

# A Project Report on

## AMTS-BUS-PASS-SYSTEM

**Submitted in partial fulfillment of Requirement  
For the award of the degree of  
Diploma Computer Engineering,  
Gujarat Technological University  
Submitted by:-**

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**Under the guidance of**

**Internal Guide  
Mr. ALPESH.R.THAKER**

**HOD  
Mr. H. R. PARMAR**



# CERTIFICATE

This is to certify that the project entitled  
***AMTS BUS PASS SYSTEM***

Submitted in partial fulfillment for the requirement of the degree of

**Diploma Computer Engineering**

Is a result of the work carried out by

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During the academic session **January** to **April** 2017. They have undergone the process of Analysis, literature survey, problem definition and project designing. They are supposed to carry out the residue UDP Part-II work on same problem during Semester-VI for the final fulfillment of the UDP work.

Internal Guide

**Mr. ALPESH.R.THAKER**

HOD

**Mr. H. R. PARMAR**

**Computer Department**  
**Government Polytechnic, Ahmedabad April-2017**

## ACKNOWLEDGEMENT

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We would like to express our sincere thanks and gratitude to Alpesh.R.Thaker, our internal guide for his help, support and guidance throughout this project. This project work would not have been successful without his valuable inputs. He was our source of inspirations during all phases of our project work.

We extend our heartfelt thanks to **Mr. H. R. PARMAR, Head of Computer Department** for his co-operation in our project work.

We cannot forget to express our thanks to the entire staff of our department and colleagues for providing us a helping arm during the project work.

**MEHUL KAPADIYA**

**PRAVIN KISHORI**

**KALPESH GOSWAMI**

## ABSTRACT

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Student Information Management Website provides a simple interface for maintenance of student information. It can be used by a single department of an educational institutes or colleges to maintain the records of students, faculties and department easily.

Student information website deals with all kind of student details, course details, curriculum, time table, mid-semester exam, notice board and other resource related details too.

It tracks all the details of a student from the day one to the end of the course which can be used for all reporting purpose. Progress in the course, completed semesters, years, curriculum details, mid-exam details, time-table, or any other assignment details will be available through a secure, online interface.

It will also have faculty details, laboratory and classroom details, the various academic notifications to the staff and students updated by the administration. It also facilitate students explore all the activities happening in the department, Different reports and Queries can be generated based on vast options related to students, faculty, exams and semesters.

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# Chapter – 1

## INTRODUCTION

## Project Profile

<b>PROJECT TITLE</b>	AMTS-PASS-SYSTEM
<b>FRONT END:</b>	Php
<b>BACK END:</b>	MySql
<b>WEB SERVER</b>	Apache
<b>SUPPORTING TOOLS TO DEVELOP WEBSITE</b>	HTML-5,CSS-3,netbeans
<b>TEXT EDITOR</b>	Notepad++
<b>INTERNAL GUIDE:</b>	Alpesh.R.Thaker
<b>SUBMITTED TO:</b>	Department of CS
<b>TEAM SIZE:</b>	3 MEMBERS
<b>TEAM MEMBER NAMES:</b>	1:Mehul Kapadiya 2:Pravin Kishori 3:Kalpesh Goswami

## **Hardware Requirements**

### **Server side**

RAM	2GB
Hard Disk	80GB
Processor	2GHz

### **Client side**

RAM	512MB
Hard Disk	20GB
Processor	1.0GHz

## **Software Requirements**

### **Server Side**

Front End	PHP
Back End	Mysql
Other Tools	Neatbeans,Notepad++
Operating System	Windows7 or any compatible os

### **Client side**

Browser	Internet explorer or any compatible browser
Operating system	Windows7 Or any compatible Operating System

# Chapter – 2

## LITERATURE SURVEY

### **Existing System**

There is one online system for Ahmedabad Municipal Transport Service which is AMTS.co.in

### **Working of the current System**

- This system provides all the information about the AMTS service.
- Provides AMTS bus routes information.
- Provides time table of the buses.
- Provides information about bus passes bus doesn't provides online passes.

### **Drawbacks of the current System**

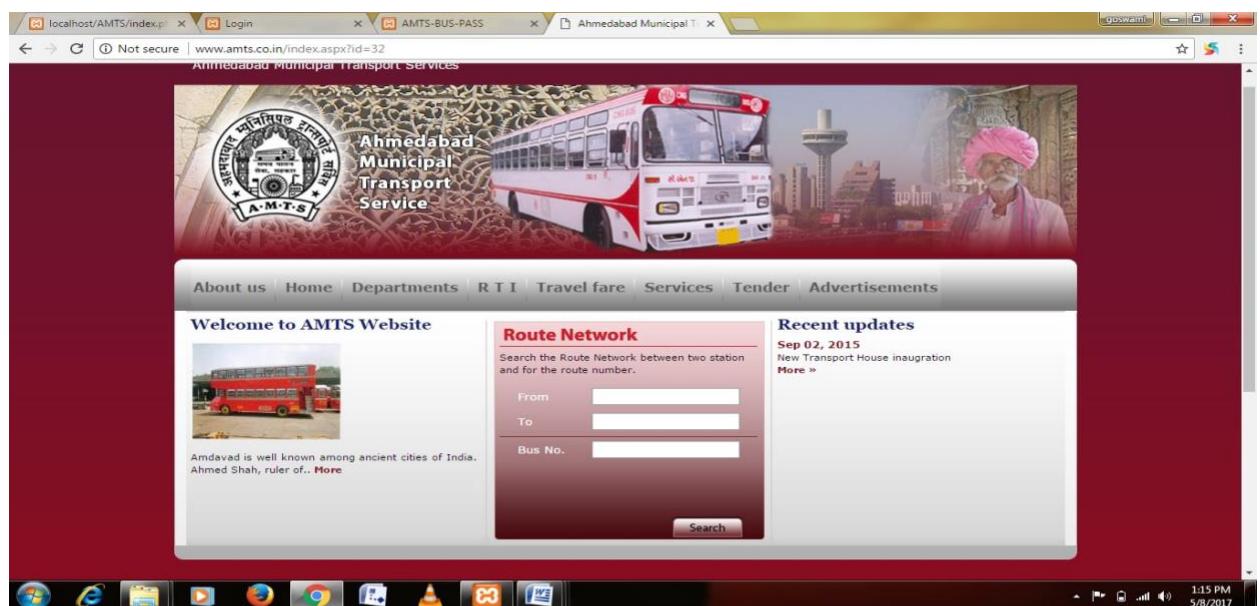
- This system provides bus pass information but it does not provide bus passes online this is the main disadvantage of the system.
- Customers must go to the amts office and they have to be in a long queue to get their bus passes.
- Amts office is open from 9AM to 3PM o clock every day.
- Time consuming for customers and administrator.
- Require much human effort to get passes.

## **Need for the new System**

- The pass facility must be online.
- Student, service, and senior citizens do not to be in a long queue.
- should request for pass from anywhere anytime.

## Existing Site Survey

There is one online system for Ahmedabad Municipal Transport Service which is [AMTS.co.in](http://AMTS.co.in)  
[www.amts.co.in](http://www.amts.co.in)



localhost/AMTS/index.php Login AMTS-BUS-PASS Ahmedabad Municipal T goswami

www.ams.co.in/SitePage.aspx?id=31

Ahmedabad Municipal Transport Services

Ahmedabad Municipal Transport Service

**About us** **Home** **Departments** **R T I** **Travel fare** **Services** **Tender** **Advertisements**

**About Ahmedabad**

Amdavad is well known among ancient cities of India. Ahmed Shah, ruler of Gujarat in those days established this city in 1411, hence it was named as Ahmedabad, and with the passage of time it became famous as Amdavad. There is a saying about the birth of this city:

"Jab kutte par Sassa aaya, Tab Badshah ne shahar basaayaa".  
(When the rabbit attacked the dog, the Sultan populated the city).

This saying indicates something rather unique, as compared to the general events. The sultan must have visualized something special on the land of this place, therefore he selected it for establishing a city. Many peculiarities in civilization, sculpture, architecture, trade & commerce and industrial development are class apart even today. Economy and practical dexterity have grown with the life of a man from Amdavad. There is an unique personality in the resident of Amdavad, staying in remote foreign countries or in various other states of India; and they can be marked different. The father of Nation Mahatma Gandhi had started the movement of freedom, keeping in view Independence of India, and its functional centre was Amdavad. Ashrams at Kochrab and at Sabarmati were the main centre of the Non-co-operation movement. Strongly attached to truth and non-violence, Respected BAPU had published two periodicals – NAVJIVAN (Gujarati) and YOUNG-INDIA (English) and that had spread the values throughout India.

