# A Project/Dissertation Final viva voice

on

#### PANCHAYAT PORTAL FOR NECESSARY SERVICES

Submitted in partial fulfillment of the requirement for the award of the degree of

# B.Tech (hons) computer science engineering



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# **ABSTRACT**

In our today's era of developing lifestyles people in rural areas are the ones being tagged out of the revolution. In the era of digital they need to go to the panchayat office of the nearest location to apply and get their certificates provides. It is more time consuming as the data is maintained manually with less security which may cause faults and errors in higher calculations. The complaints registered to their ward members, but they do not respond quickly. Therefore, providing an eportal that helps them connect to the administrative body will lubricate the current system and make it easily available and efficient for the people.

Panchayat Portal is an attempt to digitalise the working of the Panchayati government system which provides a platform where the rural people can see and review the working of the Panchayati government of their respective village. It empowers the general public with the knowledge of all the schemes and under process projects in the village. It allows the transparency to the people to check and review the status of their Panchayats implications. It also empowers the government to keep an eye on the ongoing projects and schemes in the respective rural areas so that the development of the country as a whole can be measured easily.

Sr.No	Description	Pg.No
1	Introduction	03
2	Existing system and proposed system	04
3	Hardware and software specification	07
4	Er diagram	09
5	Data flow diagram	13
6	Use case diagram	15
7	Activity diagram	27
8	Code	29
9	Conclusion	38
10	References	39
11		

# INTRODUCTION

Panchayat Portal will implement in a decentralized and participatory manner the local self-governance through the institution of Panchayati Raj System. It will broadcast all Panchayat department activities like various schemes, budgets, grant receive expenditure etc. Active involvement of the common citizens.

The Panchayat Portal project will solve the present problem i.e., incompatible relation between the three-tiers — block, panchayat and villagers. Inadequate information of the flow of finance from the higher authority to the lower authority. Lack of co-ordination between people of the villages and the higher officials. Lack of conceptual clarity which means the transparency in all functional activities will be maintained. Disillusion on structural-functional front involvement of the common citizens.

# **EXISTING SYSTEM**

The purpose of this document is to present a detailed description of the "Panchayat Portal". Its main purpose is to broadcast Panchayat department activities like various schemes, funds, budgets, grant received, expenditure etc. It involves the active involvement of the common citizens which means that each member of the village can actively participate in all the functions of the panchayat.

In the existing Panchayat Portals, there is no three-tier system due to which the users are not able connect with each other. The villagers are not able to connect with the block or the panchayat directly. Due to this reason the villagers are not able to know that what are the budgets being sanctioned for a particular project.

# PROPOSED SYSTEM

Due to above reason the three-tier system is being made in our portal so that there will be a transparency in the software and the users can see the budgets being used for a particular project.

# PROJECT ANALYSIS Study of the system

The current system do not have a transparency between the three-tier system i.e. between the block, panchayat and the villagers. This software will provide the transparency so that the villagers can directly get the information from the block or the panchayat about the project plans etc.

There are three users in our software:

- Block
- Panchayat
- Village Block:

The block updates the funds and schemes being passed to a particular panchayat for a certain project and in return it will retrieve the report from the portal.

# Panchayat:

The panchayat passes the budget to the desired project being sanctioned by the block. It will provide the schemes to the villagers according to the schemes of funds. Here also panchayat will receive the feedback from the villagers and can give the report to the higher authority.

# Village:

The village will be able to see the details about the project i.e., the funds being sanctioned, the schemes being introduced for a particular project and other basic information and in return they will provide the feedback to the higher members.

# Hardware and software specification

#### **HARDWARE**

Processor: DUAL CORE Onwards

RAM: 2GB

#### **SOFTWARE**

Web Server: Apache (2.2)

Scripting Language: PHP (5.6)

Database: MySQL (5.0)

Front end: Browser (Mozilla Firefox, Google Chrome etc.)

# SOFTWARE REQUIREMENT SPECIFICATION Functional Requirements

The source of inputs are: Block Panchayat Village

The Processing is: Block:

- Insert new schemes.
- Update the scheme.
- Updates the funds being transferred to a particular village for a certain work/project.

