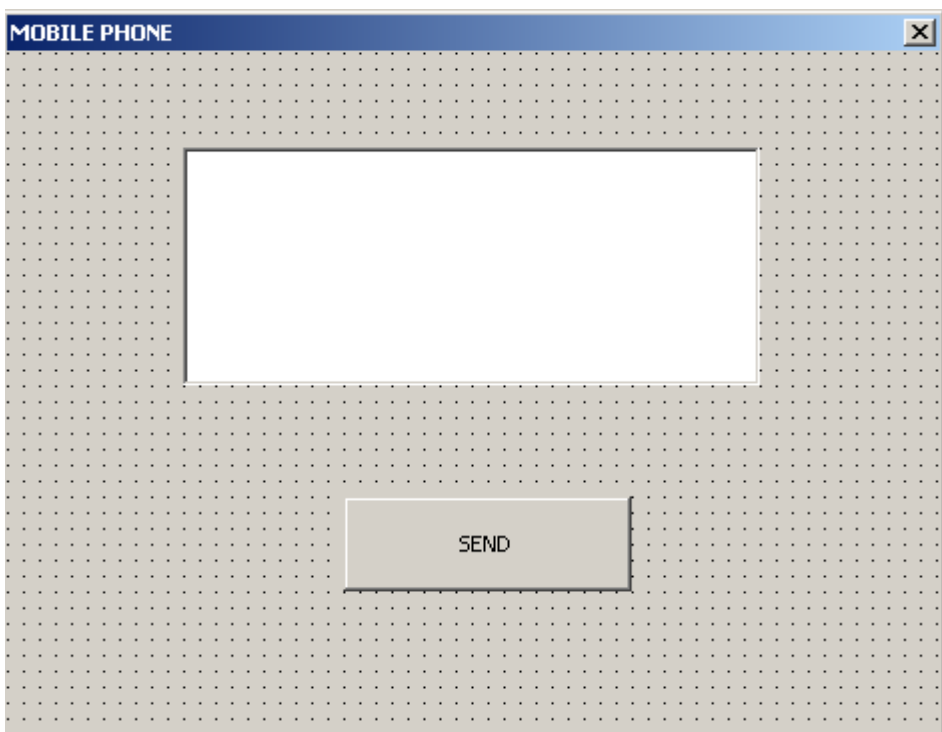
Fig 3.21: SMS send form

3.5.4 Form Name: RECEIVE

User: Participants

Purpose:

- Participants get the SMS
- Participants give the opinions



The image shows a screenshot of a mobile phone interface. At the top, there is a blue header bar with the text "MOBILE PHONE" and a close button (X) on the right. Below the header, the background is a light gray grid pattern. In the center, there is a large, empty white rectangular box, likely for displaying an SMS message. Below this box, there is a gray rectangular button with the text "SEND" in the center.

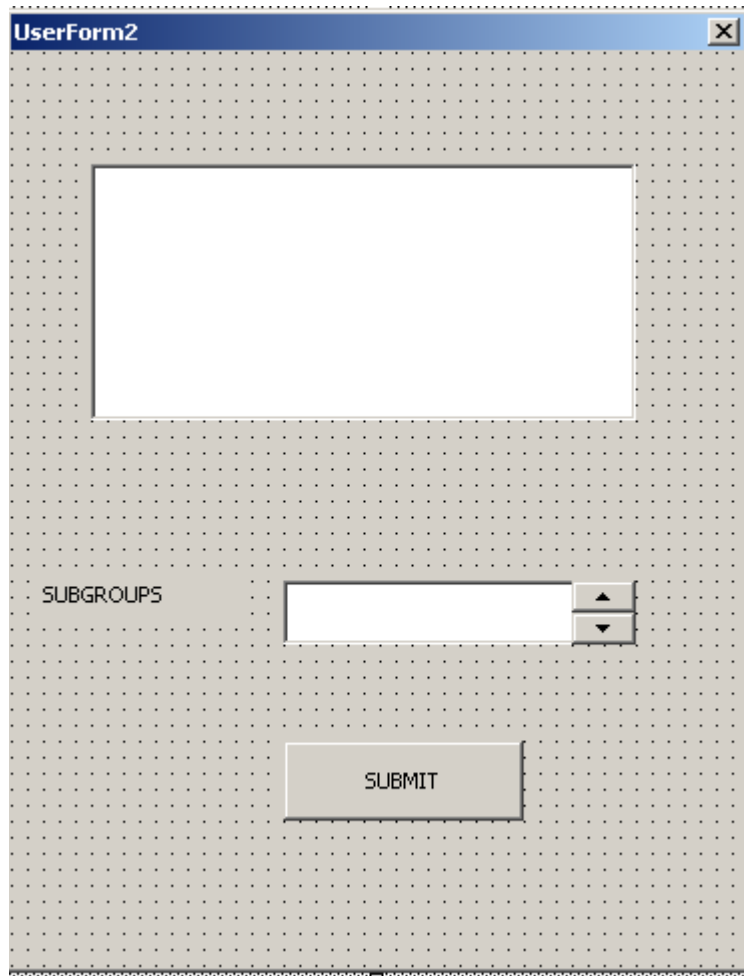
Fig 3.22: Participants receive and send Form

