

# Government Polytechnic Pune

(An Autonomous Institute Of Government Of Maharashtra)

**Department Of Computer Engineering**

(Academic Year 2013-14)



A Project Report On

## **E-Salary System**

... A Solution For Better Salary Transfer

**Presented By :**

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**Guided By :**

**Mrs. Archana S. Paiké**

# Government Polytechnic Pune

(An Autonomous Institute Of Government Of Maharashtra)

## Department Of Computer Engineering

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This is to certify that,

<b>Jaydeep Mohite</b>	<b>1106105</b>
<b>Kalpesh Chaudhari</b>	<b>1106085</b>
<b>Kalpesh Bhangre</b>	<b>1106083</b>

has successfully the necessary project work and prepared the report on

### **“E-Salary Systems”**

in a satisfactory manner as partial fulfilment for the requirement of the Department of  
Computer Engineering for the Academic Year 2013-14.

**Mrs. Archana S. Paike**

Project Guide

**Mr. Umesh Kokate**

HoD

**Mr. P. V. Sarode**

Principal

# Acknowledgement

I would like to express my deep gratitude towards my project guide **Mrs. Archana S. Paik** for his able guidance and supervision which helped me for starting this project. I am extremely grateful and remain indebted to him for being a source of inspiration and for his constant support in the idea and starting of the project.

I am thankful to him for his constant constructive criticism and invaluable suggestions, which benefited me a lot while starting the project on. ‘**E-Salary Systems**’ would also like to thank our Head of Department **Mr. Umesh Kokate**. Who where directly and indirectly instrument in enabling me to stay committed for the project. I am also very much thankful to our Principle **Mr. P. V. Sarode**. I am also very much thankful to my parents and other family members for being such a great source of inspiration of mine.

Yours Thankful,

**Jaydeep Mohite**

**Kalpesh Chaudhari**

**Kalpesh Bhangre**

# Abstract

Now-a-days, the salaries of primary, secondary and higher secondary teachers are done offline. That means the schools have to generate manual payroll slip and send it by post or by hand to Pay-unit or salary generating organization. So it takes a lot of time in doing all this stuff. So the primary goal of our project is to develop a web-site for pay-unit or organization where all the schools along with teachers can register here and their salaries can be made online without any delay.

Our project basically includes a web-site which has options for school and teacher registration. The job of manual payroll generation has been simplified in our project using computerized payroll generator. In addition to this, project also includes bank details of a teacher which will be used in transferring the salary at first of any month. Basically we will use spiral process model for incrementing efficiency of a project. As a result, we all group partners will be able to perform all the phases in project development at least once.

Hope, this project will prove to be very useful in today's world of fast growing and developing in the field of Computer and Information Technology and will satisfy our motto...

**“... A Solution For Better Salary Transfer”**

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# 1. Introduction

## 1.1 What is Payroll and E-Salary System?

Our Project, The Payroll And E-Salary Systems, is basically a online wensite system which will help the to make the process of salary transfer easier. Our project is limited to making salaries of the government school teacher's in a simple, quick, safe and time-bound way.

The payroll includes the details of the particular school teacher such as the his/her basic salary, his/her deductions and overall details associated with the salary systems of an organization. The E-salary Systems is associated with transferring the salaries according to the payroll calculated to his/her bank account directly and online through secure transaction.

## 2. Motivation And Background

### 2.1 Existing System

According to our study, the current system of salary transfer is the pune division is through manual check transfers. The school first creates the pay slip and sends it by hand to the pay unit office. The payunit office the receives manual slip checks it, and then sends it to the administration department to create the check.

### Drawbacks :

The drawbacks of current system are that as it is a manual way of processing, it takes time. Moreover, there are a lot of chances that the slip maybe misplaced by the one who is carrying it to the pay unit office. Also, at the payunit office, the government officials are not as duty oriented as other. To overcome to all these drawbacks it was necessary to develop a more efficient and secure.

## 2.2 Our System and Its Features

We have developed a system, which overcomes almost all the drawbacks of the current manual system. The main key points and features of our system are as follows:

- ✓ A system for Government Schools
- ✓ Automatic Payroll Slip Generator
- ✓ Online Salary Transfer To Specified Teacher's Bank Account
- ✓ Teacher Salary Reports
- ✓ School Profiles
- ✓ Teacher Profiles
- ✓ Email Acknowledgement to Salary Transfer Process



## **3. Project Requirements**

### **3.1 Hardware Requirements (Server)**

- ✓ Processor Dual Core 733Mhz and above
- ✓ Ram 1 GB recommended
- ✓ Hard Disk Space 1GB
- ✓ Internet Connection

### **3.2 Software Requirements**

- ✓ Internet Explorer 8.0 Above
- ✓ Mozilla Firefox 11 and above
- ✓ Chrome Browser 11 and above

### **3.3 Tools and Programming Languages used**

- ✓ Apache Tomcat Server 7.0.2
- ✓ JavaServerPages (JSP)
- ✓ HTML
- ✓ JavaScript
- ✓ Ajax
- ✓ CSS and CSS3
- ✓ Oracle Database 11g
- ✓ jQuery

## 3.2 Feasibility Study

- **What are the user's demonstrable needs?**

The user wants a web-based system, which will reduce the bulk of paperwork, provide ease of work, flexibility, fast record finding, modifying, adding, removing and generating the reports.

- **How can the problem be redefined?**

We tallied the problems and needs by existing system and requirements. We were further updating in the layout in the basis of redefined the problems. In feasibility study phase we had undergone through various steps, which are described as under:

How feasible is the system proposed?

This was analyzed by comparing the following factors with both the existing system and proposed system.

### 1. Cost

The cost required in the proposed system is comparatively less to the existing system.

### 2. Effort

Compared to the existing system the proposed system will provide a better working environment in which there will be ease of work and the effort required will be comparatively less than the existing system.

### 3. **Time**

The time required to make overall process of salary transfer is achieved early than the previous system.

### 4. **Labor**

In the existing system the number of staff required for completing the work is more while the new system will require quite less number of staff.