### Panchayat: -

- Assigns the work being said to be done by the BDO.
- Apply projects under provided schemes
- Provides the schemes along with the funds.

### Village: -

- View the schemes & projects provided by the BDO.
- View the funds that is being sanctioned for a particular village.

# Non-Functional Requirements

The Panchayat Portal will be on a server with high-speed Internet capability. The physical machine to be used will be determined by the Historical Society. The software developed here assumes the use of a tool such as Tomcat for connection between the Web pages and the database. The speed of the Reader's connection will depend on the hardware used rather than characteristics of this system.

# PROJECT DESIGN

**Data Dictionary** 

1) login	user login field
2) scheme name	name of the scheme
3) Scheme description	Its full description
4) Launch date	date at which the project or scheme has been launched
5) Project_id	Id of the project
6) Panchayat_id	Id of the panchayat
7) Scheme_ld	Id of the scheme
8) User_id	Id of the user generated at the time of login
9) User type	type of the user like Admin,Panchayat member,Public
10) Block_id	Id of the block
11) Block Name	Name of the block where it is situated
12) Panchayat Name	name of the panchayat where it is situated
13) Complain id	Id of the complain being placed

# E-R Diagram

Entity Relational Diagrams are a major data modeling tool and will help organize the data in our project into entities and define the relationships between the entities. This process has proved to enable the analyst to produce a good database structure so that the data can be stored and retrieved in a most efficient manner.

By using a graphical format, it may help communication about the design between the designer and the user and the designer and the people who will implement it.

### Components of an ERD

#### 1. Entity

A data entity is anything real or abstract about which we want to store data.

## 2. Relationship

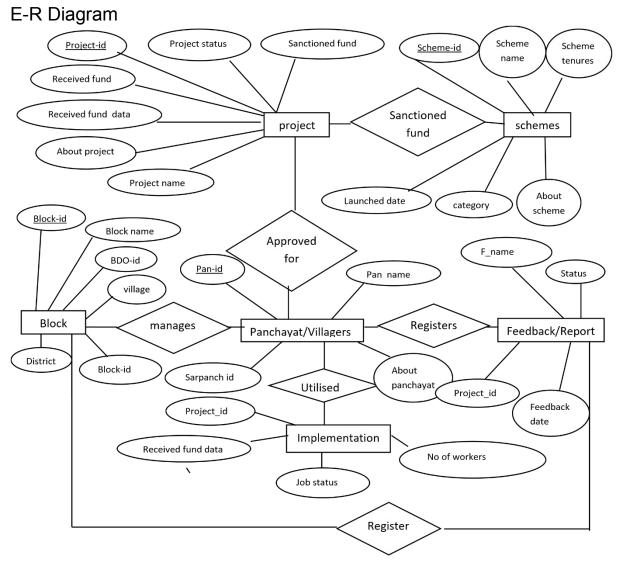
A data relationship is a natural association that exists between one or more entities.

### 3. Cardinality

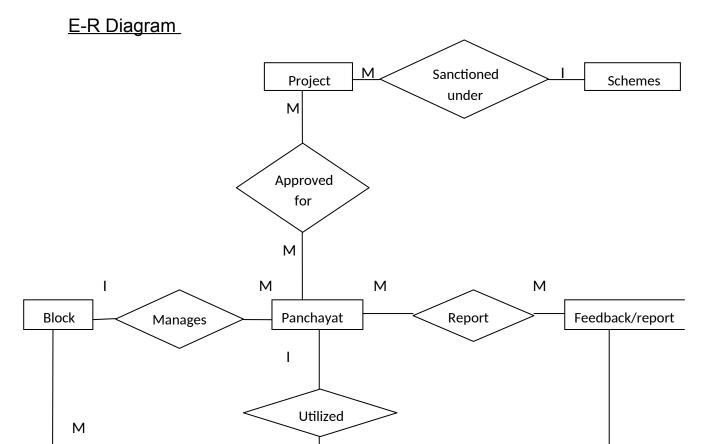
Defines the number of occurrences of one entity for a single occurrence of the related entity.