Gujarat Vidyapith has been founded here in order to establish the education system according to Indian culture and to abandon the British education, that nurtured the mentality of slaves. Great personalities such as Vinoba Bhave and Kaka Kelkar had stayed at Sabarmati Ashram and Vidyapith here in Amdavad, for in many years. Jahangir, the mogul ruler at Delhi, had situated at Shahibaug near the bank of Sabarmati river, reigned as the commander of

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localhost/AMTS/index.php Login AMTS-BUS-PASS Ahmedabad Municipal T goswami

www.ams.co.in/SitePage.aspx?id=58

Ahmedabad Municipal Transport Services

Ahmedabad Municipal Transport Service

**About us** **Home** **Departments** **R T I** **Travel fare** **Services** **Tender** **Advertisements**

**Services**

**Travel charges at different routes :**

Every adult passenger is charged fare as mentioned under :-

Stage No.	Fare (Paise)	Stage No.	Fare (Paise)
1	200	8	800
2	300	9	800
3	400	10	900
4	500	11	900
5	600	12	1000
6	700	13	1000

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localhost/AMTS/index.p Login AMTS-BUS-PASS Ahmedabad Municipal T goswami

www.amtsoin/SitePage.aspx?id=34

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Ahmedabad Municipal Transport Service

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**Right to information**

Right to information  
Right to information

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localhost/AMTS/index.p Login AMTS-BUS-PASS Ahmedabad Municipal T goswami

www.amtsoin/SitePage.aspx?id=42

Ahmedabad Municipal Transport Services

Ahmedabad Municipal Transport Service

About us Home Departments R T I Travel fare Services Tender Advertisements

**Advertise**

Ahmedabad Municipal Transport Service has given rights to advertise on buses, bus terminous and bus shelters to the following agencies.

Sr No	Name of Place	Name of Agency	Name of Contact Person	Phone No	E Mail
1	All types of Bus Shelters (Regular & Decorated) throughout the Ahmedabad City	Sambhaav Media Ltd	Indrasinh Zala	9825034802 079-46036818	sambhaav@sambhaav.com

1:18 PM 5/8/2017

# Chapter – 3

## PURPOSED WEBSITE

## **Introduction**

The AMTS-BUS-PASS-SYSTEM is a online web application which provides bus passes to the students, service and senior citizens online from anywhere in ahmedabad.

## **Functionalities**

- This system provides online bus passes to the customers.
- This system provides online payment facility.
- This system is available at 24\*7.
- Customer can access the system from anywhere.

## **Advantages**

- Customers do not need to go to the amts office.
- They don't need to be in a long queue to get their pass.
- Provides online payment facility.
- Customers can apply for pass from anywhere any time.
- This system is available at 24\*7.
- They don't need to spend their more time behind getting the pass.

## **System modules**

### **Admin**

- Account setting
- User profile
- Branch manager
- View feedback
- Manage payment

### **User**

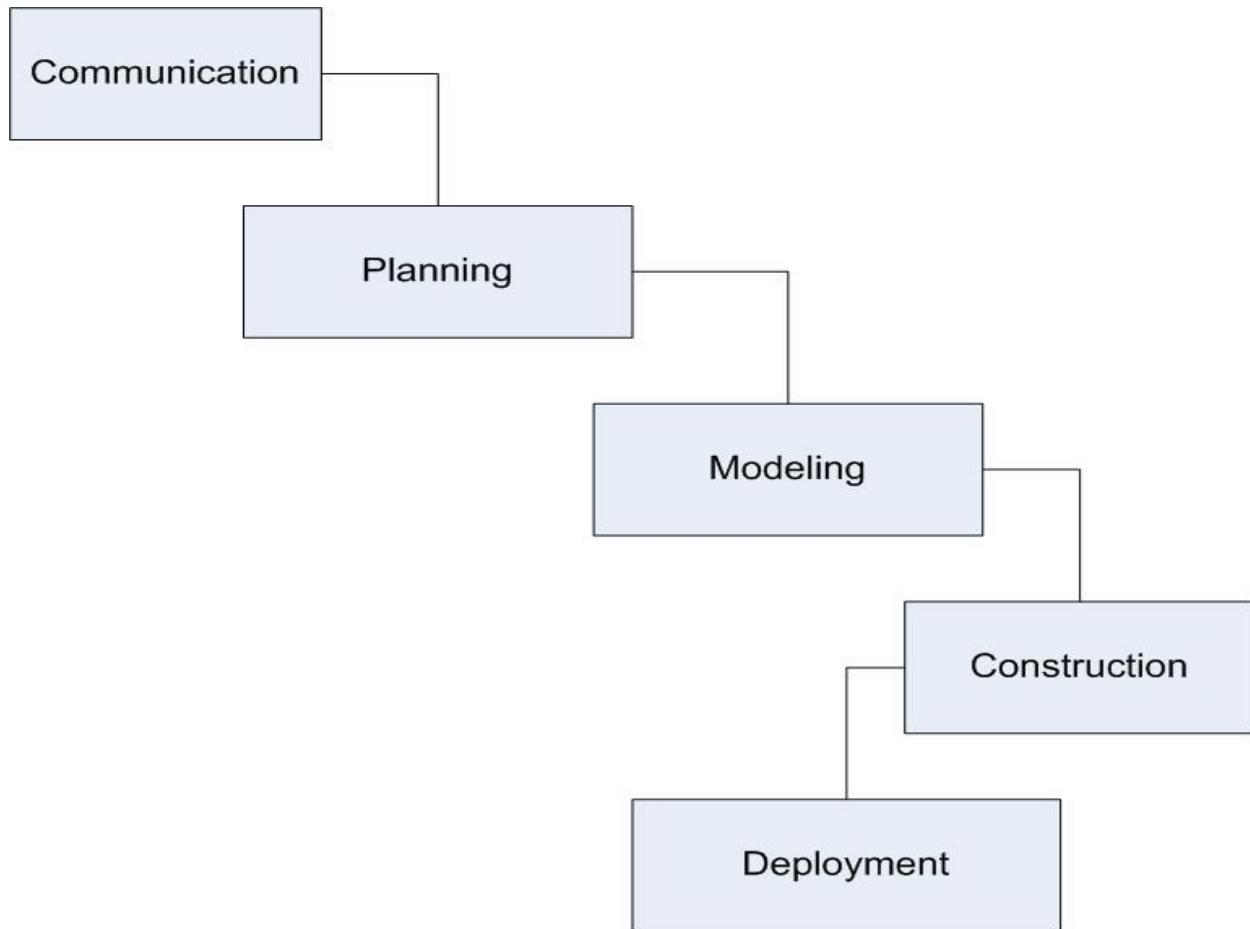
- Account setting
- Request for pass
- Cancel pass request
- Give feedback
- Login/logout
- Give payment

### **Branch manager**

- Account setting
- Student pass requests
- Service pass requests
- Senior citizen pass requests
- Approve pass requests
- Cancel pass requests

## Process model

Waterfall model is used for this system.