## 4. Diagrams

### 4.1 Use Case Diagram

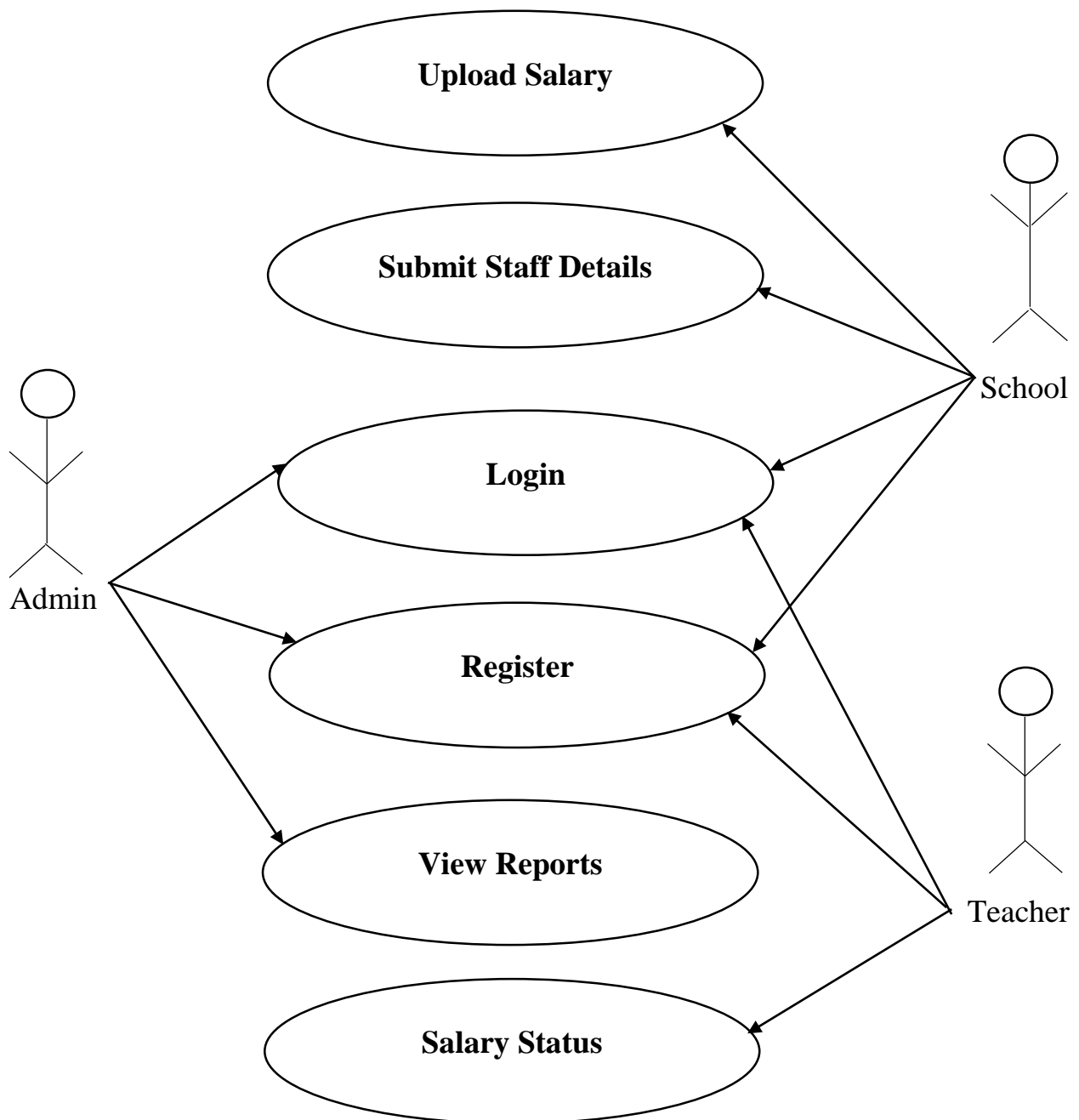


Fig. 4.1 Use Case Diagram

## 4.2 Entity Relationship Diagram

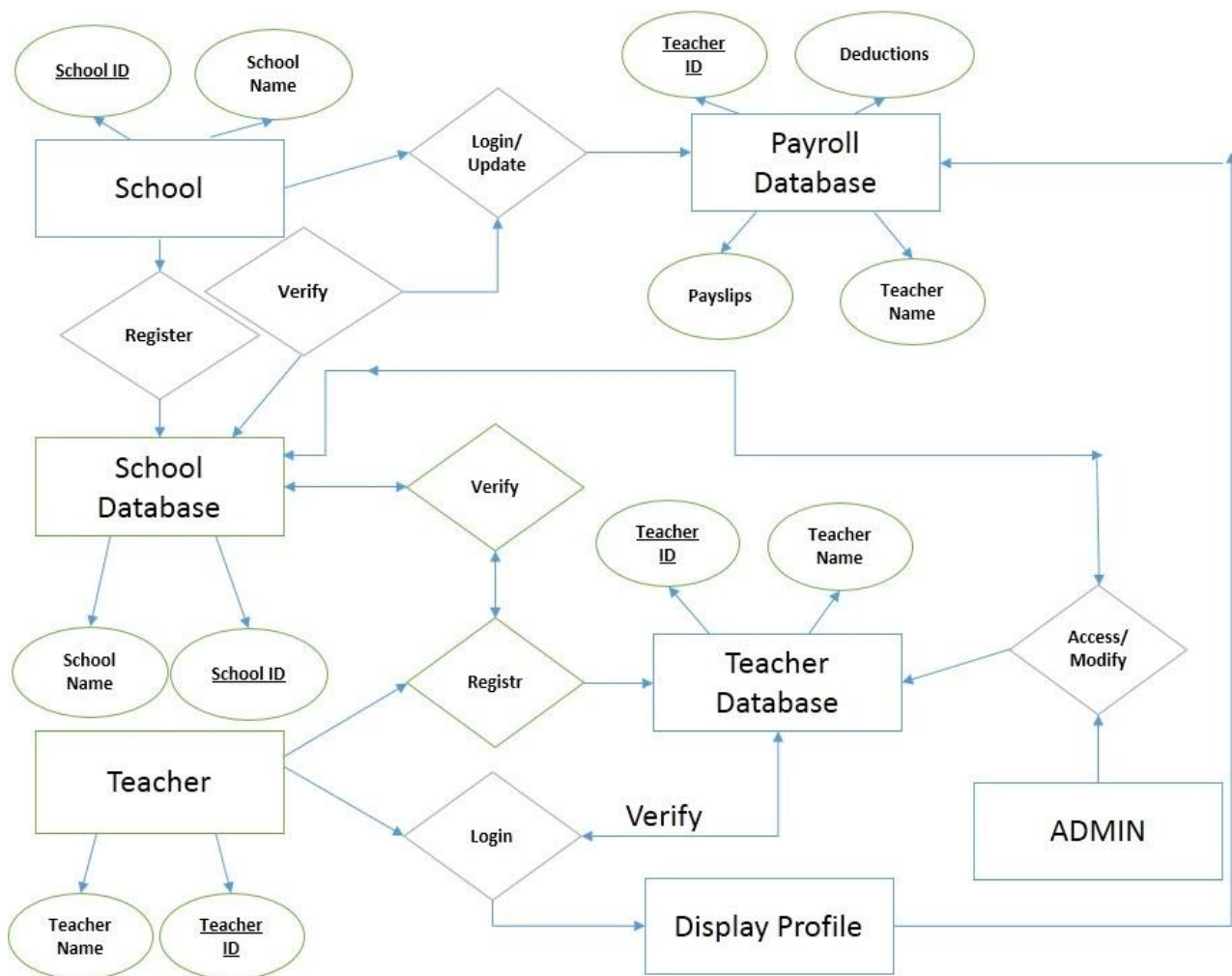


Fig. 4.2 ER Diagram

## 4.3 Data Flow Diagram

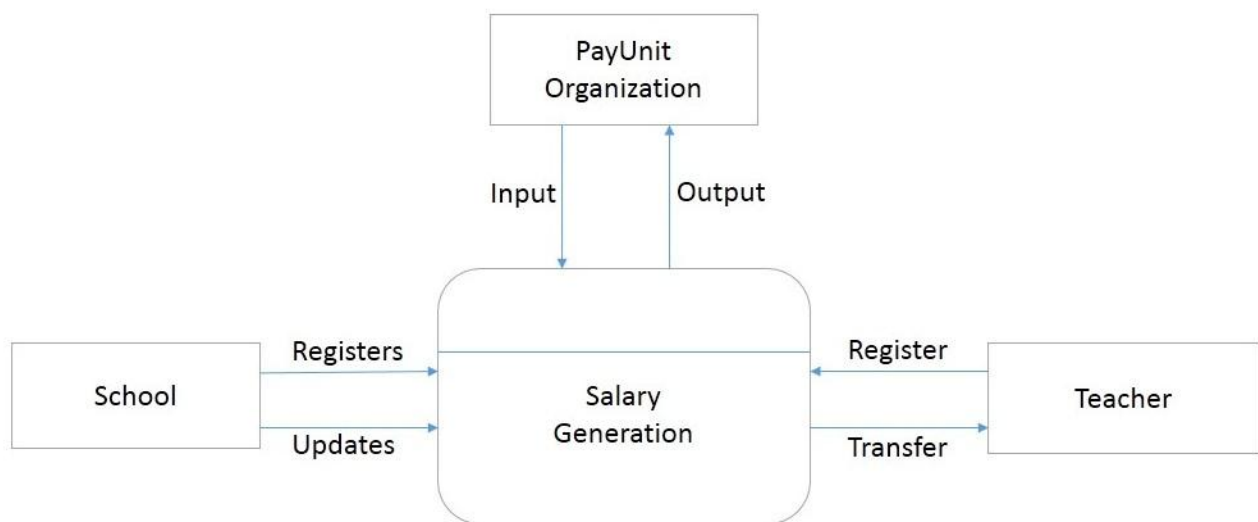


Fig. 4.3.1 Context Diagram

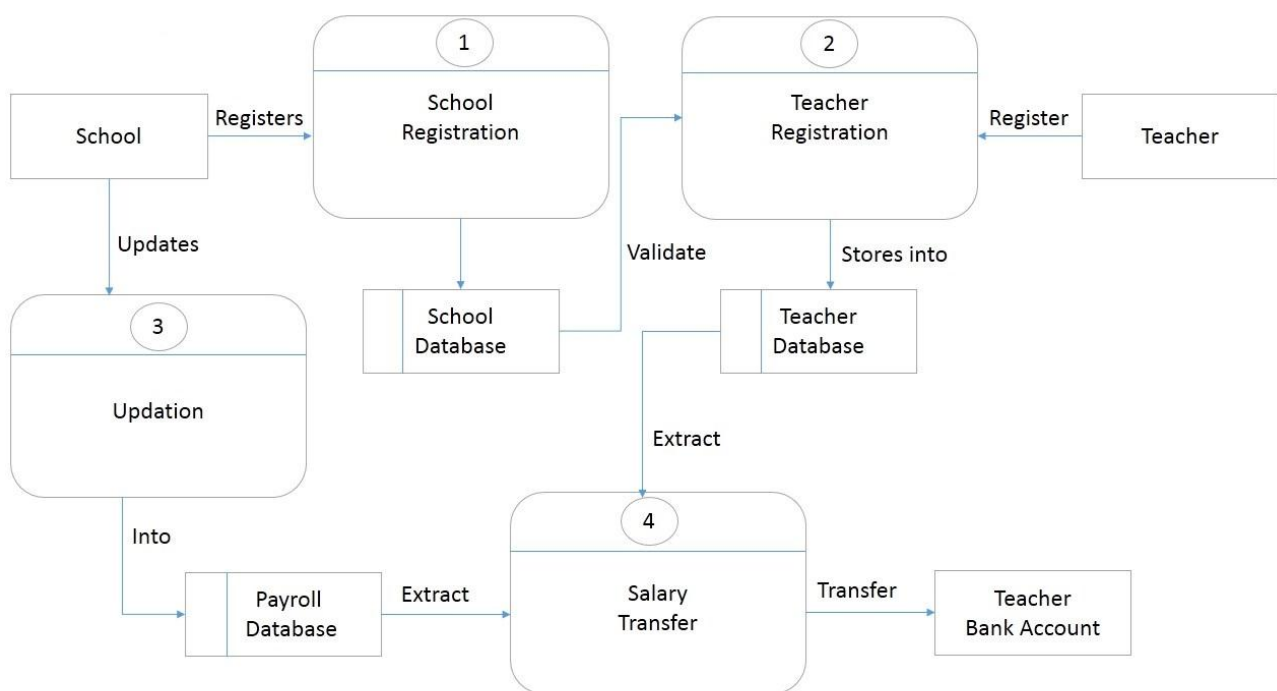


Fig. 4.3.2 Level 0 Diagram

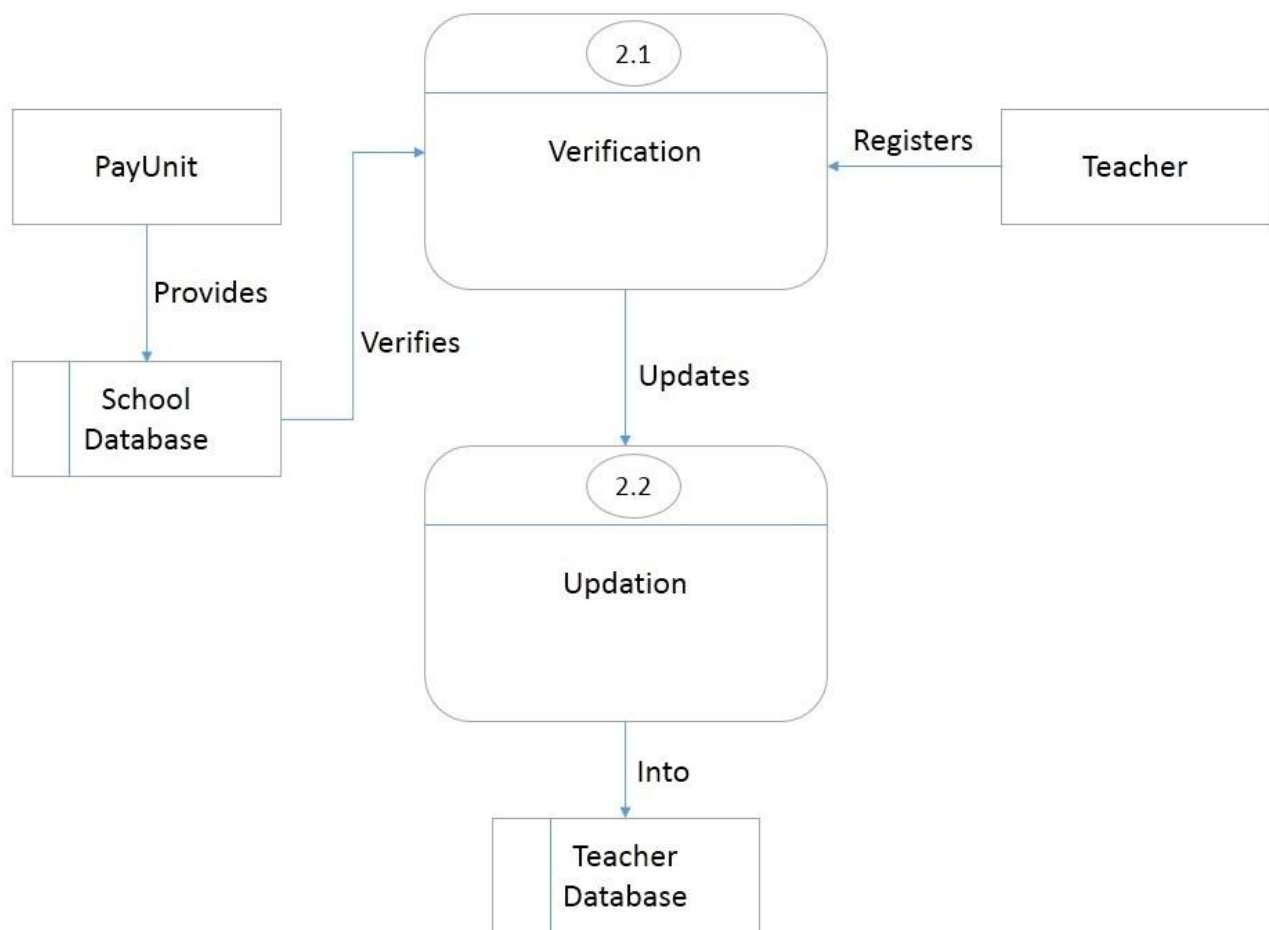


Fig. 4.3.3 Level 2 Diagram

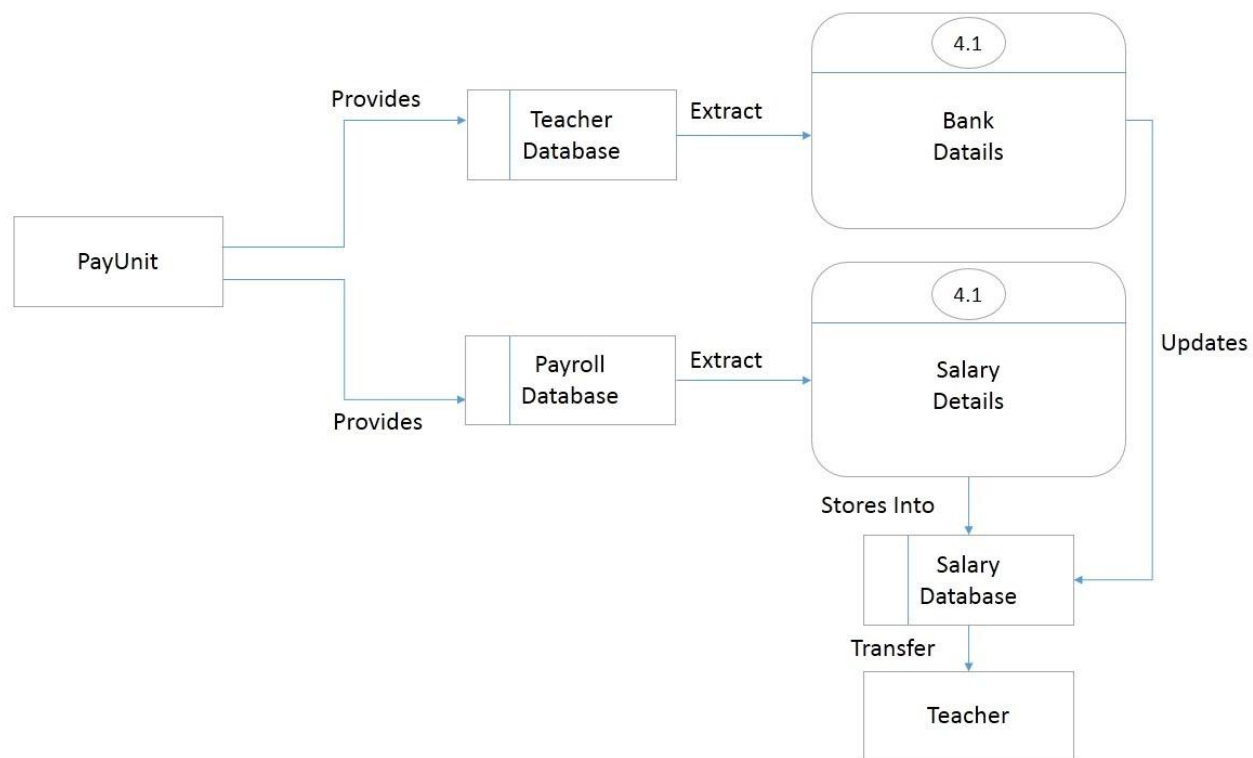


Fig. 4.3.4 Level 4 Diagram



## 4.4 Activity Diagram

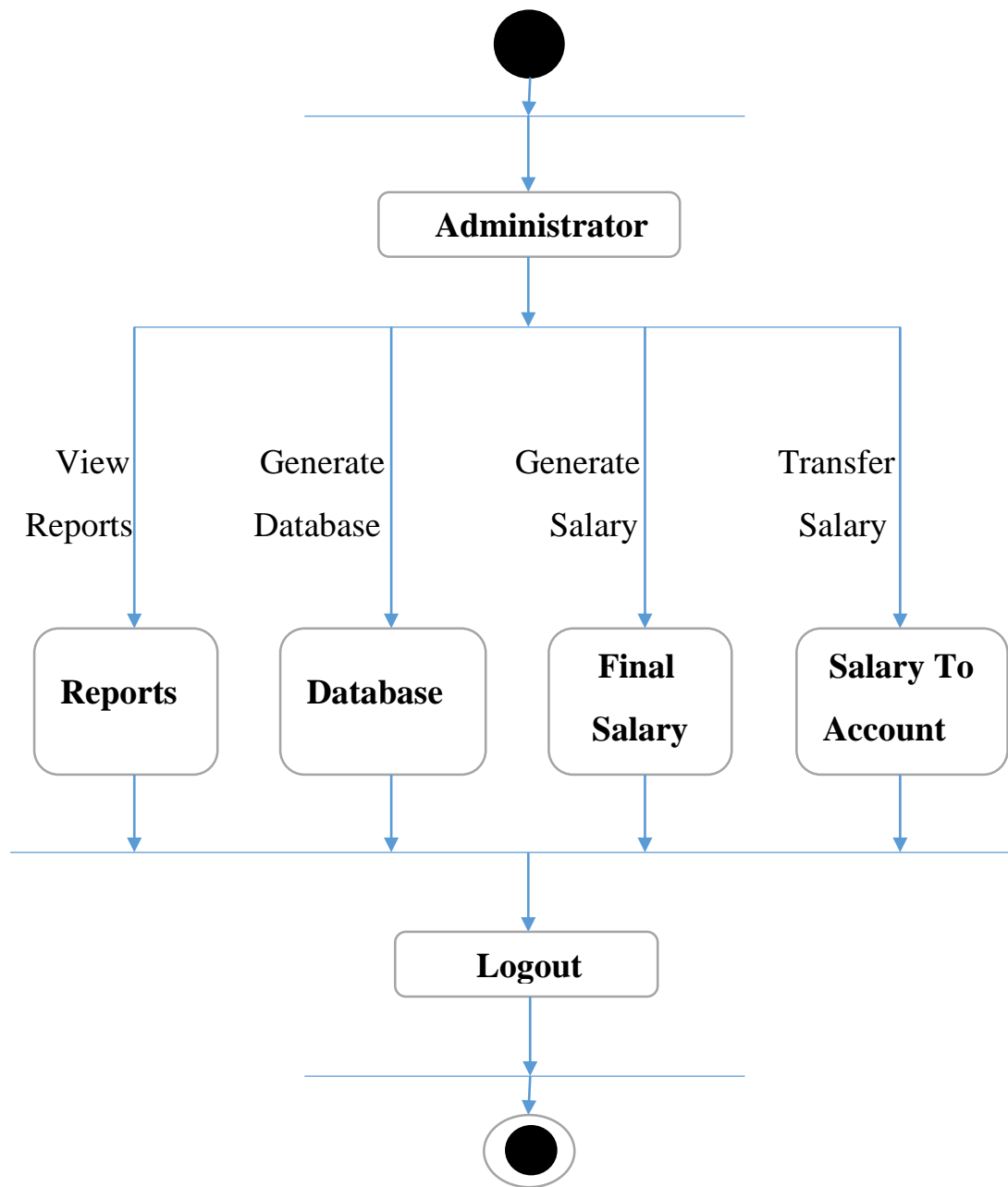


Fig. 4.4.1 Administrator Activity Diagram

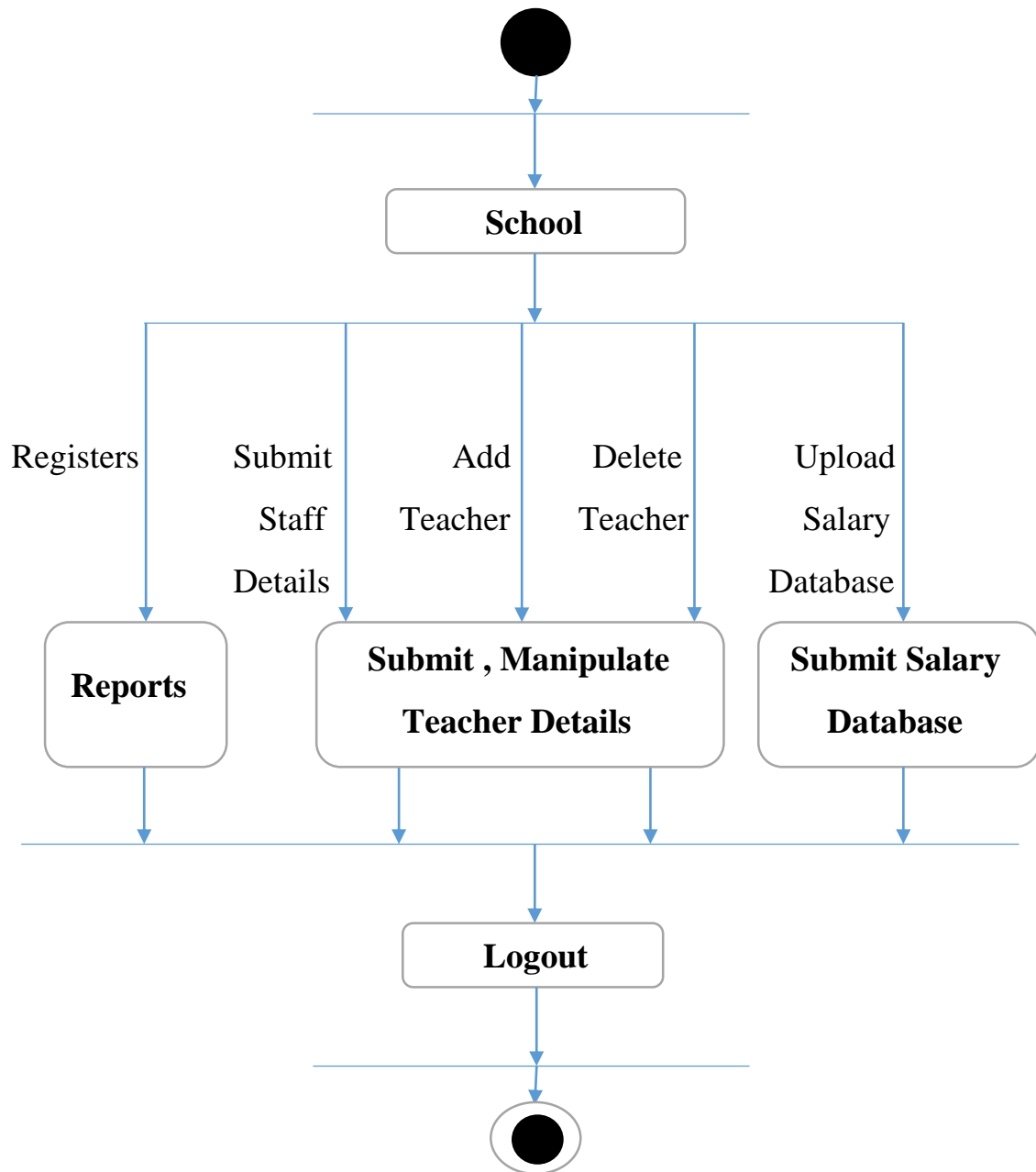


Fig. 4.4.2 School Activity Diagram