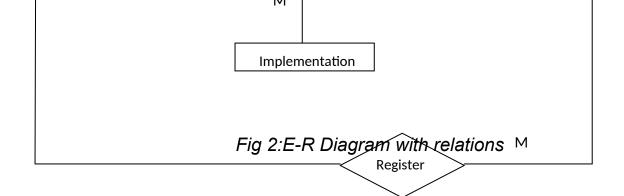
#### 4. Attribute

A data attribute is a characteristic common to all or most instances of a particular entity. Synonyms include property, data element, and field E.g. Name, address, Employee Number are all attributes of the entity employee.



E-R Diagram with relations





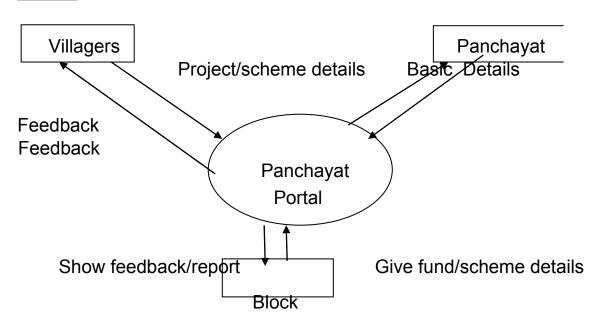
# Data Flow Diagram (DFD)

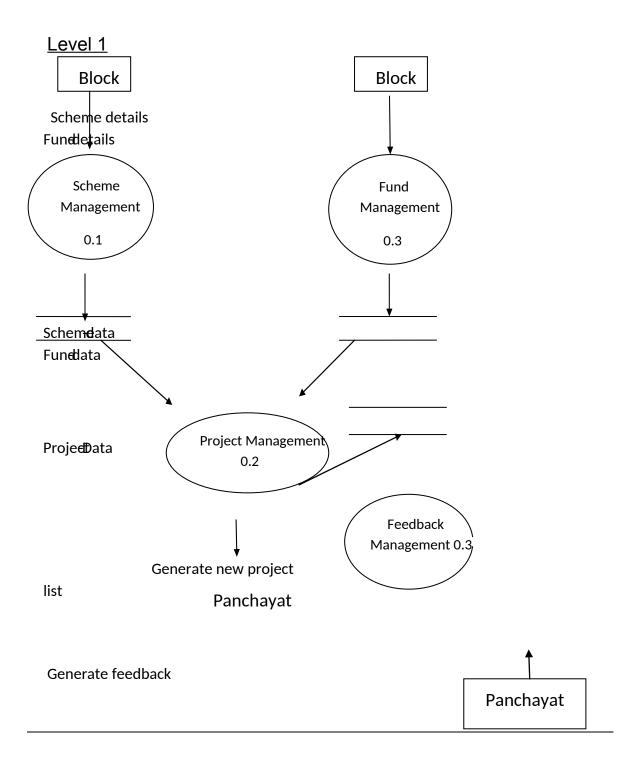
Data Flow Diagrams show the flow of data from external entities into the system, and from one process to another within the system. There are four symbols for drawing a DFD:

- > Rectangles representing external entities, which are sources or destination of data.
- > Ellipses representing processes, which take data as input, validate and process it and output it.
- > Arrows representing the data flows.