3.5.5 Form Name: GROUPS

User: Client

Purpose:

- After collecting all the opinions into the server they are grouped
- Grouped are done by subgroups



The image shows a screenshot of a web form window titled "UserForm2". The window has a blue title bar with a close button (X) in the top right corner. The main content area has a light gray background with a fine grid pattern. In the upper center, there is a large, empty white rectangular text input field. Below this field, on the left side, is the label "SUBGROUPS". To the right of the label is a dropdown menu with a white background and a gray border. The dropdown menu is currently closed, showing only the top and bottom arrow buttons. Below the dropdown menu is a rectangular button with a gray background and a black border, containing the text "SUBMIT" in black, uppercase letters.

Fig 3.22: Groups the opinions

3.5.6 Form Name: Reports

User: Client

Purpose:

- After the process done, client want to see the output
- Reports show the output
- Client can print the report

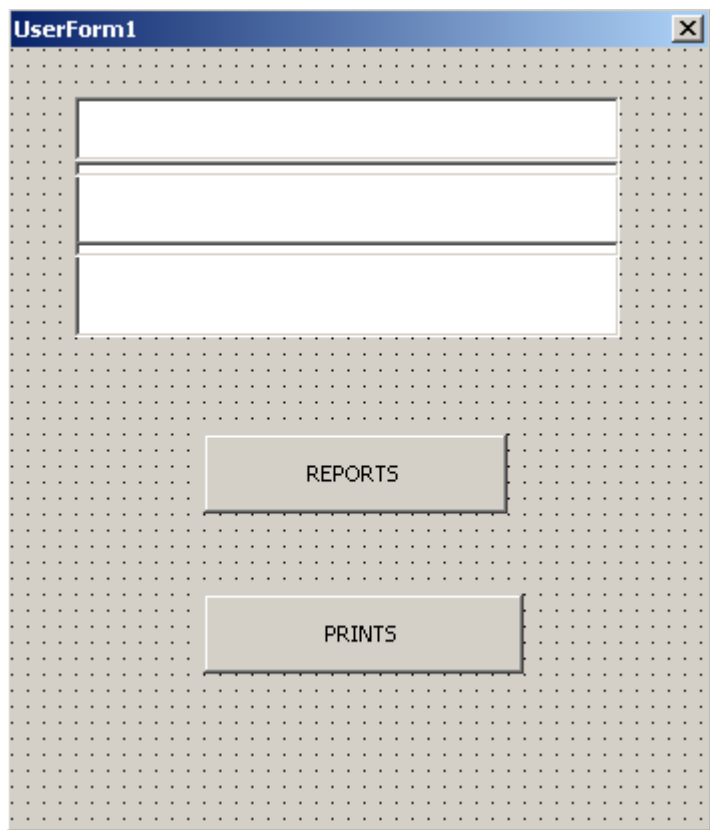
The image shows a screenshot of a Windows application window titled "UserForm1". The window has a blue title bar with a close button (X) on the right. The main area of the window is a light gray grid. In the upper left, there are three empty text boxes stacked vertically. Below these text boxes, there are two buttons: "REPORTS" and "PRINTS", both in a light gray box with a dark border. The "REPORTS" button is positioned above the "PRINTS" button.

Fig 3.23: Reports form

Chapter IV

4. Design

4.1 Change Made from Prototype Testing

We did a prototype using MS-Excel, which shows us a guide to implement this new system. Lots of improvement was made in our proposed system after prototyping. We made a template in the prototype for client login; questions send by the client's, receiving questions to the participants and also given opinions by the participants. In our proposed system we show how our project grouped the opinions using the subgroups. After doing grouped our project can generate reports.