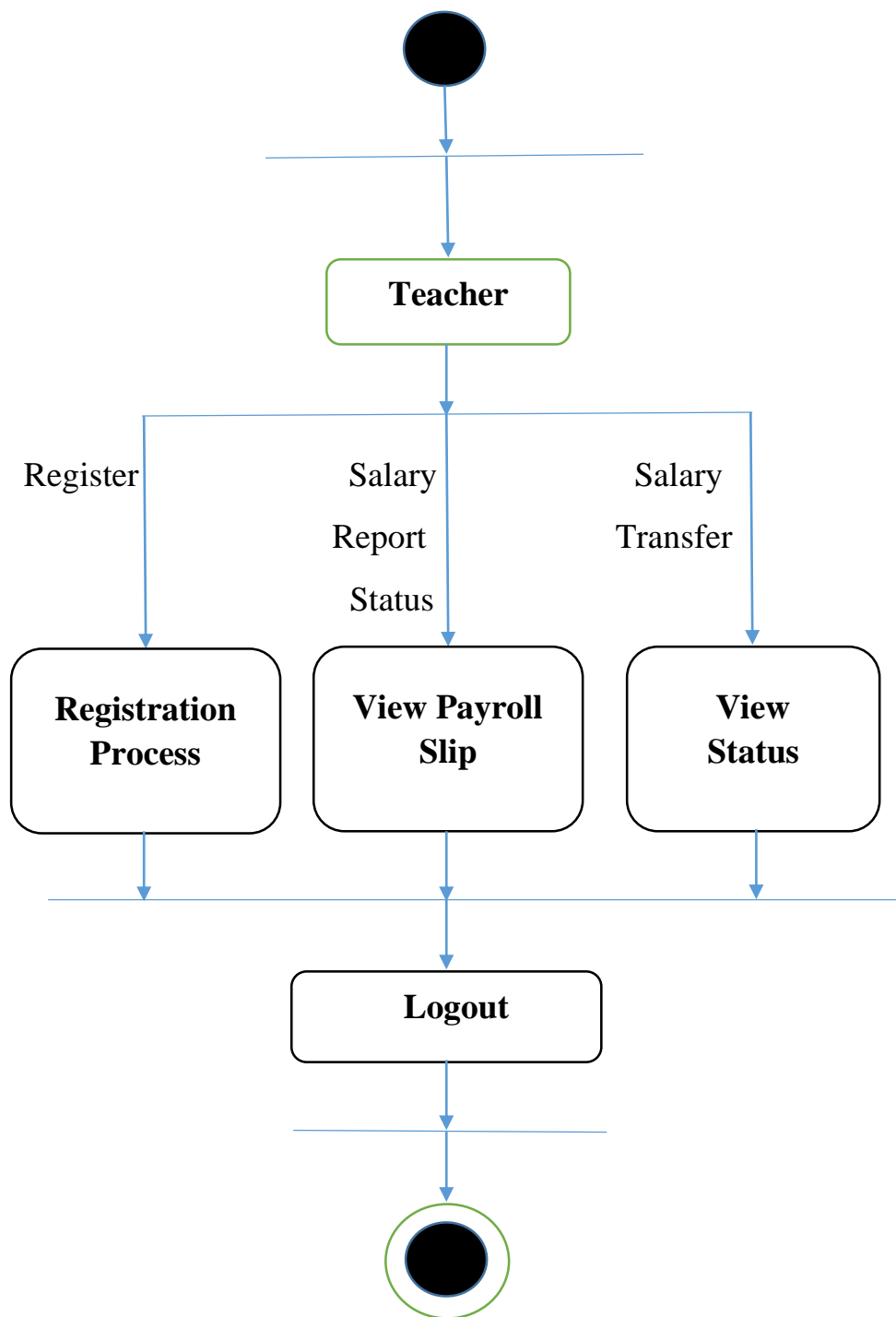


Fig. 4.4.3 Teacher Activity Diagram

## 5. Data Dictionary

### 5.1 school\_login

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>SCHOOL_LOGIN</u>	<u>S_ID</u>	NUMBER	22	-	-	-	✓
	<u>S_USERNAME</u>	VARCHAR2	100	-	-	-	✓
	<u>S_PASSWORD</u>	VARCHAR2	100	-	-	-	✓
	<u>QUESTION</u>	VARCHAR2	100	-	-	-	✓
	<u>ANSWER</u>	VARCHAR2	100	-	-	-	✓

### 5.2 school\_details

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>SCHOOL_DETAILS</u>	<u>S_ID</u>	NUMBER	22	-	0	1	-
	<u>S_NAME</u>	VARCHAR2	100	-	-	-	✓
	<u>S_RID</u>	VARCHAR2	100	-	-	-	✓
	<u>S_TYPE</u>	VARCHAR2	20	-	-	-	✓
	<u>S_ADD1</u>	VARCHAR2	100	-	-	-	✓
	<u>S_CITY</u>	VARCHAR2	100	-	-	-	✓