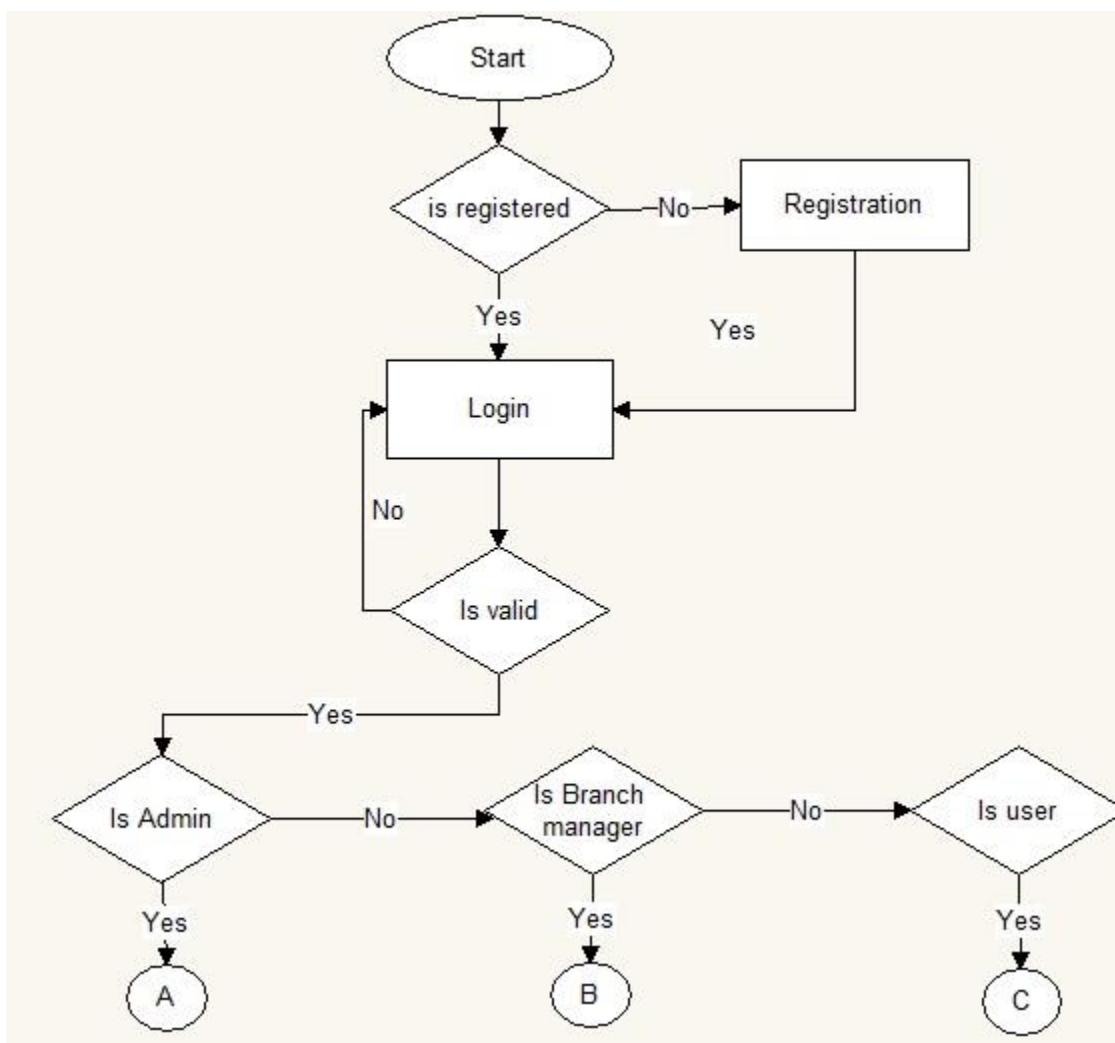
## Reason to choose this model

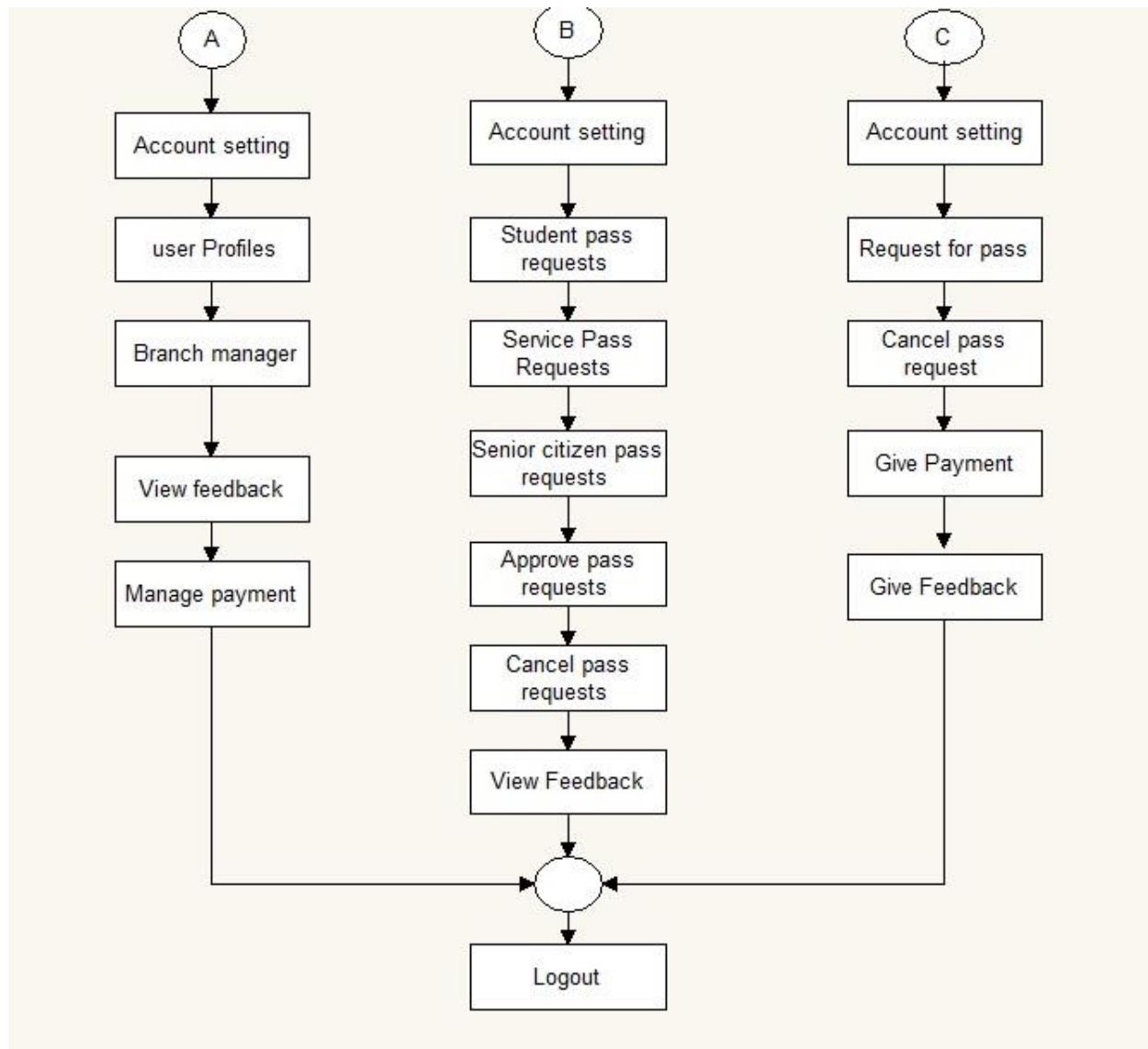
- This project is used for getting the pass.
- All the requirements are gathered In advance.