Ø

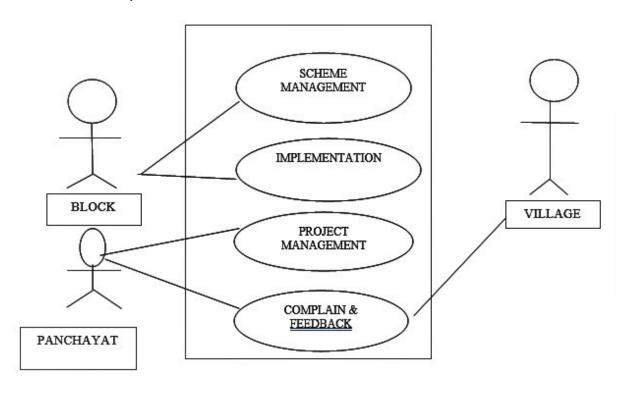
#### Level 0





### Use case diagram

# **Overall Description**



The Panchayat Portal has three active actors and one cooperating system. The

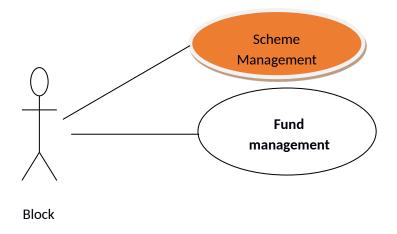
Block, Panchayat, Village accesses the Panchayat Portal through the Internet. Any

Panchayat/Block/Village communication with the system is through Panchayat Portal. The Block accesses the entire system directly. There is a link to the (existing) Historical Society.

# Functional Requirements Specification

This section outlines the use cases for each of the active readers separately. The block, panchayat, village have only one-use case a piece while the block is main actor in this system.

**Block Use Case** 



### **Brief Description**

The Block accesses the panchayat website, adds new schemes for the villagers and sanctioned the funds for the particular project for a particular panchayat.

Initial Step-By-Step Description

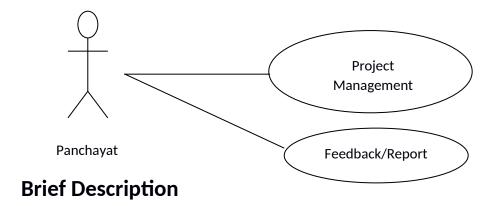
Before this use case can be initiated, the Block has already accessed the Panchayat Portal Website.

- 1. The block chooses to search panchayat by p\_id, p\_name, location.
- 2. The system displays the choices to the Block.
- 3. The block selects the schemes desired.
- 4. The system presents the abstract of the scheme to the block.
- 5. The block chooses to upload the scheme.

# Panchayat Use Case

In case of panchayat, this term refers to the *principal author*, with whom all communication is made.

### Diagram:

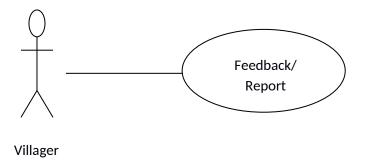


The panchayat controls the project management and gives the feedback to the block.

Initial Step-By-Step Description

Before this use case can be initiated, the Panchayat has already connected to the Panchayat Website.

- 1. The Panchayat chooses the *Project Management* button.
- 2. The System uses the *sendto* tag to bring up the user's email system.
- 3. The Sarpanch fills in the project's detail and schemes and attaches it to the system. Villager Use Case Diagram:



# **Brief Description**

The villager gives the feedback to the block and the panchayat through the website.

Initial Step-By-Step Description

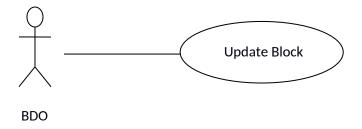
Before this use case can be initiated, the villager has already connected to the Panchayat Portal website.

- 1. The Villager chooses the feedback/report option.
- 2. The System uses the *sendto* tag to bring up the user's email system.
- 3. The Villagers fills in the Feedback and Comment and attaches the it to the system.
- 4. The System generates and sends an email acknowledgement.

Update Information use cases

Use case: Update Block

Diagram:



### **Brief Description**

The BDO enters a new Schemes or updates information about a current Block.

Initial Step-By-Step Description

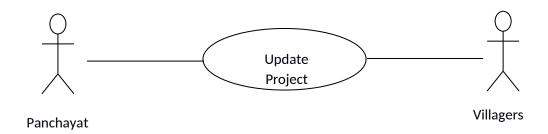
Before this use case can be initiated, the BDO has already accessed the main page of the Scheme.

- 1. The BDO selects to Add/Update schemes.
- 2. The system presents a choice of adding or updating.
- 3. The BDO chooses to add or to update new schemes.
- 4. If the BDO is updating a schemes, the system presents a list of schemes to choose from and presents a grid filling in with the information; else the system presents a blank grid.
- 5. The BDO fills in the information and submits the form.