	<u>S_TALUKA</u>	VARCHAR2	100	-	-	-	✓
	<u>S_DISTRICT</u>	VARCHAR2	100	-	-	-	✓
	<u>S_STATE</u>	VARCHAR2	100	-	-	-	✓
	<u>S_PINCODE</u>	NUMBER	22	-	-	-	✓
	<u>S_SAREA</u>	FLOAT	126	126	-	-	✓
	<u>S_CLASSROOMS</u>	NUMBER	22	-	0	-	✓
	<u>S_PAREA</u>	FLOAT	126	126	-	-	✓
	<u>S_SANITARY</u>	VARCHAR2	10	-	-	-	✓
	<u>S_DRINKING</u>	VARCHAR2	10	-	-	-	✓
	<u>S_TSTAFF</u>	NUMBER	22	-	-	-	✓
	<u>T_CONTACT</u>	NUMBER	22	-	-	-	✓
	<u>T_EMAIL</u>	VARCHAR2	100	-	-	-	✓

## 5.3 teacher\_login

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>TEACHER_LOGIN</u>	<u>T_ID</u>	NUMBER	22	-	-	-	✓
	<u>T_USERNAME</u>	VARCHAR2	100	-	-	-	✓
	<u>T_PASSWORD</u>	VARCHAR2	100	-	-	-	✓
	<u>QUESTION</u>	VARCHAR2	100	-	-	-	✓
	<u>ANSWER</u>	VARCHAR2	100	-	-	-	✓