4.2 Logical Data Modeling for the Proposed System

We design our projects in to the following ways:

4.2.1 Our database system:

Name	Owner	Type ▲	Create Date
Department	dbo	User	11/20/2006 10:20:47 AM
LoginTab	dbo	User	11/20/2006 9:36:28 AM
MainTopic	dbo	User	11/22/2006 8:22:31 PM
Message	dbo	User	11/20/2006 6:38:22 PM
PersonalInformation	dbo	User	11/20/2006 10:37:37 AM
TopicResponce	dbo	User	12/3/2006 2:36:06 PM
TopicSubGroup	dbo	User	11/22/2006 9:38:54 PM

fig 4.1:Database table

4.2.2 Tables & Relations are given Below for login system

Login Information (user_id, pass_type,)

Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
UserID	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Password	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Name	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
Type	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

fig 4.2:Login table

4.2.3 Tables & Relations are given Below for topic send

Personalinformation(serial_id,participant_name,mobile_num,
participant_addres,designation_type,department_id))

Department (department_id, department_name)

Main topic (topic_id,topic_name)

Design Table 'PersonallInformation'											
	Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid
▶	SerialNumber	int	4	10	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	1	1	<input type="checkbox"/>
	StaffName	nvarchar	200	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
	Address	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
🔍	PhoneNumber	nvarchar	50	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
	Designation	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
	DepartmentID	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>
						<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>

fig 4.3:Personal information table

Design Table 'Department'											
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid	
DepartmentID	nvarchar	50	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
DepartmentName	nvarchar	50	0	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	

Fig 4.4: Department table

Design Table 'MainTopic'											
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid	
TopicID	int	4	10	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	1	1	<input type="checkbox"/>	
TopicName	nvarchar	250	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	

Fig 4.5: Main Topic table

4.2.4 Tables & Relations are given below for receiving opinions by client

messageInformation(serial_num, mobile_num, message_type)

Design Table 'Message'											
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid	
SerialNumber	int	4	10	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	1	1	<input type="checkbox"/>	
PhoneNumber	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
Message	nvarchar	200	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
S_R_Date	smalldatetime	4	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
S_R_Status	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
Read_Unread_status	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	

Fig 4.6:opinions table

4.2.5 Tables & Relations are given below for opinions grouping

Topicresponse(topicresponse_id,topic_id,message_type,phone-
num,topicgroup_id)

Topicsubgroup(topic_id,topicgroup_id,topic_id)

Design Table 'TopicResponse'											
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid	
TopicResponseID	int	4	10	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	1	1	<input type="checkbox"/>	
TopicID	int	4	10	0	<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
Message	nvarchar	255	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
PhoneNumber	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
TopicGroupID	int	4	10	0	<input checked="" type="checkbox"/>	(0)	<input type="checkbox"/>			<input type="checkbox"/>	
ReadStatus	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	

Fig 4.7:Topicresponse table

Design Table 'TopicSubGroup'											
Column Name	Datatype	Length	Precision	Scale	Allow Nulls	Default Value	Identity	Identity Seed	Identity Increment	Is RowGuid	
TopicGroupID	int	4	10	0	<input type="checkbox"/>		<input checked="" type="checkbox"/>	1	1	<input type="checkbox"/>	
TopicGroupName	nvarchar	50	0	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
TopicID	int	4	10	0	<input checked="" type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
					<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	

Fig 4.8:Topicsubgroup table

4.3 Total integrated sets of relations:

Login Information (user_id, pass_type,)

Personalinformation(serial_id,participant_name,mobile_num,
participant_addres,designation_type,department_id))

Department (department_id, department_name)

Main topic (topic_id,topic_name)

messageInformation(serial_num, mobile_num, message_type)

Topicresponse(topicresponse_id,topic_id,message_type,phone-
num,topicgroup_id)

Topicsubgroup(topic_id,topicgroup_id,topic_id)