6. The system verifies the information and returns the BDO to the Admin main page.

Use case: Update Villagers

Diagram:



**Brief Description** 

The Panchayat enters a new Project or updates information about a current Project.

Initial Step-By-Step Description

Before this use case can be initiated, the Panchayat has already accessed the main page of the Admin.

- 1. The Panchayat selects to Add/Update Project.
- 2. The system presents a choice of adding or updating.
- 3. The Editor chooses to add or to update.
- 4. The system links to the Historical Society Database.
- 5. If the Editor is updating a Reviewer, the system and presents a grid with the information about the Reviewer; else the system

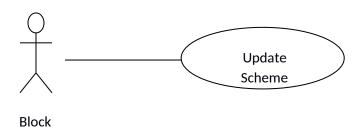
presents list of members for the editor to select a Reviewer and presents a grid for the person selected.

- 6. The Editor fills in the information and submits the form.
- 7. The system verifies the information and returns the Editor to the Article

Manager main page.

Use case: Update Scheme

### Diagram:



**Brief Description** 

The BDO enters information about an existing scheme.

Initial Step-By-Step Description

Before this use case can be initiated, the BDO has already accessed the main page of the Article Manager.

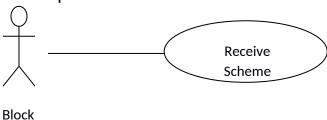
- 1. The BDO selects to *Update Scheme*.
- 2. The system presents s list of active schemes.

- 3. The system presents the information about the chosen scheme.
- 4. The BDO updates and submits the form.
- 5. The system verifies the information and returns the BDO to the Article Manager main page.

Handle Scheme use cases

Use case: Receive Scheme

**Brief Description** 



The Block enters a new or revised scheme into the system.

Initial Step-By-Step Description

Before this use case can be initiated, the Block has already accessed the main page of the Scheme Manager and has a file containing the scheme available.

- 1. The Block selects to Receive Scheme.
- 2. The system presents a choice of entering a new article or updating an existing scheme.
- 3. The Block chooses to add or to update.

- 4. If the Block is updating an scheme, the system presents a list of schemes to choose from and presents a grid for filling with the information; else the system presents a blank grid.
- 5. The Block fills in the information and submits the form.
- 6. The system verifies the information and returns the Block to the scheme Manager main page.

Use case: Assign Panchayat

This use case extends the *Update scheme use* case.

**Brief Description** 

The Sarpanch assigns one or more projects to the villagers.

Initial Step-By-Step Description

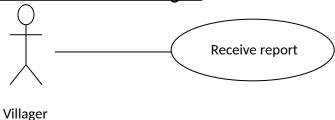
Before this use case can be initiated, the Sarpanch has already accessed the scheme using the *Update scheme* use case.

- 1. The Sarpanch selects to Assign Project.
- 2. The system presents a list of projects with their status (see data description is section 3.3 below).
- 3. The sarpanch selects a project.
- 4. The system verifies that the person is still an active member using the Historical

Society Database.

- 5. The sarpanch repeats steps 3 and 4 until sufficient projects are assigned.
- 6. The system emails the Block, attaching the scheme and requesting that they do the project.
- 7. The system returns the sarpanch to the *Update Scheme use* case.