## 5.4 teacher\_details

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>TEACHER_DETAILS</u>	<u>T_ID</u>	NUMBER	22	-	-	1	-
	<u>T_NAME</u>	VARCHAR2	100	-	-	-	✓
	<u>T_RID</u>	VARCHAR2	100	-	-	-	✓
	<u>T_SCHOOL</u>	VARCHAR2	100	-	-	-	✓
	<u>T_ADD1</u>	VARCHAR2	100	-	-	-	✓
	<u>T_CITY</u>	VARCHAR2	50	-	-	-	✓
	<u>T_TALUKA</u>	VARCHAR2	100	-	-	-	✓
	<u>T_DISTRICT</u>	VARCHAR2	100	-	-	-	✓
	<u>T_STATE</u>	VARCHAR2	100	-	-	-	✓
	<u>T_PINCODE</u>	NUMBER	22	-	-	-	✓
	<u>T_TYPE</u>	VARCHAR2	100	-	-	-	✓
	<u>T_CERT</u>	VARCHAR2	100	-	-	-	✓
	<u>T_PYEAR</u>	NUMBER	22	-	-	-	✓
	<u>T_JDATE</u>	VARCHAR2	100	-	-	-	✓
	<u>T_BANK</u>	VARCHAR2	100	-	-	-	✓
	<u>T_BRANCH</u>	VARCHAR2	100	-	-	-	✓
	<u>T_ACCOUNT</u>	NUMBER	22	-	-	-	✓
	<u>S_ID</u>	NUMBER	22	-	-	-	✓
	<u>T_EMAIL</u>	VARCHAR2	100	-	-	-	✓

## 5.4 salary\_details

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>SALARY_DETAIL</u>	<u>S_RID</u>	VARCHAR2	50	-	-	-	✓
	<u>T_RID</u>	VARCHAR2	100	-	-	-	✓
	<u>T_NAME</u>	VARCHAR2	100	-	-	-	✓
	<u>BAND_PAY</u>	FLOAT	126	126	-	-	✓
	<u>GRADE_PAY</u>	FLOAT	126	126	-	-	✓
	<u>SUM_BAND_GRADE</u>	FLOAT	126	126	-	-	✓
	<u>DA</u>	VARCHAR2	100	-	-	-	✓
	<u>HRA</u>	VARCHAR2	100	-	-	-	✓
	<u>TA</u>	FLOAT	126	126	-	-	✓
	<u>RECOVERY</u>	FLOAT	126	126	-	-	✓
	<u>PPF</u>	FLOAT	126	126	-	-	✓
	<u>PRO_TAX</u>	FLOAT	126	126	-	-	✓
	<u>INCOME_TAX</u>	FLOAT	126	126	-	-	✓
	<u>TOTAL_SAL</u>	FLOAT	126	126	-	-	✓

## 5.5 MonthYear

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>MARCH2014</u>	<u>T_RID</u>	VARCHAR2	50	-	-	-	✓
	<u>STATUS</u>	VARCHAR2	50	-	-	-	✓

## 5.6 admin\_login

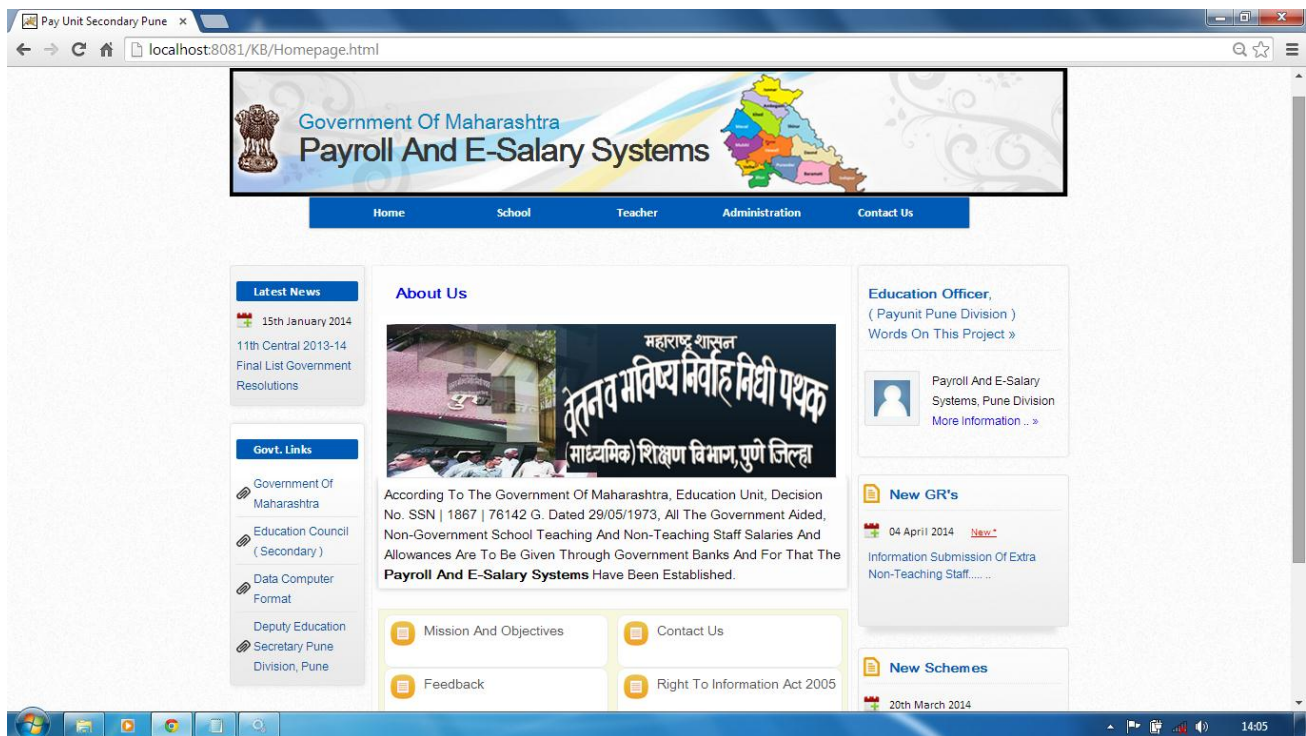
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>ADMIN_LOGIN</u>	<u>A_ID</u>	NUMBER	22	-	-	-	✓
	<u>A_USERNAME</u>	VARCHAR2	100	-	-	-	✓
	<u>A_PASSWORD</u>	VARCHAR2	100	-	-	-	✓

## 5.7 feedback\_details

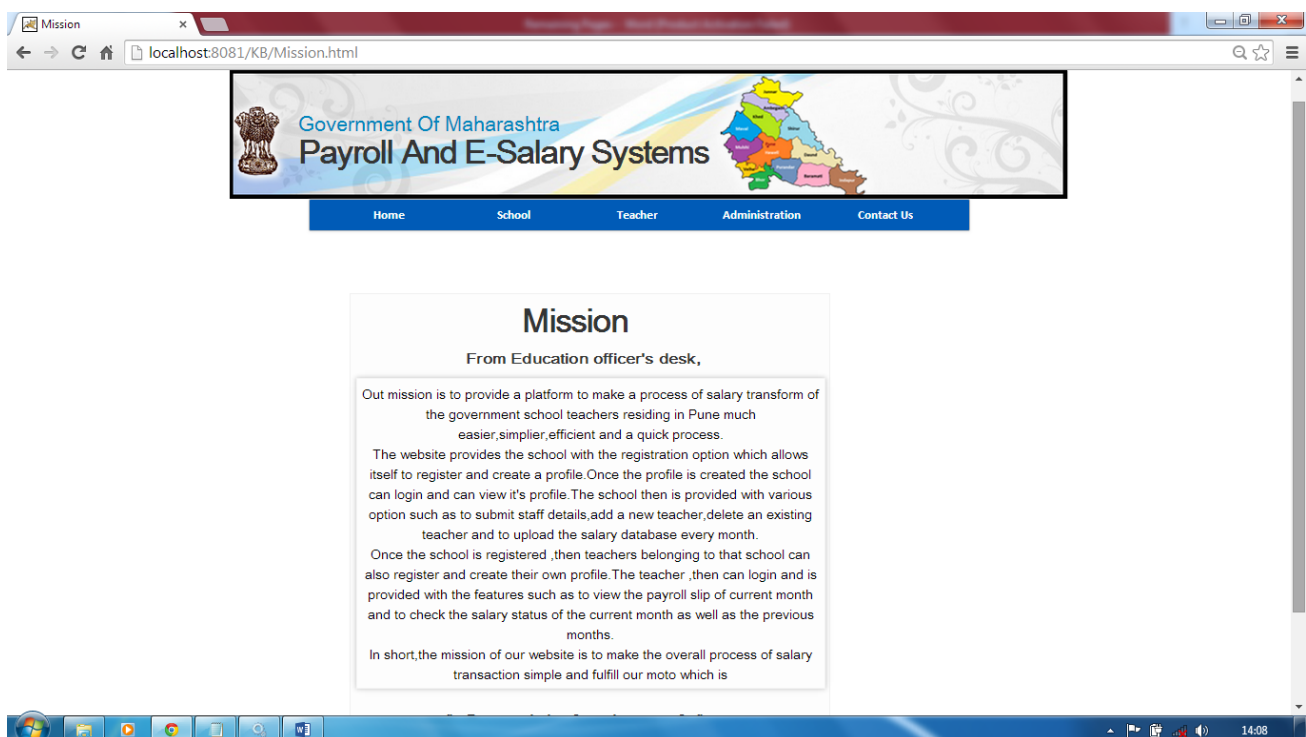
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable
<u>FEEDBACK_DETAILS</u>	<u>F_ID</u>	NUMBER	22	-	-	-	✓
	<u>FEEDBACK</u>	VARCHAR2	1000	-	-	-	✓
	<u>EMAIL</u>	VARCHAR2	50	-	-	-	✓