4.4 Entity relationship diagram

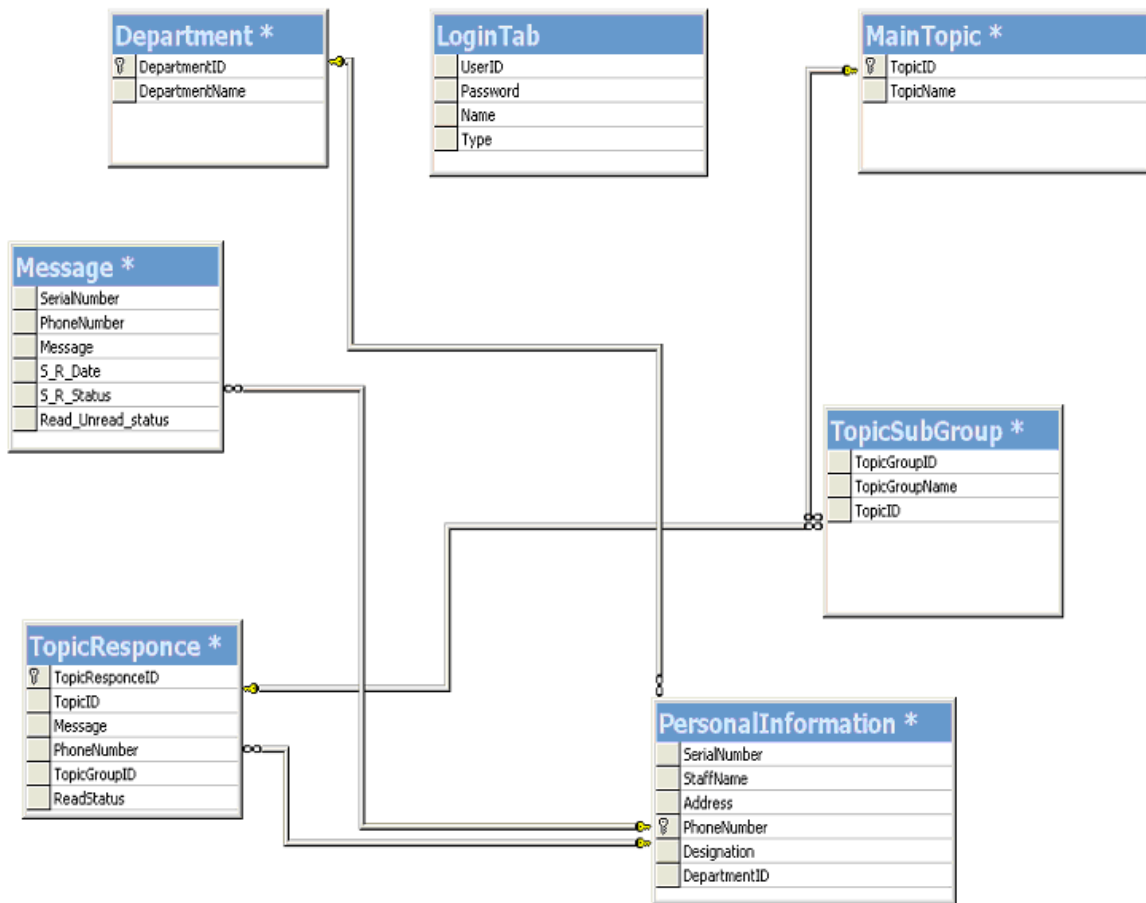


Fig 4.9: ERD diagram

4.5 Physical Tables Design

Login table:

Column Name	Datatype
UserID	nvarchar
Password	nvarchar
Name	nvarchar
Type	nvarchar

Fig 4.11: login table

The purpose of this table is, client have to register for use the software. Client must have valid userid, password. otherwise he or she cannot use this software.

Personal information table:

Column Name	Datatype
SerialNumber	int
StaffName	nvarchar
Address	nvarchar
PhoneNumber	nvarchar
Designation	nvarchar
DepartmentID	nvarchar

Fig 4.12: personal information table

The purpose of this table is, it keep the personal records of the participants

Department table:

Column Name	Datatype
DepartmentID	nvarchar
DepartmentName	nvarchar

Fig 4.13: department table

The purpose of this table is, when client send the topics to the participants, he select the department. Like management, accounts etc.

Topic table:

Column Name	Datatype
TopicID	int
TopicName	nvarchar

Fig 4.15: topic table

The purpose of this table is client selects the topic Id and topic name for sending it to the participants.