Use case: Receive Villager



# **Brief Description**

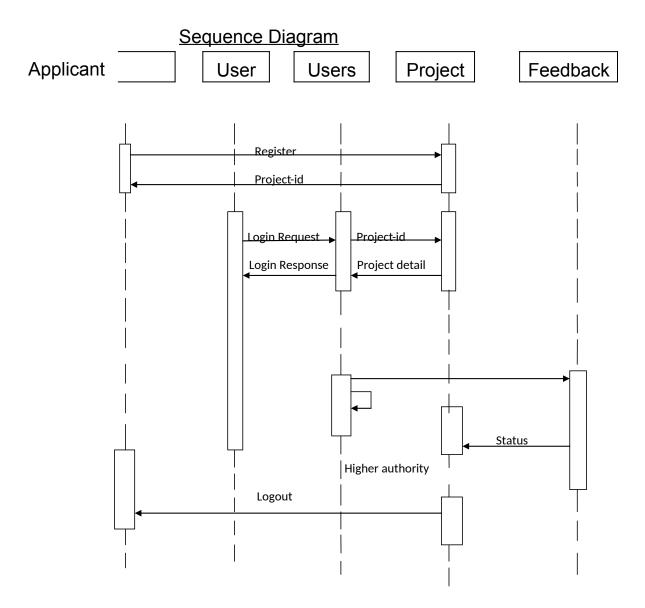
This use case extends the *Update feedback* use case.

Initial Step-By-Step Description

Before this use case can be initiated, the Villager has already accessed the report feedback using the *Update feedback* use case.

- 1. The Villager selects to Receive report
- 2. The system presents a grid for filling with the information.
- 3. The Villager fills in the information and submits the form.
- 4. The system verifies the information and returns back to the villagers.

# **Activity Diagram**



#### **User Characteristics**

The User is expected to be Internet literate and be able to use a search engine. The main screen of the Panchayat Portal Website will have the search function and a link to "Admin/BDO/Sarpanch/Villagers Information".

The Admin and the Users are expected to be Internet literate and to be able to use email with attachments.

The User is expected to be Windows literate and to be able to use button, pull-down menus, and similar tools.

The detailed look of these pages is discussed in section 3.2 below.

Requirements Specification

# External Interface Requirements

The Panchayat portal software will be updated by the Block with schemes and funds required for the particular project for the panchayat. The panchayat will approve the schemes for the project and finally gives the feedback to the block. The villager will also give the feedback to the block directly by maintaining the transparency among all the three users.