## 6. Project Snapshots

### 6.1 Homepage

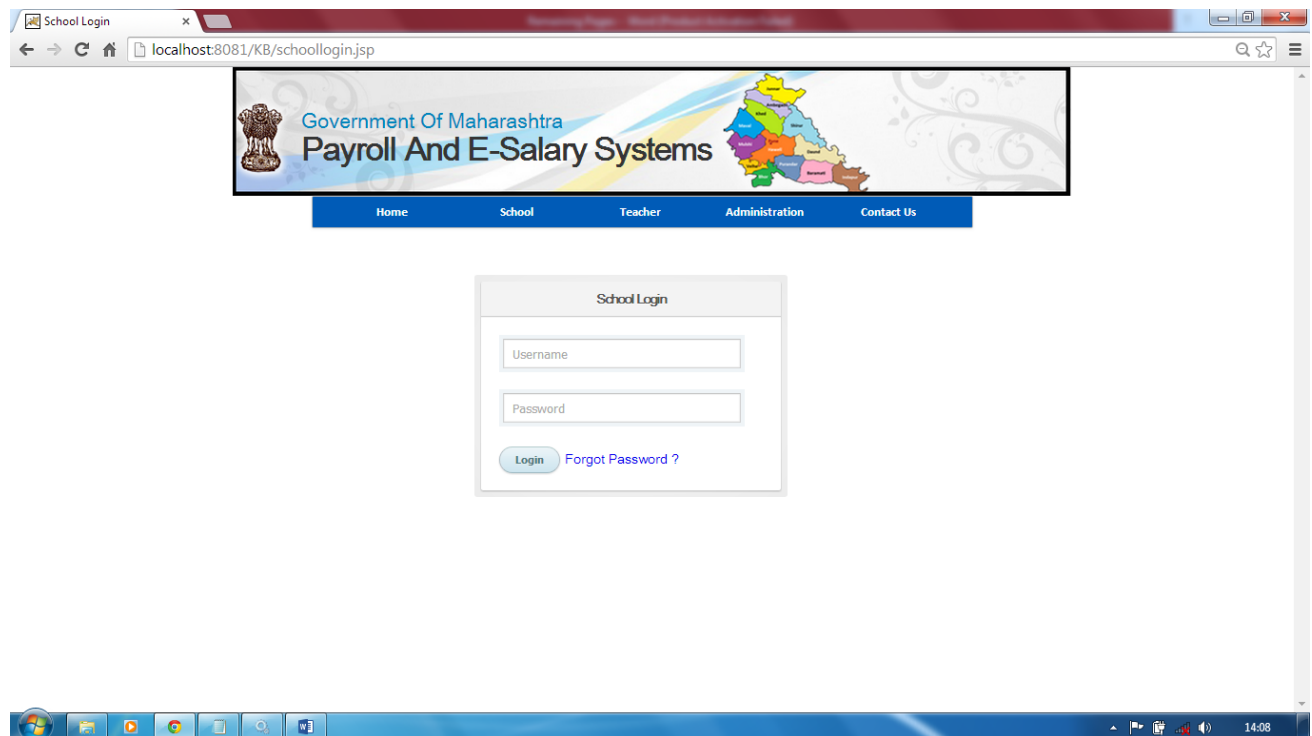


### 2.2 Mission And Objectives



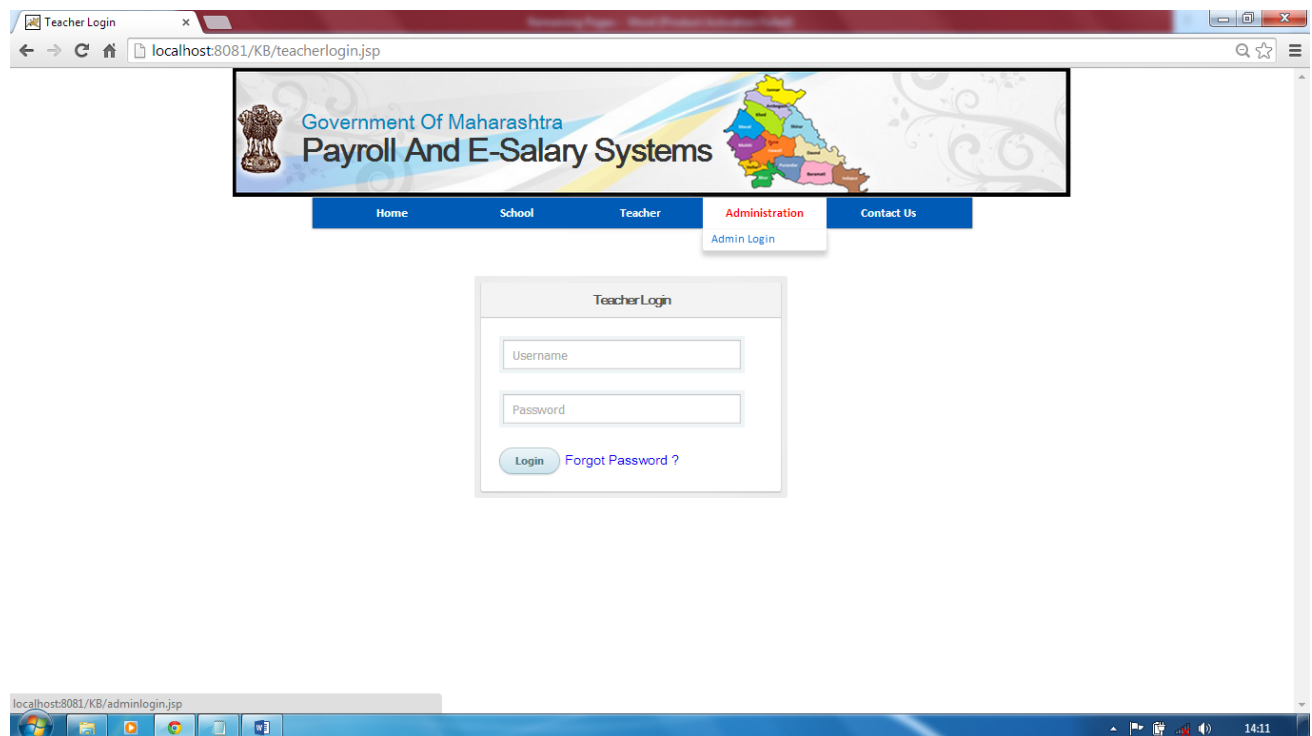


## 6.3 School Login



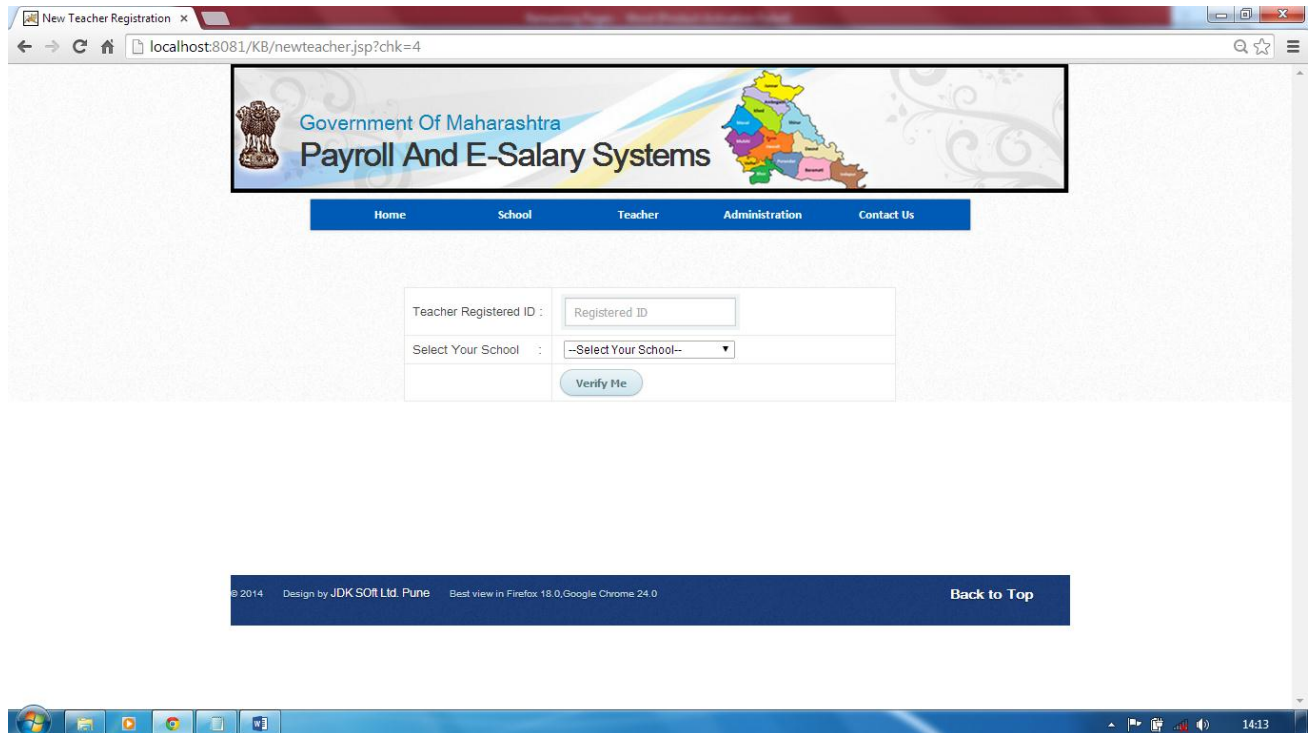
The screenshot shows a web browser window with the title 'School Login' and the URL 'localhost:8081/KB/schoollogin.jsp'. The page features a header banner for the 'Government Of Maharashtra Payroll And E-Salary Systems' with a map of India. Below the banner is a navigation bar with links: Home, School, Teacher, Administration, and Contact Us. The main content area contains a 'School Login' form with fields for 'Username' and 'Password', a 'Login' button, and a 'Forgot Password ?' link. The Windows taskbar at the bottom shows the time as 14:08.

## 6.4 Teacher Login



The screenshot shows a web browser window with the title 'Teacher Login' and the URL 'localhost:8081/KB/teacherlogin.jsp'. The page features the same header banner as the previous page. The navigation bar now has 'Administration' highlighted, with a dropdown menu showing 'Admin Login'. The main content area contains a 'TeacherLogin' form with fields for 'Username' and 'Password', a 'Login' button, and a 'Forgot Password ?' link. The Windows taskbar at the bottom shows the time as 14:11.