Message table:

Column Name	Datatype
SerialNumber	int
PhoneNumber	nvarchar
Message	nvarchar
S_R_Date	smalldatetime
S_R_Status	nvarchar
Read_Unread_status	nvarchar

Fig 4.16: Message table

The purpose of this table is after the participants give their opinions client receive the opinions by the server

Topic response table:

Column Name	Datatype
TopicResponseID	int
TopicID	int
Message	nvarchar
PhoneNumber	nvarchar
TopicGroupID	int
ReadStatus	nvarchar

Fig 4.17: Topic response table

Topic subgroup table:

Column Name	Datatype
TopicGroupID	int
TopicGroupName	nvarchar
TopicID	int

Fig 4.18: Topic subgroup table

The purposes of these two tables are when all the opinions come to the server then they become grouped. The group's is made by Selecting the subgroups .and after that the report generate.

CHAPTER V

5. IMPLEMENTATION

5.1 System Implementation

Implementation is the final step of the project. Implementation is needed to convert the design, system development and previous specification into computer programs for testing.

5.1.1 Computer Programming

In the programming part we follow some steps. First we make the flow charts and according to the flow charts we code and test. When each module was successfully completed it was saved and linked with the main program.

5.1.2 Actual Coding

For our coding we use some programming language.

- We use Visual Basic for front-end designing.
- For the database we use MySQL.
- For Mobile phones we use ActiveXpert software
- And we make CRYSTAL report.

5.1.3 System Modules

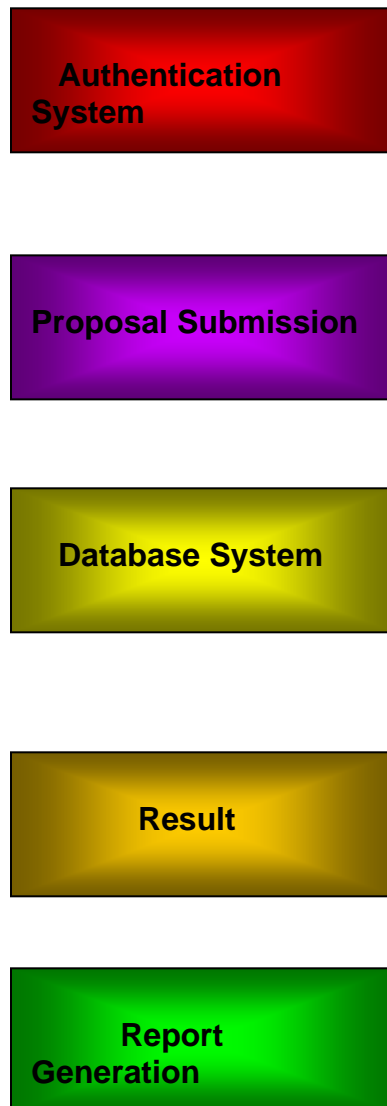


Fig 5.0: Individual Modules that were my Responsibility

Authentication System:

In the authentication system we make the function, which will authenticate the user of this part. The users of this section are Client and Participants. Without valid authentication the Client or the Participants cannot use the system

Proposal Submission:

We collect all the data from web sites and survey. We collect data and all the information's, which is related to our project. Then we submit our proposal. Our advisor makes it corrections.

Database System:

In the database system we have all the information's. We keep all the records of the participants, departments etc.

Result:

Our target is to convert the manual VIPP system into automated system. And we do our best

Report Generation:

For every project report generation part play the vital role. It focus the total part of the project. We do the CRYSTAL reports.

5.2 Actual Testing

5.2.1 Testing Preparation

After ending our coding part we test it. Because without testing we cannot confirm that our project works or not. we need MYSQL server, VISUAL BASIC, Mobile phones for testing. We also used active expert software for SMS sending and receiving. From the MYSQL server Client send topic to the participants. They receive it by their mobile phones as SMS. Then they send their opinions. All the opinions save to the server. Then the opinions automatically sort and grouped. Then a report generates. Client can print the reports.