# Chapter – 4

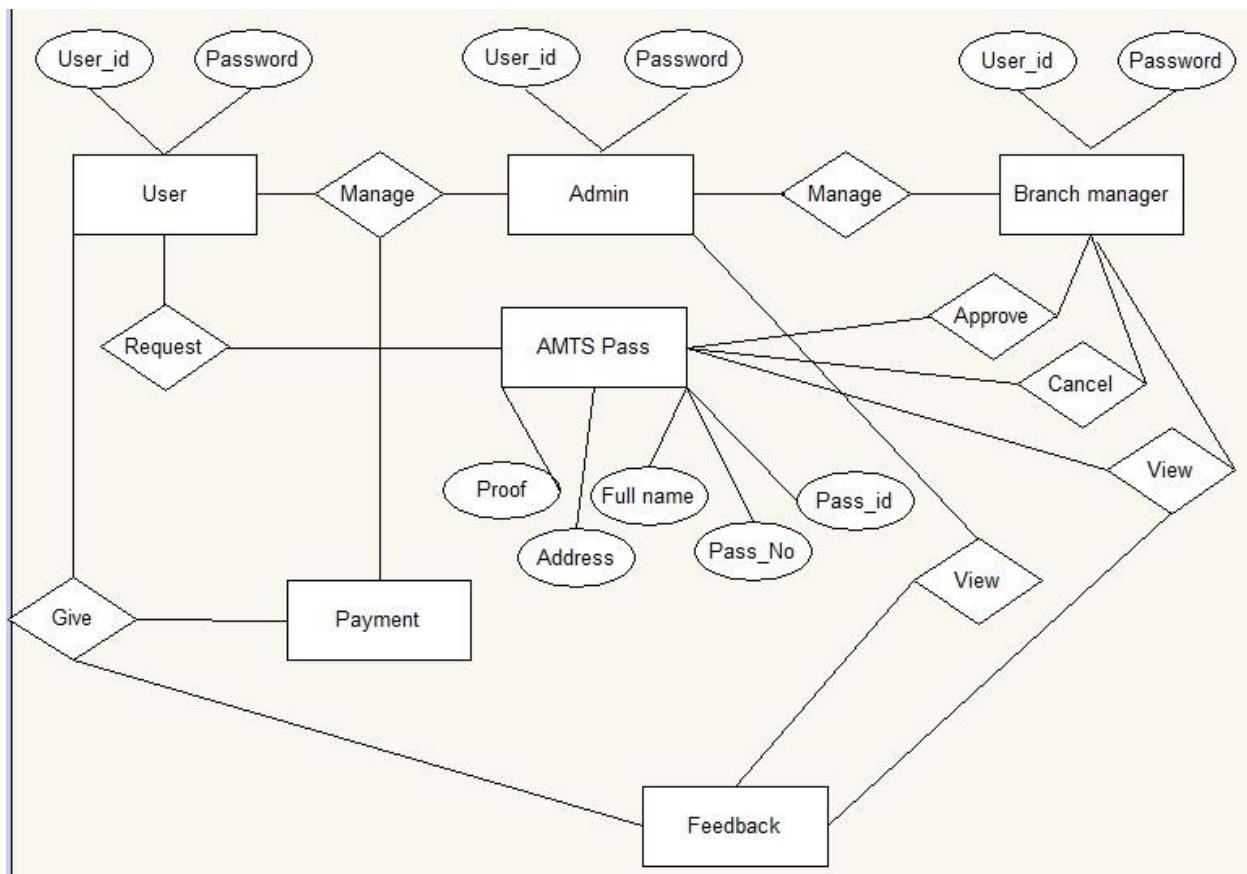
## SYSTEM DESIGN

### System flow diagram



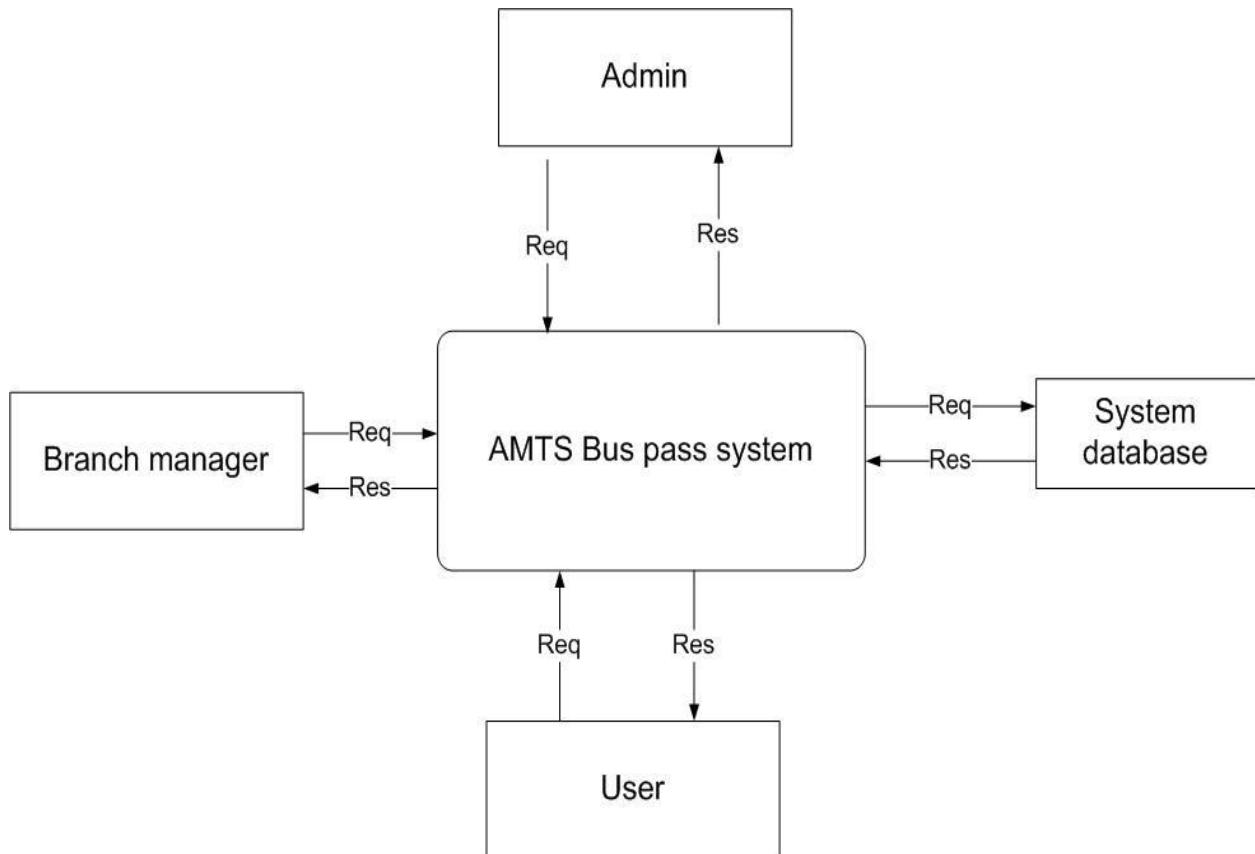