## 6.5 Teacher Registration (Verification)



Government Of Maharashtra  
Payroll And E-Salary Systems

Home School Teacher Administration Contact Us

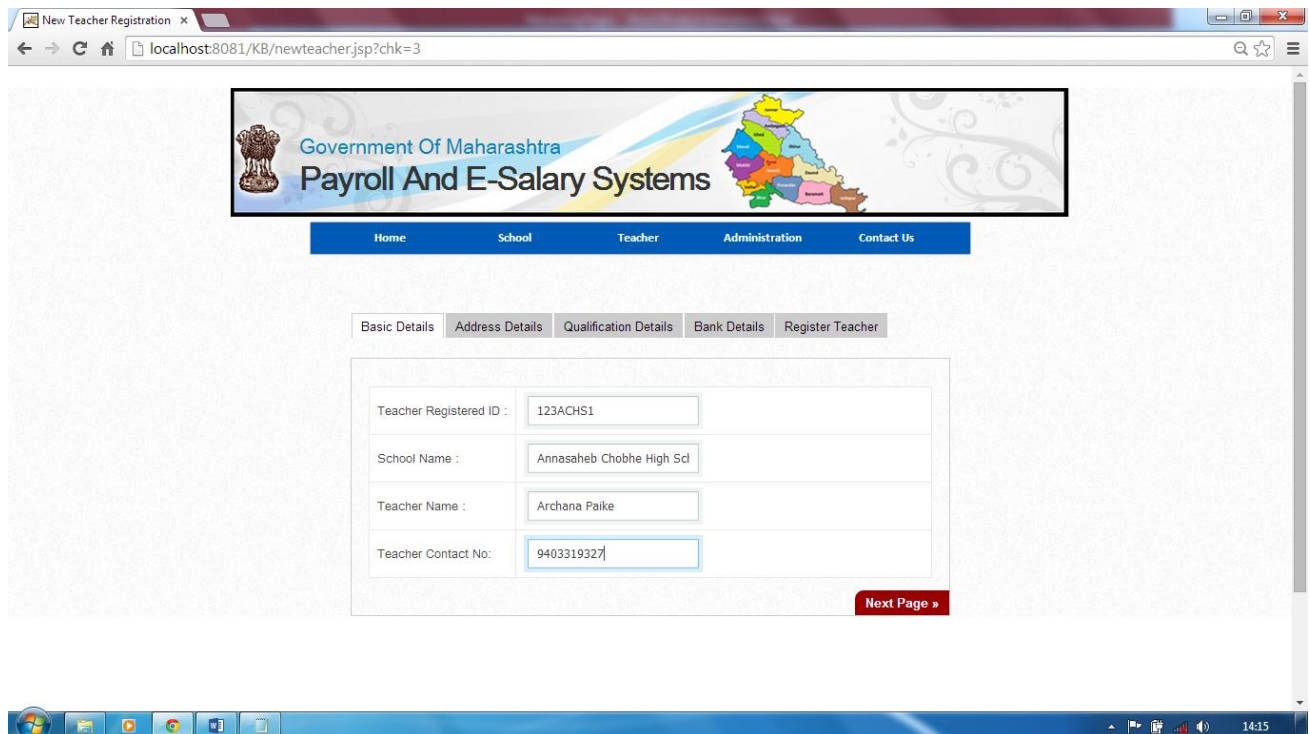
Teacher Registered ID : Registered ID

Select Your School : --Select Your School--

Verify Me

© 2014 Design by JDK SOFT Ltd. Pune Best view in Firefox 18.0, Google Chrome 24.0 Back to Top

## 6.6 Teacher Registration



Government Of Maharashtra  
Payroll And E-Salary Systems

Home School Teacher Administration Contact Us

Basic Details Address Details Qualification Details Bank Details Register Teacher

Teacher Registered ID : 123ACHS1

School Name : Annasaheb Chobhe High Scl

Teacher Name : Archana Paikar

Teacher Contact No. : 9403319327

Next Page »

## 6.7 School Homepage

Government Of Maharashtra  
Payroll And E-Salary Systems

**Welcome Annsaheb Chobhe High School**

Basic Details	Address Details	Infrastructure Details	Staff Details
Registered School ID :123ACHS School Name :Annsaheb Chobhe High School School Type :Primary School Contact NO :9966553322 School Email :Achs@gmail.com	Address Line 1 :08,Tukaram Nagar City :Talegaon Dabhade Taluka :Maval District :Pune State :Maharashtra Pincode :410506	School Area :5000.0 Number Of Classrooms :20 School Playground Area :100.0 Sanitary Provisions :Yes Drinking Water Provisions :Yes	School Teaching Staff :3

[Edit Basic School Information](#)
[Submit Staff Details](#)
[Add Teacher](#)
[Delete Teacher](#)
[Upload Salary Database](#)
[Logout](#)

© 2014 Design by JDK SOFT Ltd. Pune Best view in Firefox 18.0, Google Chrome 24.0 [Back to Top](#)

## 6.8 Teacher Homepage

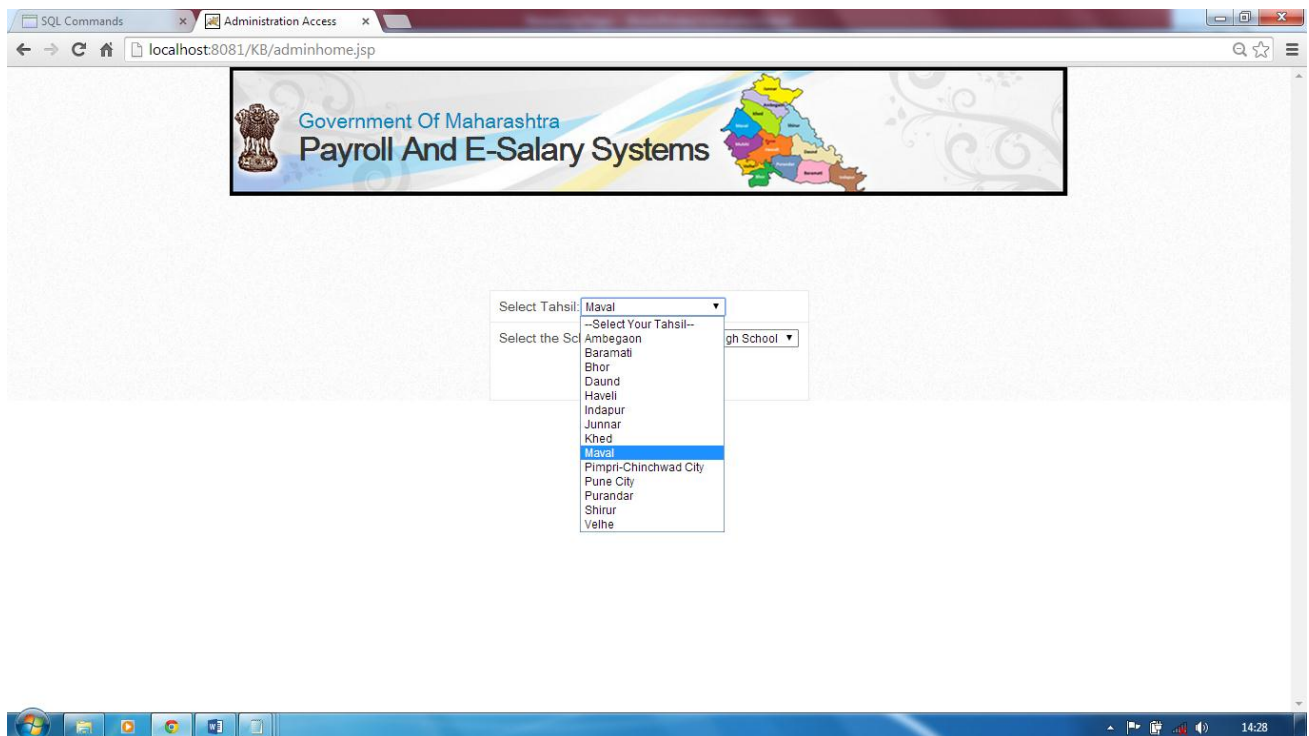
Government Of Maharashtra  
Payroll And E-Salary Systems

**Welcome, Archana Paike**

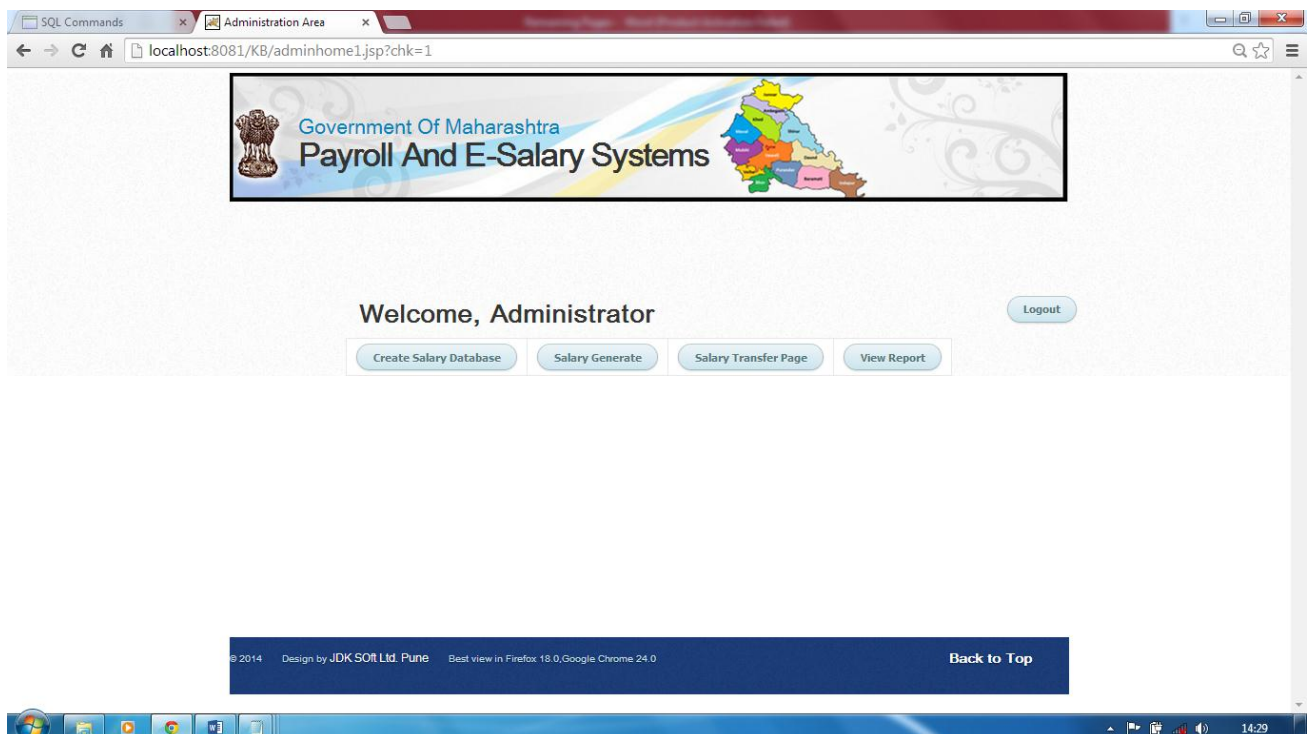
Registered Teacher ID :123ACHS1 Teacher Name :Archana Paike Teacher Type :Primary Teacher Contact :9403319327 Teacher Email :archana21@gmail.com	Teacher Address Address Line 1 :Tukaram nagar City :Talegaon Dabhade Taluka :Khed District :Pune State :Maharashtra Pincode :410506	Qualification :D.Ed. Passing Year :2000 School Joining Dtae :01/01/2000	Bank Name :ICICI Bank Bank Branch Name:Talegaon Dabhde Bank Account No :123123123
--	---	---	---