5.2.2 Graphical interface of our system

This is the server that we used for our project

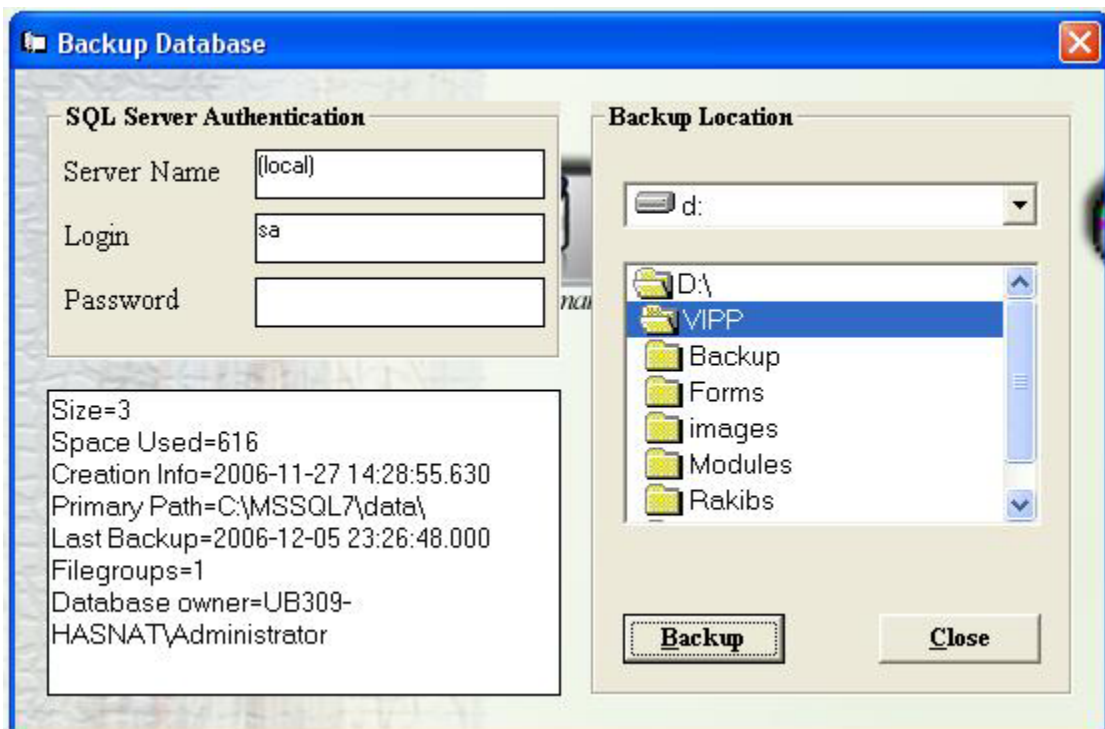


Fig 5.1: Backup database system



Fig 5.2: Login Form for Client

By this form the Client can login to the software
After login the client can access the software



Fig 5.3: Client user form

Personal information's of the participants

Fig 5.4: Personal information's form

Client selects the topic or questions

Set Topic

Visualization In Participatory Program

Topic Name

Save Clear Close

Fig 5.5: Select topics form

Here the client uses this form for selecting the topics. There are some options here that client can save the topics and can also delete.

Client sends questions or Topics to the participant

Send Message

Visualization In Participatory Program

Department

Staff Name

Mobile Number

Message

Send Clear Close

Fig 5.6: Send Questions or topics Form

Client use this form for sending questions to the participants. Client selects participants name, department, and mobile number.