# Code snippets

Login.php

```
<?php
     session_start();
     $dbcon=mysqli_connect("localhost","root",","panchayat_portal");
     $uname=$_POST['username'];
     $pass=$_POST['pass'];
     $utype=$_POST['utype'];
     $sql="select *from user where username='$uname' and
     password='$pass'and u_type='$utype'";
     $result=mysqli_query($dbcon,$sql);
     $arr = mysqli_fetch_array($result);
     $pas =
     $arr['password'];
     $utype=$arr['u_type'
     ]; if($pas==$pass)
     {
           //echo
           "password
           matched":
           $_SESSION['u
           sername']=$un
           ame; if($utype
           =='public')
           {
                 header('location:public.php');
                 $_SESSION['utype']='public';
                 //MUST add additinal feature to the public feature
           }
           else if($utype =='bdo')
           {
```

```
header('location:Bdoportal.php');
                 $ SESSION['utype']='bdo';
           }
           else if($utype=='sarpanch')
           {
                 $qry="select * from sarpanch where
                 sadhar no='$uname'";
                 $result1=mysqli_query($dbcon,$qry);
                 $arr1=mysqli_fetch_array($result1);
                 $sar_id=$arr1['sarpanch_id'];
                 header('location:sarpanch.php');
                 $_SESSION['utype']='sarpanch';
                 $_SESSION['sar_id']=$sar_id;
                 //echo "ook":
                 $_SESSION['utype'];
                 //echo $sar_id;
           }
           else{ header('location
                 :err_loggin.php'
                 );
           }
     }
     else{ header('location
           :err_loggin.php'
           );
     }
?>
Public_registration.php
<?php
     session start();
     $con=mysqli_connect("localhost","root","","panchayat_portal");
```

```
$adhar_var=$_POST['adhar'];
$firstn_var=$_POST['fname'];
$middlen var=$ POST['mname'];
$lastn_var=$_POST['Iname'];
$panchayat_var=$_POST['panchayat'];
$village_var=$_POST['village'];
$block var=$ POST['block'];
$phone var=$ POST['phno'];
$email var=$ POST['email'];
$pas=$ POST['pass'];
//$pas=substr($lastn_var,0,3).'#'.substr($phone_var,4,5);
$sql1="select *from village panchayat where
village nm='$village_var'";
$res=mysqli_query($con,$sql1);
$arr=mysqli fetch array($res);
$pid=$arr['panch id']; if($panchayat var == $pid){ $sql="insert
into
public reg(adhar no,fname,mname,lname,panchayat,village na
me,block,phno,e mail)
values('$adhar var','$firstn var','$middlen var','$lastn var','$panc
hayat var', '$vil lage var', '$block var', '$phone var', '$email var')";
     //print $sql;
      $qry=mysqli_query($con,$sql); //or
      die(mysqli_error()); if($qry)
     {
           $sql1="insert into user(username,password,u_type)
           values('$adhar_var','$pas','public')";
           //print $sql1;
           $qry1=mysqli_query($con,$sql1) or
           die(mysql error()); if($qry1)
           {
                 //print "ok";
                 header('location:public.
                 php');
       $ SESSION['username']=$adhar var;
           }
           else
```

```
print "No";
                       header('location:err_public_reg
                       d.php');
                 }
           }
           else
           {
                 print "outerno";
                 //header("location:err_public_regd.php");
           }
     else{ echo "village is not present in the selected panchayat.
           Either choose diif village or select diiferent panchayat";
     }
?>
Addscheme db.php
<?php
     $con=mysqli_connect("localhost","root","","panchayat_portal");
     $schemenm=$_REQUEST['schemenm'];
     $desc=$ REQUEST['desc'];
     $fund=$ REQUEST['fund'];
     $strtdt=$_REQUEST['strtdt'];
     $enddt=$ REQUEST['enddt'];
     $stat=$ REQUEST['stat']; $sql="insert into
     scheme(scheme id, scheme nm, scheme desc, fund,
     start_dt,end_dt,status)
     values(null,'$schemenm','$desc','$fund','$strtdt','$end
     dt','$stat')";
     $qry=mysqli query($con,$sql);// or
     die(mysqli_error()) if($qry)
     {
           //echo "ok";
           header('location:maintain scheme
           .php');
     }
     else
     {
```

```
//echo "no":
           header('location:err public regd.
           php');
     }
?>
Apply project
<?php
     session start();
     $sar nm=$ SESSION['username'];
     $sar id=$ SESSION['sar id'];
     $con=mysqli_connect("localhost","root","","panchayat_portal");
     $no=$ REQUEST['aply'];
     $sql="select * from scheme where scheme id='$no'";
     $result=mysqli query($con,$sql);
     $row=mysqli fetch array($result);
     $stat=$row['status'];
     $scheme nm=$row['scheme nm'];
     $s des=$row['scheme desc'];
     $pid=$ SESSION['panch'];
?>
<form action="apply project db.php" method="get "> scheme
     ID:<input type="text" class="form-control" disabled
     value="<?php echo $no;?>"><br>
     <input type="hidden" name="sid" value="<?php
     echo $no;?>"> scheme Name:<input type="text"