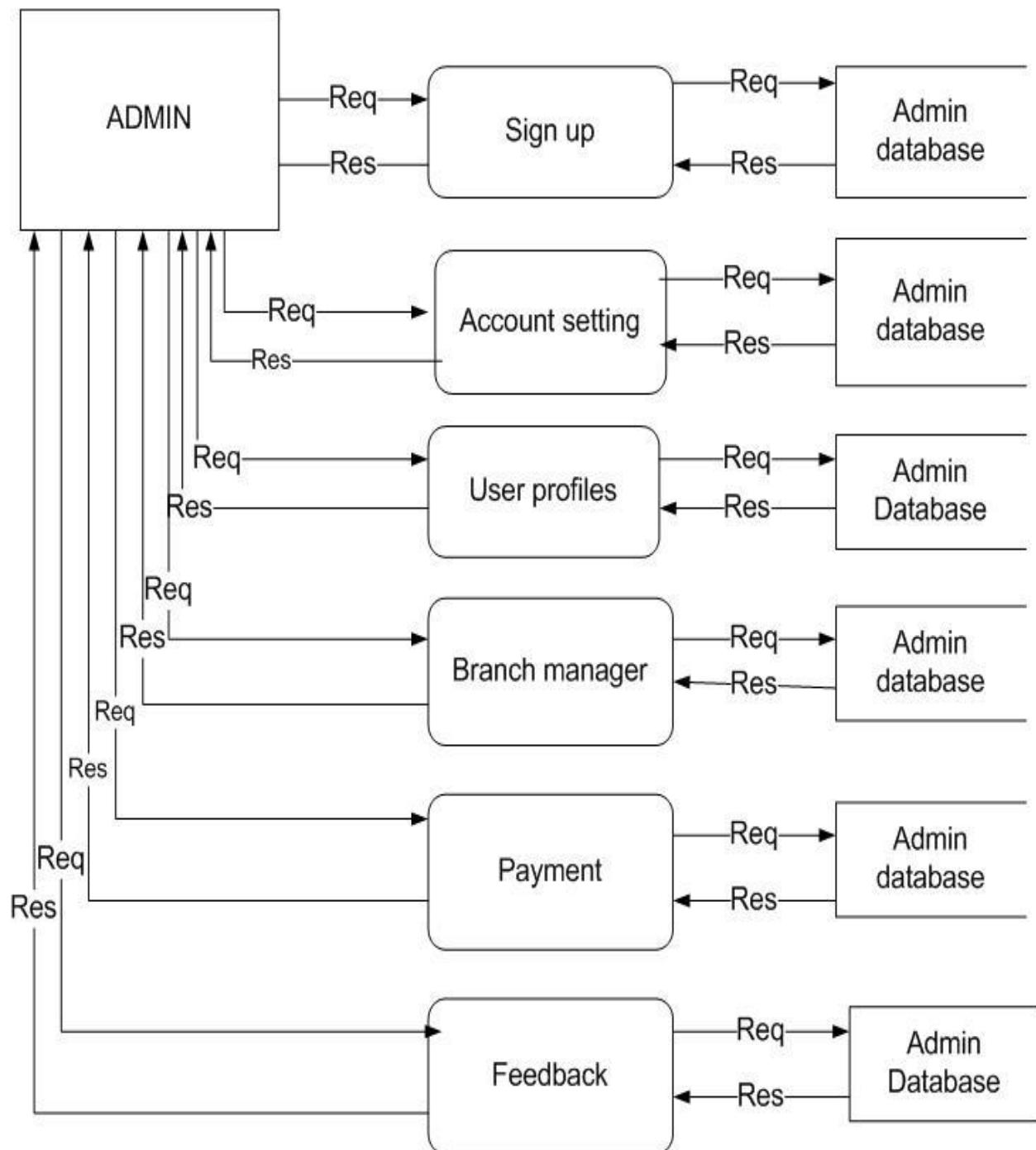
## E-R diagram

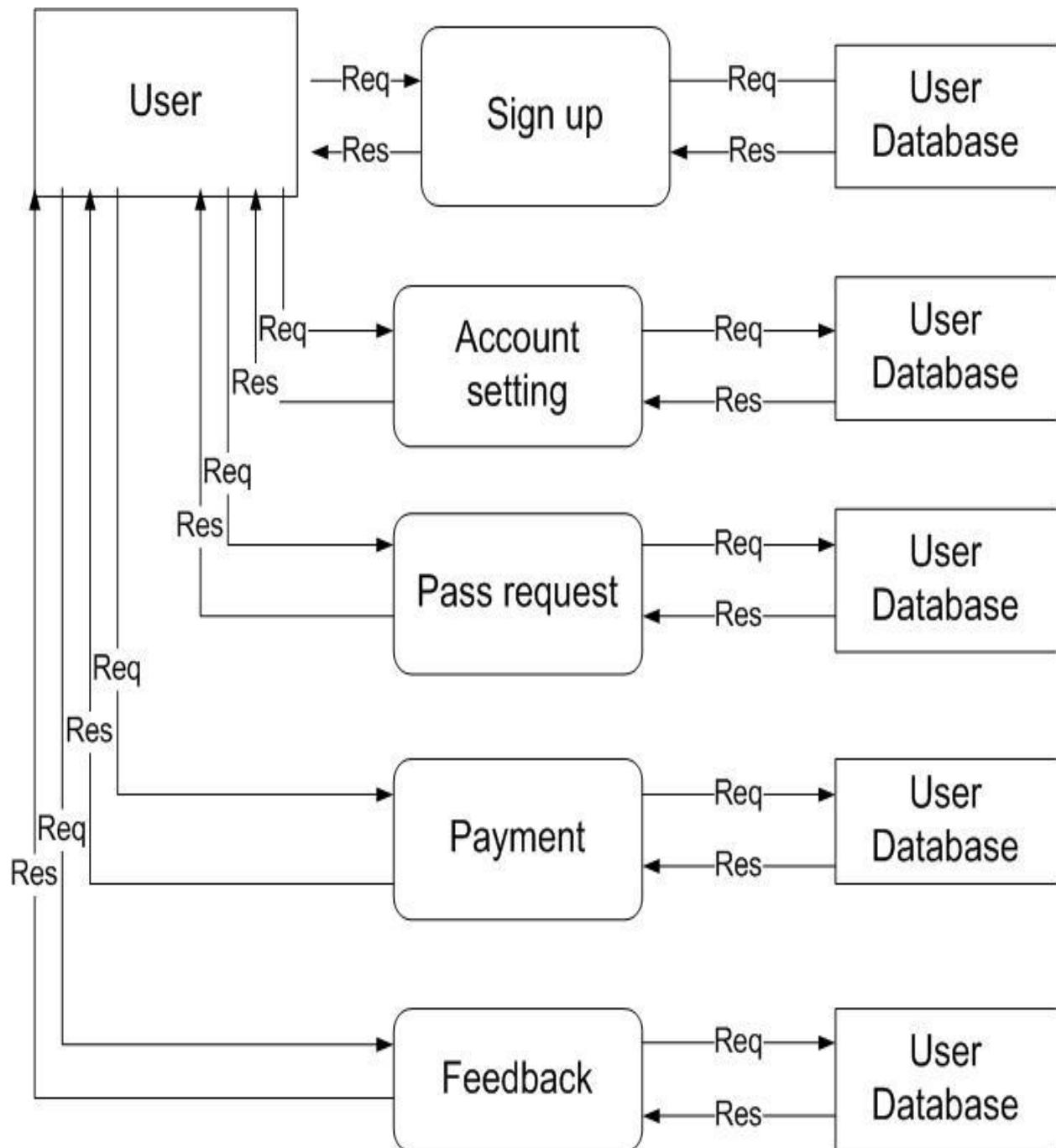


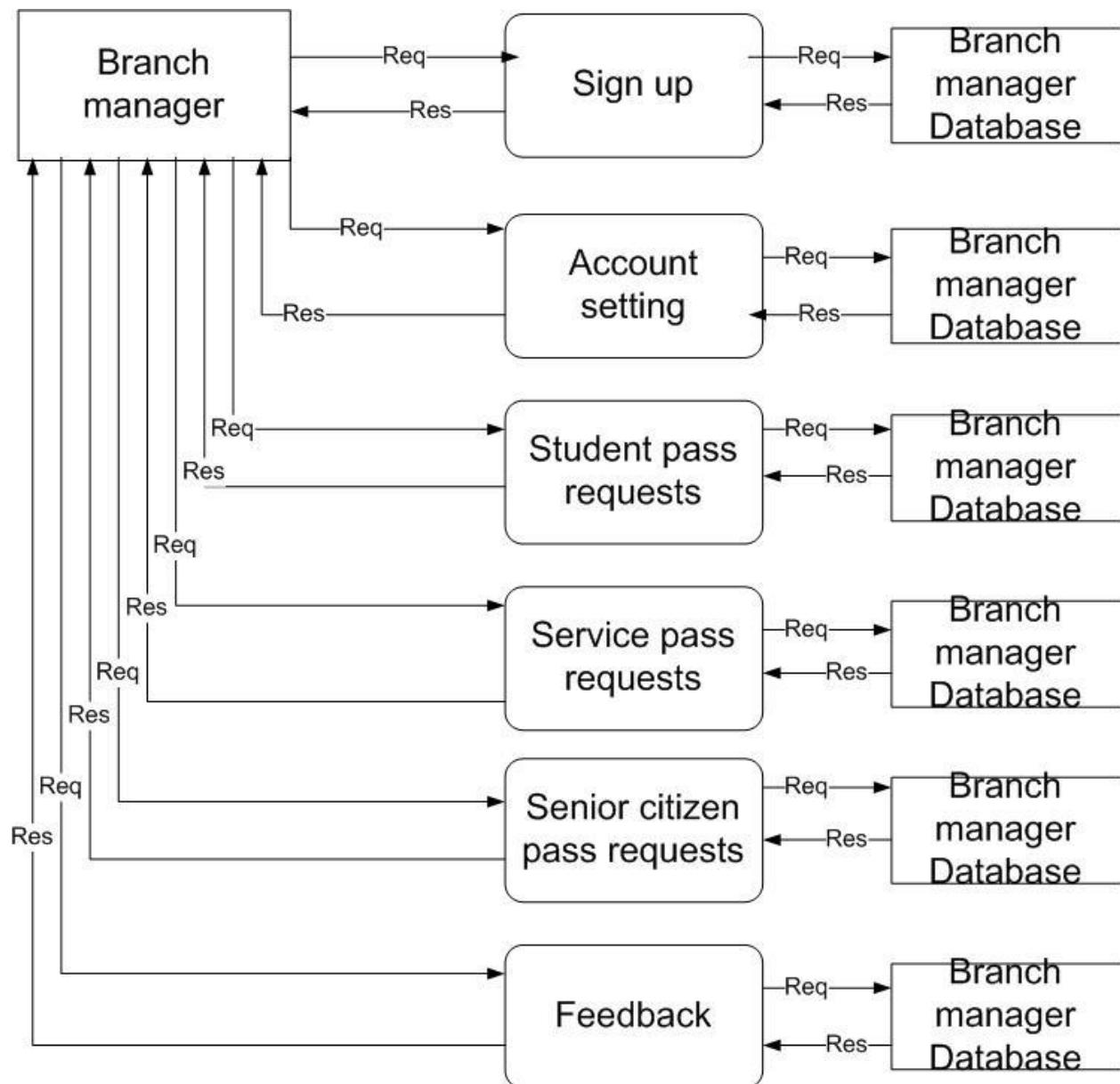
## Data Flow Diagram

Context level:

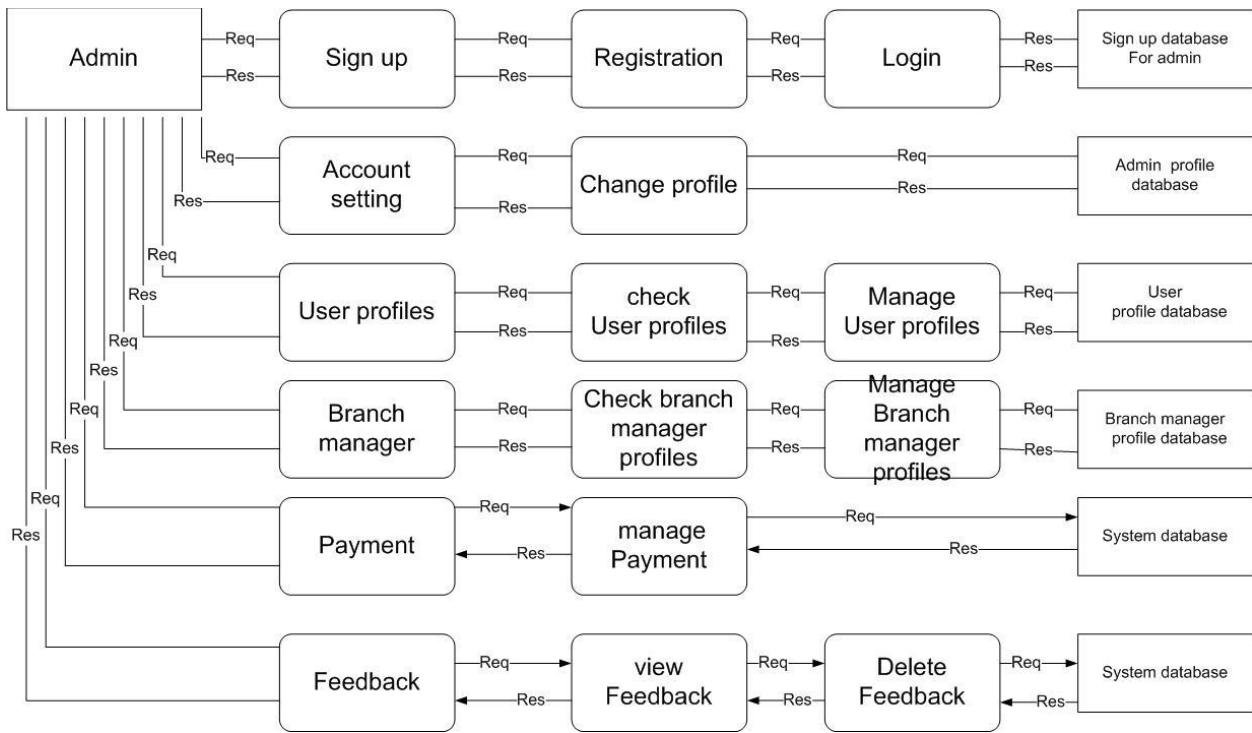


**Admin 1 level Diagram**

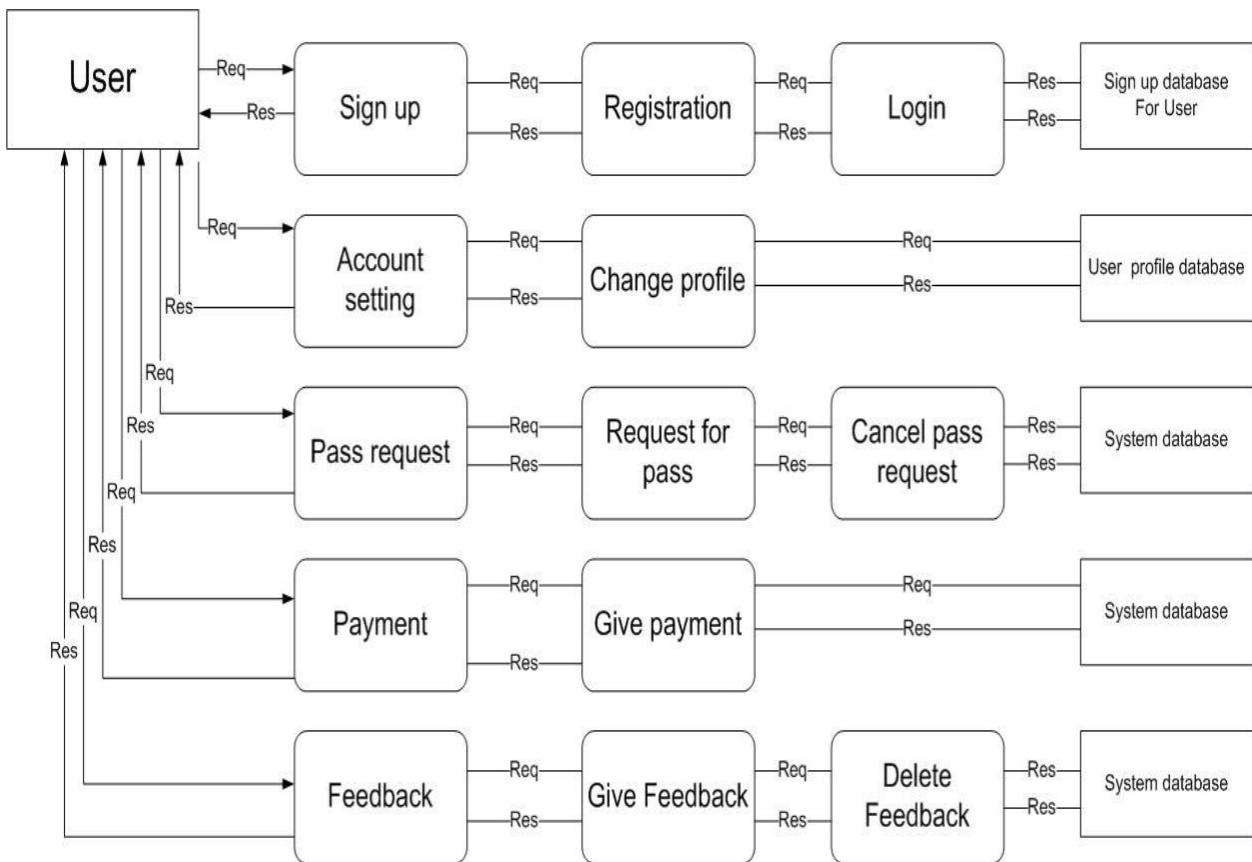
**User 1 level diagram**

**Branch-manager 1 level Diagram**

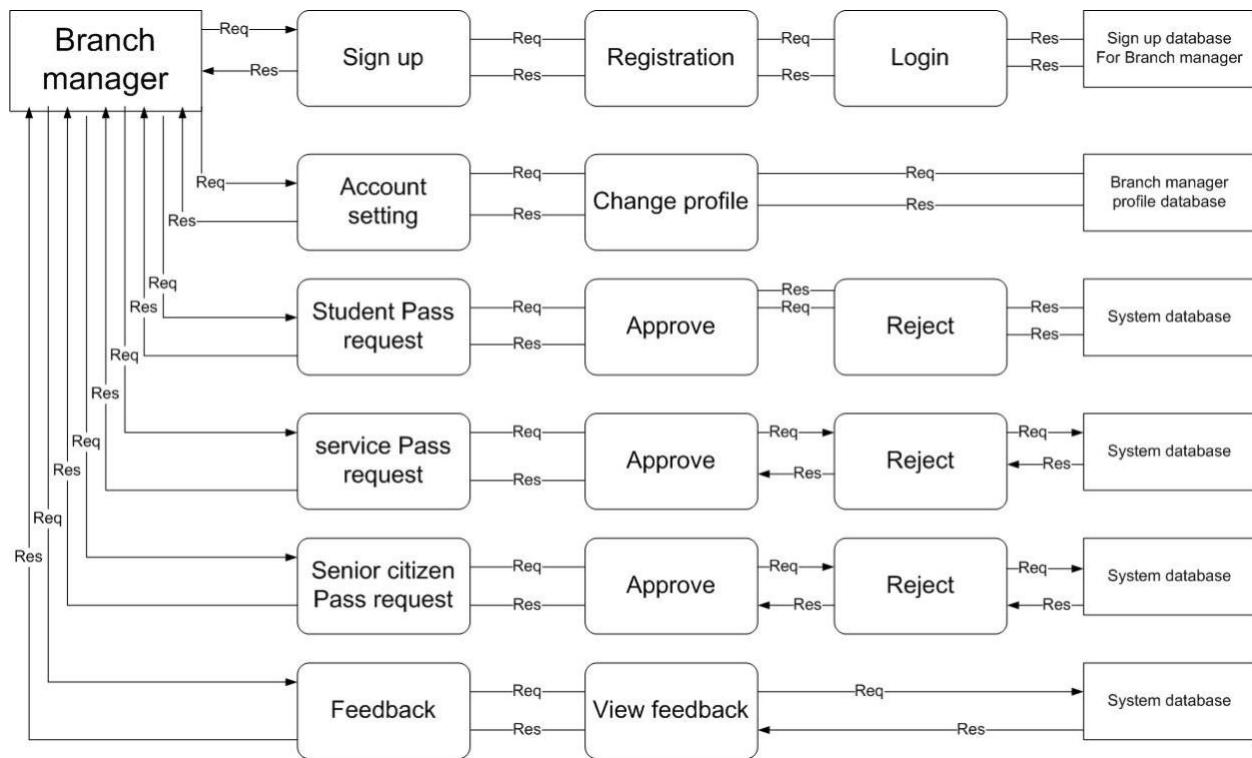
## Admin 2 level Diagram



**User 2 level Diagram:**

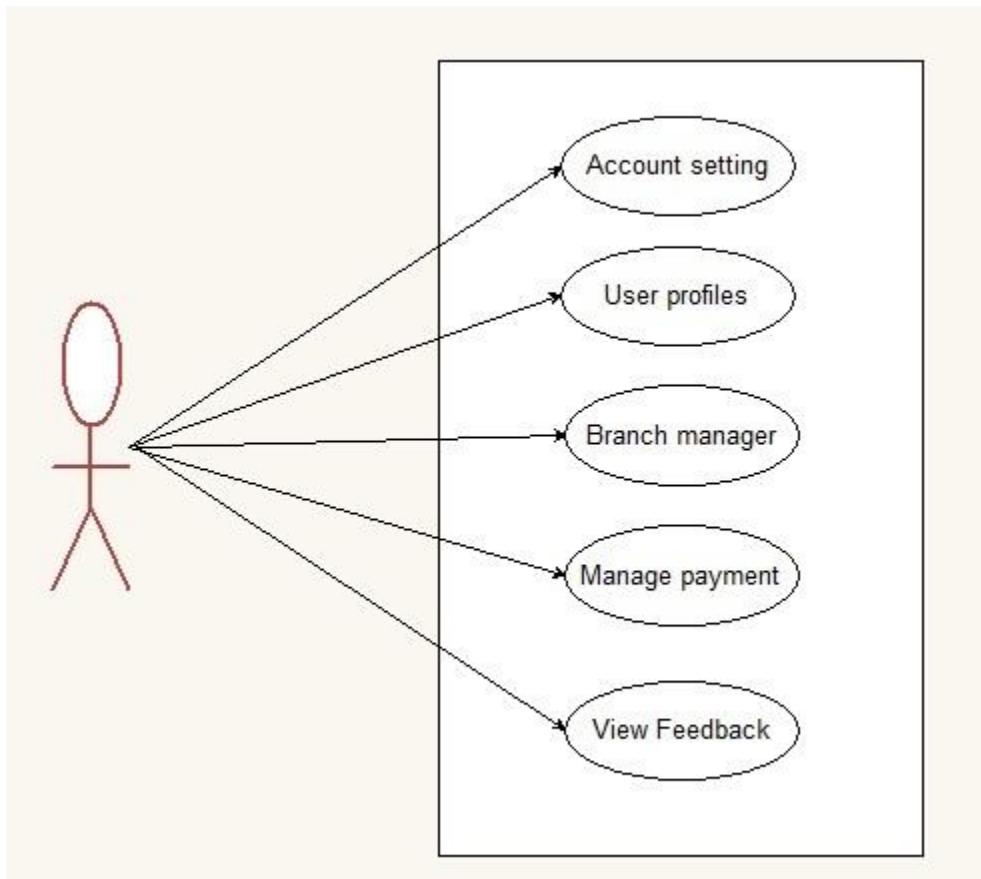


## Branch manager 2 level Diagram

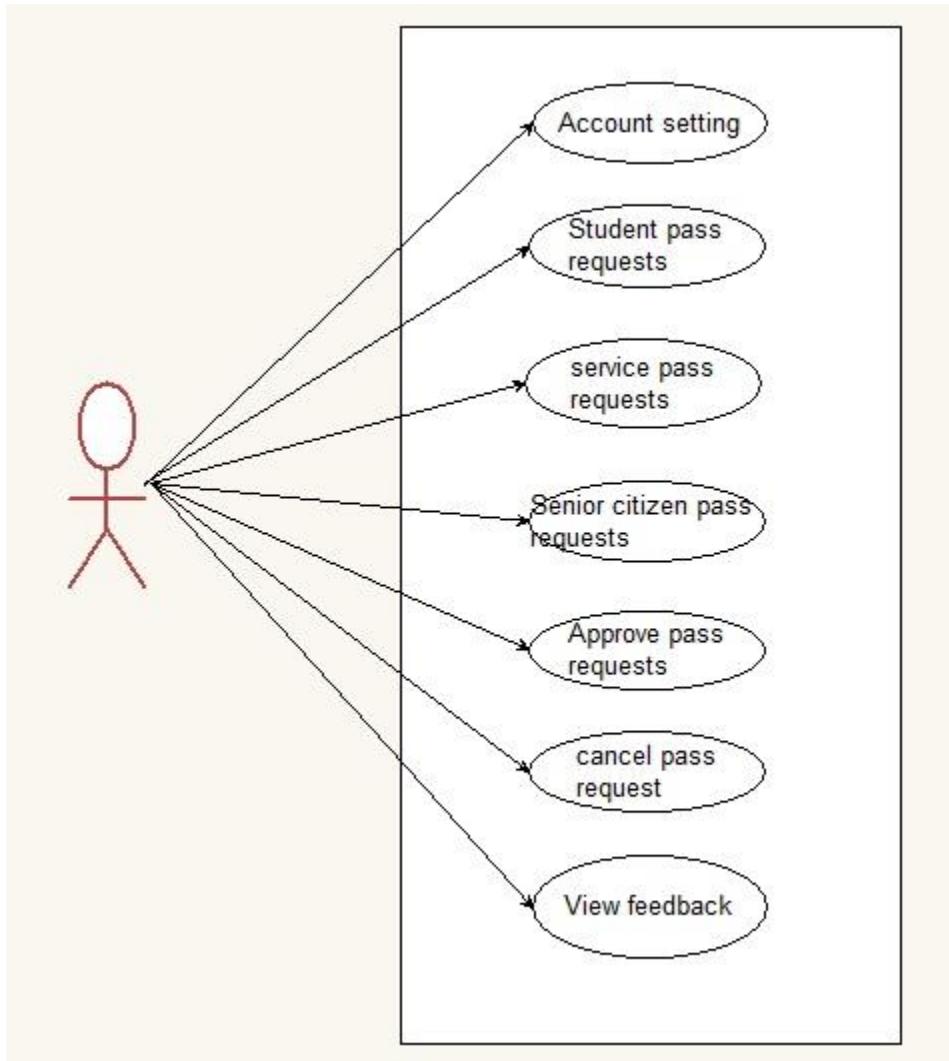


### Use case diagram

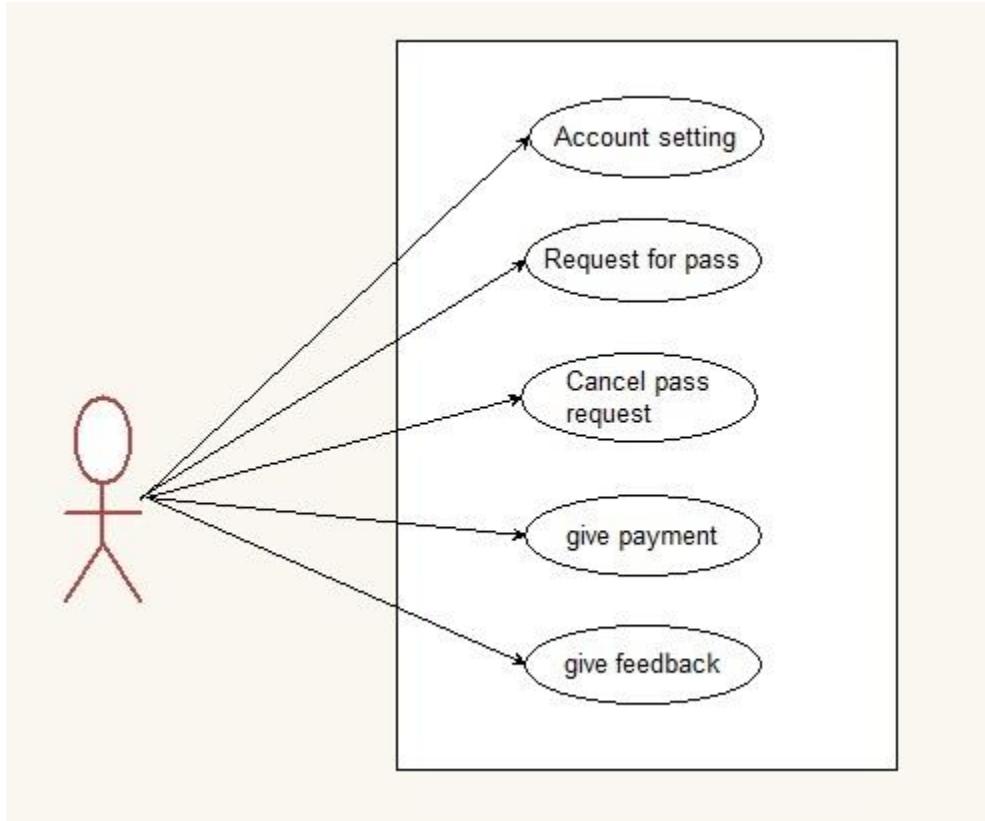
Admin:



**Branch manager:**



User:



## Data Dictionary

### **Table name: Admin**

Description: - it stores Login information for admin

Primary key: - user id

Field	Type	Size	Constraint	description
User_id	Varchar	25	Primary key	it provides the user id of admin
Password	Varchar	25	Not null	It provides the password of admin

### **Table name: Registration**

Description: it stores the registration information for user

Primary key: registration\_id

Field	Type	Size	Constraint	description
Registration_id	Varchar	25	Primary key	it provides the registration_id of user
Username	Varchar	20	Not null	Provides username of user
Password	Varchar	20	Not null	Provides password of user
Name	Varchar	100	Not null	It provides the password of admin
Address	Varchar	270	Not null	It provides the address of user
Gender	Char	S	Not null	Gender
Birth date	Date time	-	Not null	Provides birth date of user