Participants give the response to the client

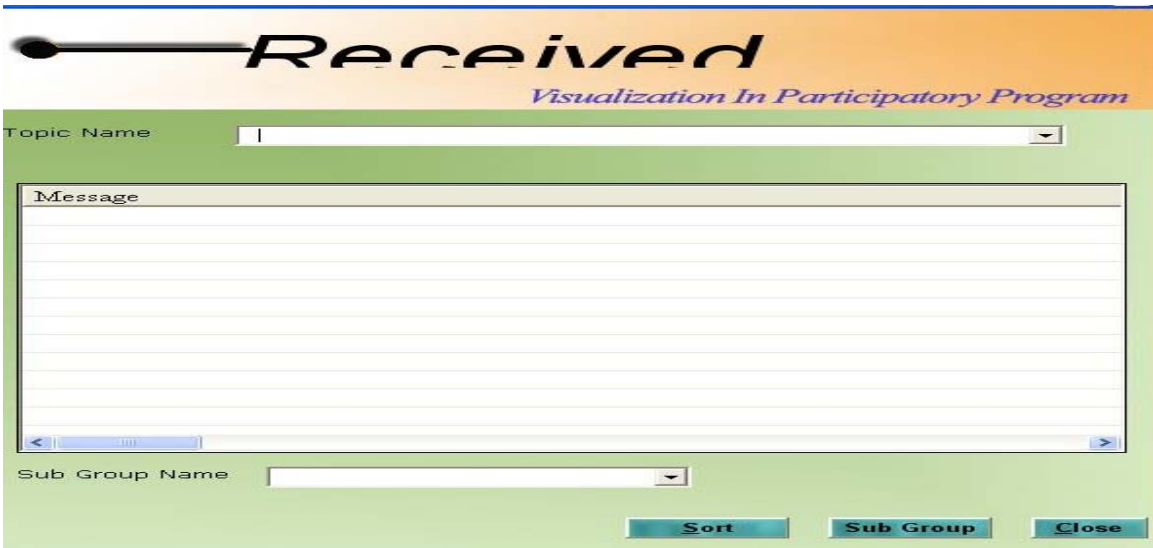


The screenshot shows a software window titled "Response" with the subtitle "Visualization In Participatory Program". The window has a blue title bar and a green background. It contains a "Topic Name" dropdown menu and a "Message" text area with vertical scrollbars.

Fig 5.7: Response Form

After getting the topics, participants give their opinions.

All the opinions comes to the server



The screenshot shows a software window titled "Received" with the subtitle "Visualization In Participatory Program". The window has a blue title bar and a green background. It contains a "Topic Name" dropdown menu, a "Message" text area with horizontal lines representing grouped opinions, a "Sub Group Name" dropdown menu, and three buttons: "Sort", "Sub Group", and "Close".

Fig 5.8: Opinions grouped Form

Grouping of opinions done here.
Client can select the subgroups



The screenshot shows a software window titled "Sub Group". The window has a blue title bar with standard Windows window controls (minimize, maximize, close). The main content area has a light green background. At the top, there is a header with a logo on the left and the text "Sub Group" in a large, bold, black font. Below the logo, the text "Visualization In Participatory Program" is written in a smaller, italicized font. The main area contains two input fields: "Topic Name" and "Sub Topic Name". The "Topic Name" field is a simple text box with a dropdown arrow on the right. The "Sub Topic Name" field is a larger text box with a scroll bar on the right. At the bottom right of the window, there are three buttons: "Save", "Clear", and "Close".

Fig 5.9: Sub group Form

Here the Client can give subgroups, using that subgroups grouping of opinions is made.



The screenshot shows a software window titled "Reports". The window has a blue title bar with standard Windows window controls (minimize, maximize, close). The main content area has a light green background. At the top, there is a header with a logo on the left and the text "REPORT" in a large, bold, black font. Below the logo, the text "Visualization In Participatory Program" is written in a smaller, italicized font. The main area contains a dropdown menu labeled "1 Topic Name". At the bottom right of the window, there are two buttons: "Preview" and "Close".

Automated report generate

Fig 5.10: report generate Form

CHAPTER VI

6. LIMITATIONS

We try to do our best. But we do not have total satisfaction. Every thing has limitations .our project is not out of this. As we used SMS service it cost. The client sends message by the server to the participant but participants use mobile phones for reply. So for one topics or question a lot of opinions come. And all of them cost. Again those participants who do not have mobile phones or not able how to write SMS their will be problems. Some times when participants do spelling mistake to write SMS then our system is not able to find out the actual things. That is another problem. We also face problems by the subgroups. Because when the participants give their opinions, all of them store to the server. we give some related subgroups but we think this is not enough. we do not give all the possible subgroups for the opinions. That's why the problems occur. Like if someone writes personal computer and other writes PC then our software does not mean that both of them are same.

If we try to solve this problem then we have to use the AI (artificial intelligence).But we do not have enough time to do this. If some one interested to work on it into the future then our proposal, document, study and also software help them very much.

CHAPTER VII

7. CONCLUSIONS

Automated VIPP system is developing to make the original system easy. The system is user friendly and very easy. Now mobile phone is used in everywhere. And most of the people who use mobile phones are familiar with SMS system. Our system will be helpful for those organizations whose branches are in several places. Manually when the organization wants the opinions of the participants, they need to arrange a meeting. The problem is, all the participants come to the head office and then give their opinions, which is time consuming and also costly .after that manually sorting of the opinions, In the current system the opinions are sorted manual, so to arrange all the opinions into groups it takes a lot of times. And also the current system does not give any report. Our system will solve this entire problem and also make the traditional system easy.

Future works:

For matching words of two questions or sentences with the help a machine is tough because each and every word has its many different forms. We have to consider every form of a word and match them. Here I describe a concept of how can it be done. But, actually from machine we can get a opinions group by the way a human being can do. For this, the machine has to understand the inner meaning of the opinions and group place the opinions under appropriate group. Future work can be done on this approach.

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