[Edit Basic Teacher Information](#)
[View Current Salary](#)
[View Transfer Salary](#)
[Logout](#)

## 6.9 Admin Homepage

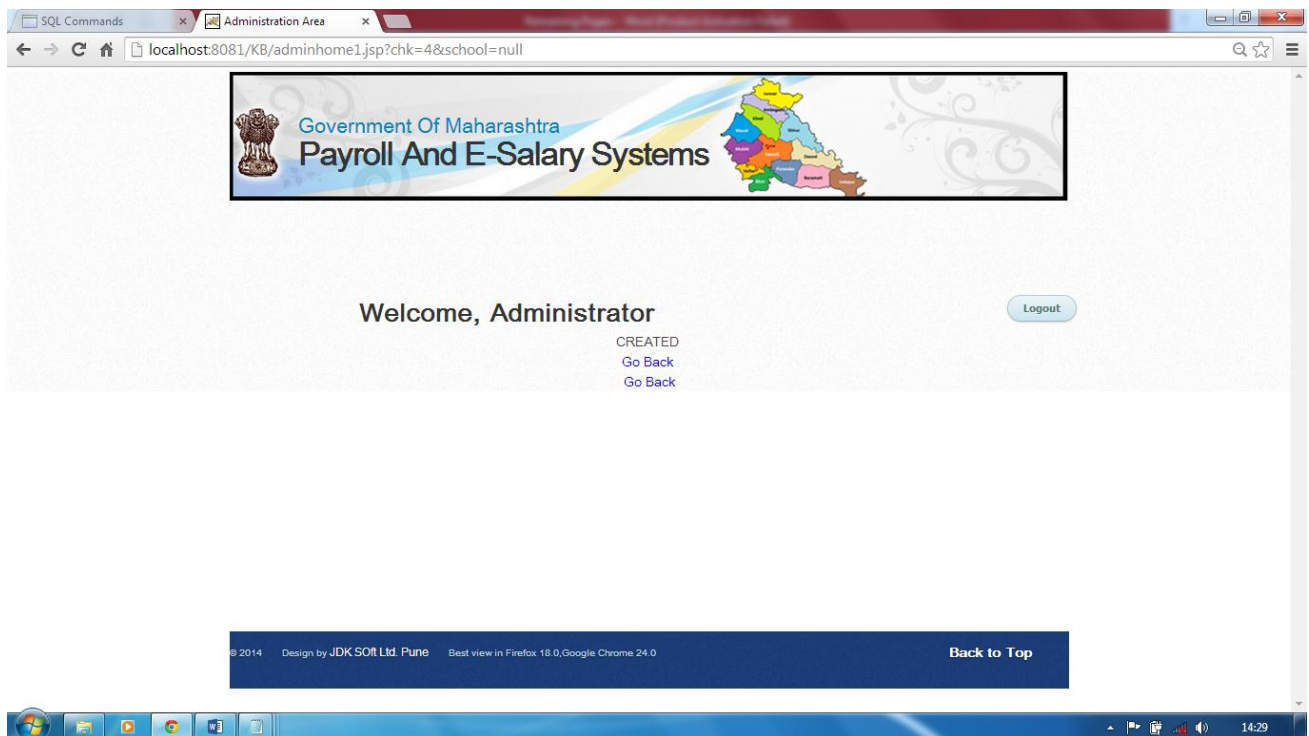


## 6.10 Admin Homepage Access

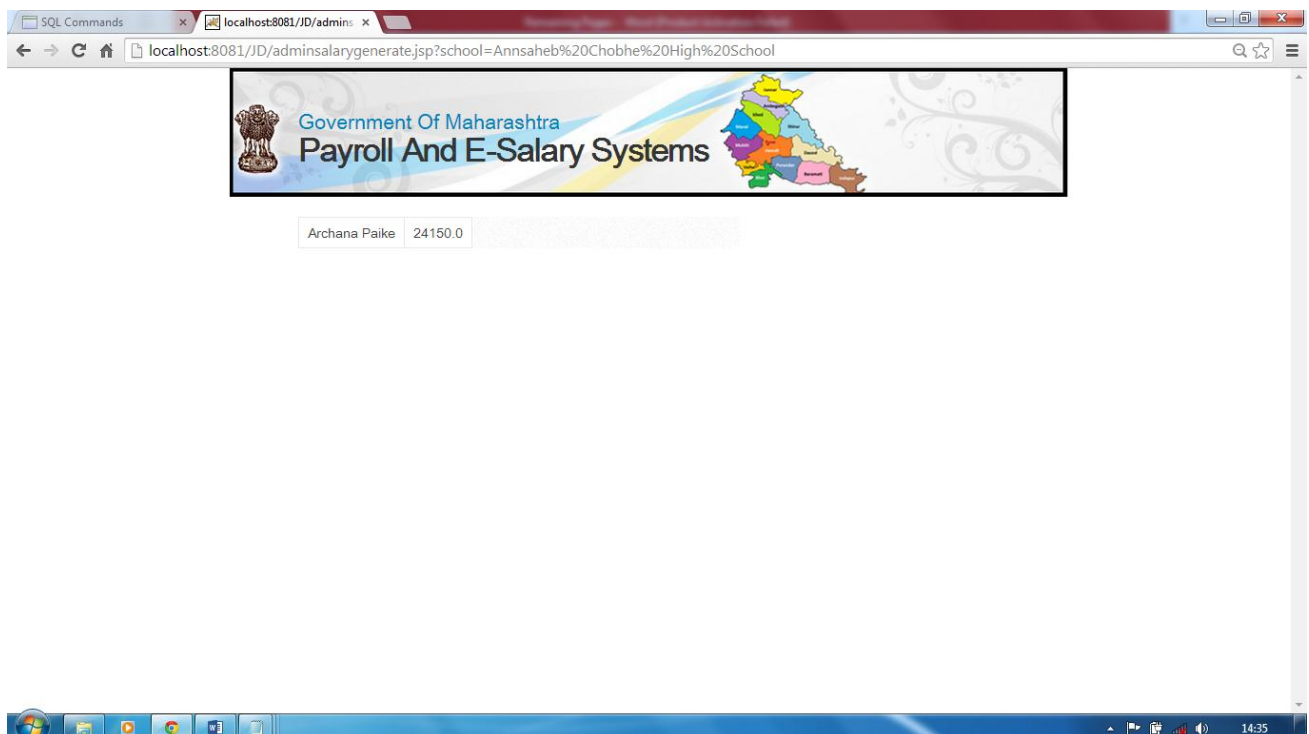




## 6.11 Admin Creates Salary Database



## 6.12 Admin Generates Salary



## 6.13 Salary Receipt Email Sent To Teacher

The screenshot shows a Gmail inbox on a web browser. The browser's address bar displays the URL <https://mail.google.com/mail/u/0/#inbox/1459d9f4fec42379>. The Gmail interface includes a search bar, a navigation menu on the left with options like 'Compose', 'Inbox', 'Starred', 'Important', and 'Sent Mail', and a main content area. The selected email is titled 'Salary Transfer Receipt' and is from 'kalpeshchaudhari634@gmail.com', received 4:10 PM (22 hours ago). The email body contains a table with transaction details.

**Transaction Details**

Teacher ID:	123ACHS1
Teacher Name:	Jaydeep Mohite
Bank Name:	State Bank Of India
Bank Branch Name:	Talegaon
Bank Account No:	123000123
Total Salary Transferred:	24150.0

Below the table, there is a section for replying or forwarding the email, and a HostGator advertisement at the bottom of the email content area.

**HostGator - Start Your Website Today**  
Get your website online today for just one penny!

## 7. Future Scope

Our project is limited to a small division or area like Pune. In Future, our project can be expanded to over a big area covering almost the schools under the Government Of Maharashtra.

Moreover our limitations to access the Internet, we haven't included the web services and provided the gateway to transfer the salary into the respective bank accounts. We have just shown the demo transaction procedure. In future, we can implement the wen services and provide a real gateway like paypal and provide a secure transaction procedure.

Also, the website provides a limited number of features. In future additional features such as the Provident Funds, Loan Facilities can be provided to enhance the utility of the website.

Also other facilities like paper checking bills, election duty notices and bills, etc can be included in the features of the website.

## 8. Conclusion

Our project provides the website which allows the school to register, submit staff details and upload the salary details every month.

It also allows the teachers of particular school to register and then view the salary slip of particular month. Also it allows to check his/her salary status right from the inception of E-salary systems to the current date.

Our project calculates the payroll of each month online every month. Also it allow the admin to transfer the salary on first of each month.

Overall, our project is Government Website which allows or makes the salaries of Government Schools in Pune in much faster, secure, economically feasible and more importantly online through e-transaction into the particular teacher's bank account.



## 9. References