Age	Int	-	Not null	Provides age of the user
Contact no	Numeric	18	Not null	Provides contact no of user
Type	Varchar	15	Not null	Which type of registration
Photo	Varchar	50	Not null	Provide the upload proof of particular person

### **Table name: pass form**

Description: used to fill up the pass form

Primary key: pass id

Foreign key: pass no

Field	Type	Size	Constraint	description
Pass_id	Int	10	Primary key	it provides pass id of user
Pass no	Varchar	10	Foreign key	It provides the pass no of user
Pass type	Varchar	20	Not null	Which type of pass

Username	Varchar	50	Not null	Provides the username
Address	Varchar	100	Not null	Provides address of user
Age	Date time	S	Not null	Provides the age
Gender	Char	10	Not null	Gender
Pass limit	Varchar	30	Not null	Provides the limit of pass
Source station	Varchar	50	Not null	Provides the source station
Middle station	Varchar	50	Not null	Provides middle station
Destination Station	Varchar	50	Not null	Provides destination station
Photo	Varchar	50	Not null	Provides upload proof of particular person
College id	Varchar	50	Not null	Provides college id of student
College address	Varchar	100	Not null	Provides college address
Service place	Varchar	30	Not null	Provides service place
Service place address	Varchar	100	Not null	Provides service place address