     class="form-control" disabled value="<?php echo
     $scheme nm;?>"><br>
     <input type="hidden" name="snm" value="<?php echo
     $scheme nm;?>">
     Name:<input type="text" class="form-control" name="nm" id="nm"
     placeholder="NAME"><br> Project Description:
     <textarea name="pdesc" class="form-control" rows="10"
     placeholder="Description" ></textarea><br>
     Fund Required:<input type="text" class="form-control"
     name="reqf" id="reqf" placeholder="Required Fund"><br>
```

```
Attach file:<input type="file" class="form-control" id="file"
     name="file" >
     <input type="hidden" value="<?php echo $stat;?>" name="stat">
     <input type="submit"class="btn academy-btn mt-30"</pre>
value="Apply" name="btnsubmit"> </form>
Apply_project_db.php
<?php
     session start();
     $con = mysqli connect("localhost","root","","panchayat portal");
     $schmid= $ REQUEST['sid'];
     $snm=$ REQUEST['snm'];
     $nm=$ REQUEST['nm'];
     $pdesc = $_REQUEST['pdesc'];
     $fund= $ REQUEST['reqf'];
     $status ='applied';
     $appby = $_SESSION['username'];
     $sar id = $ SESSION['sar id'];
     $sql1="select * from panchayat master";
     $qry1=mysqli query($con,$sql1);
     $res=mysqli fetch array($qry1);
     $panch id=$res['pid']; $sql="insert into
     apply project(project id, scheme id, panch id, scheme nm, proj n
     m,project_desc,p_fun
     d,applied dt,approved dt,status,applied by,sar id,approved by)
     values('null','$schmid','$panch id','$snm','$nm','$pdesc','$fund',cu
     rdate(),",'$status','$a ppby','$sar id',")";
     $qry=mysqli query(
     $con,$sql); if($qry)
           //print $sql;
           header("location:sarpanch.
           php");
     }
     else
     {
           header("location:errorpage.php");
```

```
}
?>
Approve db.php
<?php
     session start();
     $con=mysqli_connect("localhost","root","","panchayat_portal");
     $aprove = $_SESSION['username'];
     $stat='approved';
     $pid= $ SESSION['pid'];
     $fund=$_REQUEST['fnd']; $sql="update apply_project set
     approved_by='$aprove',status='$stat',approved_dt=curdate(),
     p fund='$fund' where project id='$pid'";
     //print $sql;
     $qry=mysqli_query(
     $con,$sql); if($qry)
     {
           header("location:Bdoportal.php");
           //echo "yes";
     }
     else
     {
           echo "no";
     }
?>
Report db.php
<?php
     session_start();
     $con = mysqli_connect("localhost","root","","panchayat_portal");
     $sid= $ REQUEST['sid'];
     $p_id= $_REQUEST['pid'];
     $rdesc = $ REQUEST['rdesc'];
     $fund=$ REQUEST['fund'];
     $stat ='orignal';
     $sar id = $ SESSION['sar id'];
```

```
$ch="select * from project_report where p_id='$p_id' ORDER BY
     date DESC ";
     $chh=mysqli_query($con,$ch);
     $fch=mysqli_fetch_array($chh);
     $last_dt=$fch[
     'date'];
     if($last_dt ==
     'curdate()')
     {
           header("location:errorpage.php");
     }
     else
     {
           $sql="insert into
            project_report(sar_id,scheme_id,r_desc,fund_used,date,p_
            id, status)
           values('$sar id','$sid','$rdesc','$fund',curdate(),'$p id','$stat
           ')";
           $qry=mysqli_query(
            $con,$sql); if($qry)
                 //print $sql;
                 header("location:maintain report.
                 php");
           }
           else
           {
                 header("location:errorpage.php");
           }
     }
?>
```

```
Complain db.php
<?php
      session start();
     $con = mysqli_connect("localhost","root","","panchayat_portal");
     $pid=$ REQUEST['pid'];
     $dt=$_REQUEST['dt'];
     $ppl=$ REQUEST['ppl'];
     $sub=$ REQUEST['sub'];
      $desc=$ REQUEST['desc'];
     $stat="applied"; $sql="insert into
     complain(c id,proj id,dt,pub id,c sub,c desc,applied dt,status)v
     alues(null,'$pid','$dt','
     $ppl','$sub','$desc',curdate(),'$stat')";
     $result=mysqli_query($con,$sql);
     //
      echo
      $sql;
     if($re
      sult)
     {
           //echo"done":
           header('location:pub projlist.p
            hp');
      else{
           //echo"fail";
           header('location:error.
            php');
```

# **Conclusion**

It solves the problem of three-tier system i.e., it will form a transparency between the block, panchayat and the villagers. The panchayat portal project will solve the present problem i.e., incompatible relation between the three-tiers – block, panchayat and villagers. Inadequate information of

the flow of finance from the higher authority to the lower authority. Lack of co-ordination between people of the villages and the higher officials. Lack of conceptual clarity which means the transparency in all functional activities will be maintained. Disillusion on structuralfunctional front involvement of the common citizens.

# References

http://www.panchayatportal.gov.in

http://www.mahapanchayat.gov.in

http://www.grampanchayat.com

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http://www.egovernance.com