**Table name: user**

Primary key: user-id

Field	Type	Size	Constraint	description
User type	Varchar	25	Primary key	it provides the user type of user
User_id	Varchar	25	Not null	Provides user_id of user
Password	Varchar	25	Not null	It provides the password of user

**Table name: feedback**

Description: provides the feedback information

Primary key: user\_id

Field	Type	Size	Constraint	description
User_id	Varchar	25	Primary key	it provides the user_id of user
title	Varchar	100	Not null	Provides title of feedback
description	Varchar	50	Not null	It provides the description of feedback
e-mail	Varchar	30	Not null	Provides e-mail id of user

**Table name: Branch manager****Primary key: user\_id**

Field	Type	Size	Constraint	description
User_id	Varchar	25	Primary-Key	Provides User id of branch Manager
Password	Varchar	25	Not-null	Provides password of branch manager

**Table name: Manage routs****Primary key: rout\_id**

Field	Type	Size	Constraint	description
rout_id	Varchar	25	Primary-Key	Provides rout id
from	Varchar	25	Not-null	Provides area from where you want to search
to	varchar	25	Not null	Provides area from where you want to search
Rout no	int	11	Not null	Provides rout number you want to search

**Table name: Manage payment****Primary key: payment\_id**

Field	Type	Size	Constraint	description
Payment_id	Varchar	25	Primary-Key	Provides payment id
type	Varchar	25	Not-null	Provides type of the customers
months	int	11	Not null	Provides months you want to manage payment
Payment rate	int	11	Not null	Provides payment rate
date	date		Not null	Provides date when you create payment rate

**Table name: Pass Actions****Primary key: action-id**

Field	Type	Size	Constraint	description
Action-id	Varchar	25	Primary-Key	Provides action id
type	Varchar	25	Not-null	Provides type of the customers
User-id	int	11	Not null	Provides user-id
Action	varchar	25	Not null	Provides actions of approval or rejection
date	date		Not null	Provides date when you approve or reject pass

**Table name: Payment**

**Primary key: payment-id**

<b>Field</b>	<b>Type</b>	<b>Size</b>	<b>Constraint</b>	<b>description</b>
payment-id	Varchar	25	Primary-Key	Provides provides payment id
Profile-id	int	11	Not-null	Provides profile of the customers
Payment status	varchar	25	Not null	Provides status of payment
Transaction type	varchar	25	Not null	Provides transaction type
Payment date	date		Not null	Provides date when you pay for pass
Payment receipt	varchar	25	Not null	Provides receipt of your payment

**Table name: Area****Primary key: area-id**

<b>Field</b>	<b>Type</b>	<b>Size</b>	<b>Constraint</b>	<b>description</b>
area_id	Varchar	25	Primary-Key	Provides rout id
Area-name	Varchar	25	Not-null	Provides area from where you want to search
date	varchar	25	Not null	Provides area from where you want to search

**Table name: collage detail****Primary key: collage-id**

<b>Field</b>	<b>Type</b>	<b>Size</b>	<b>Constraint</b>	<b>description</b>
collage_id	Varchar	25	Primary-Key	Provides collage id
Collage name	Varchar	25	Not-null	Provides collage name
Category	varchar	25	Not null	Provides category of the collage
Address	Varchar	25	Not null	Provides address of the collage

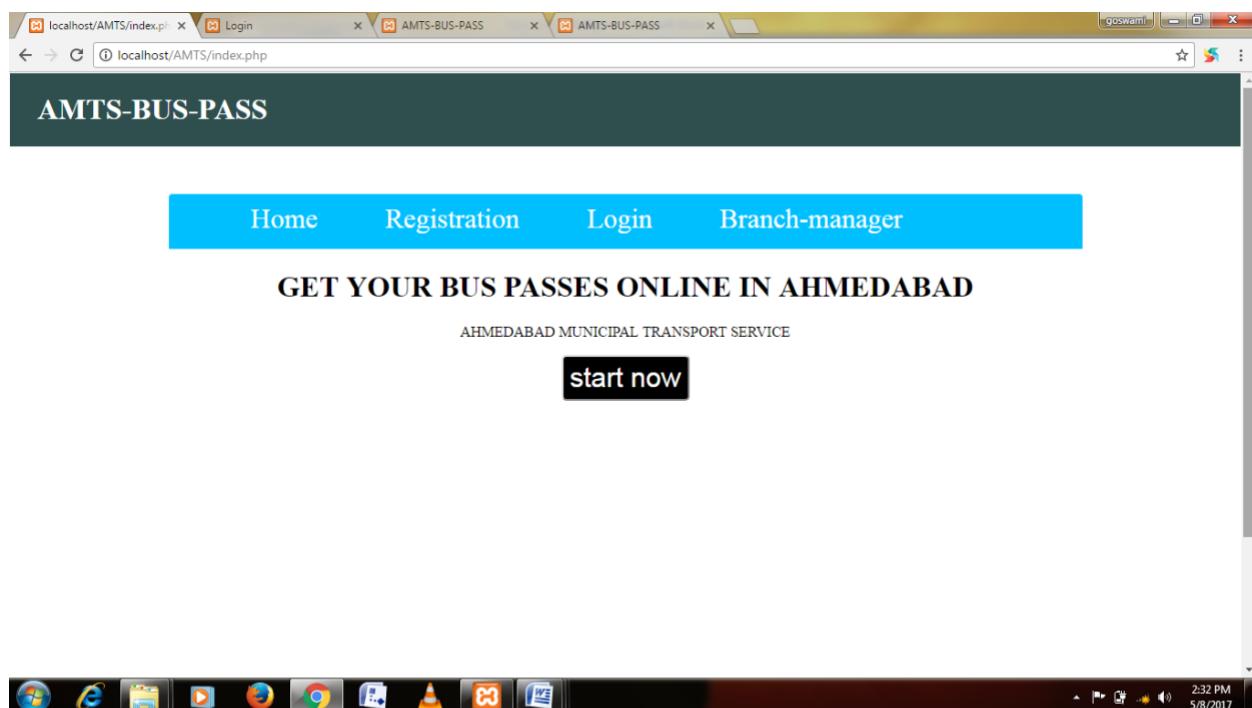
# Chapter – 5

## PROJECT IMPLEMENTATION

## Snap-shorts

User-side:

Home page:



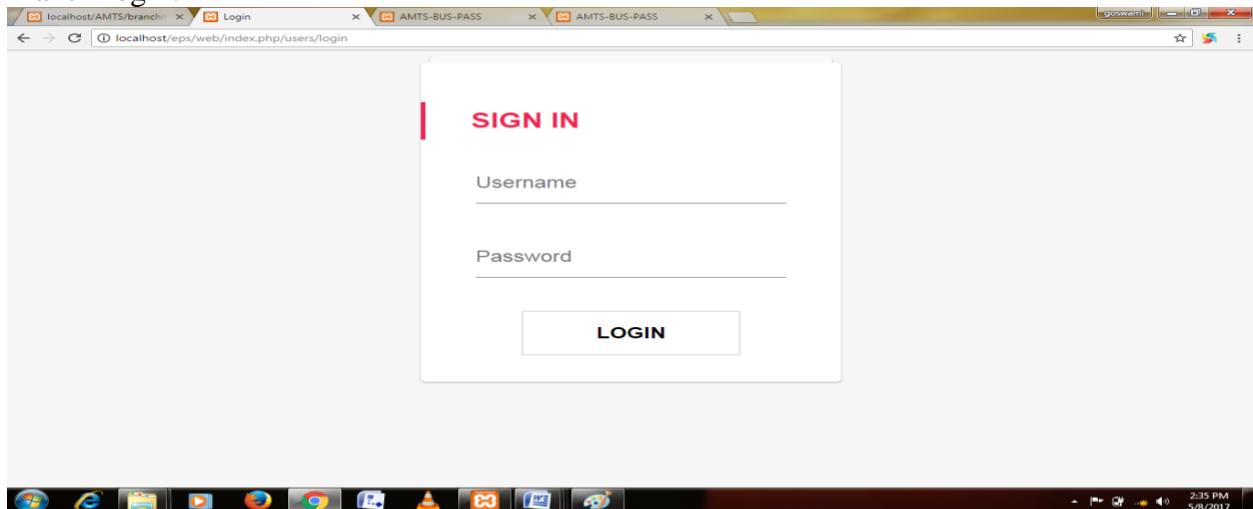
Registration:

The screenshot shows a Windows desktop environment with a taskbar at the bottom. A web browser window is open, displaying a registration form titled "AMTS-BUS-PASS". The browser has three tabs: "localhost/AMTS/Register.php", "AMTS-BUS-PASS", and another "AMTS-BUS-PASS" tab. The registration form includes fields for First-name, Last-name, Gender (male or female), Address, Mobile, User\_id, and Password, along with a "submit" button.

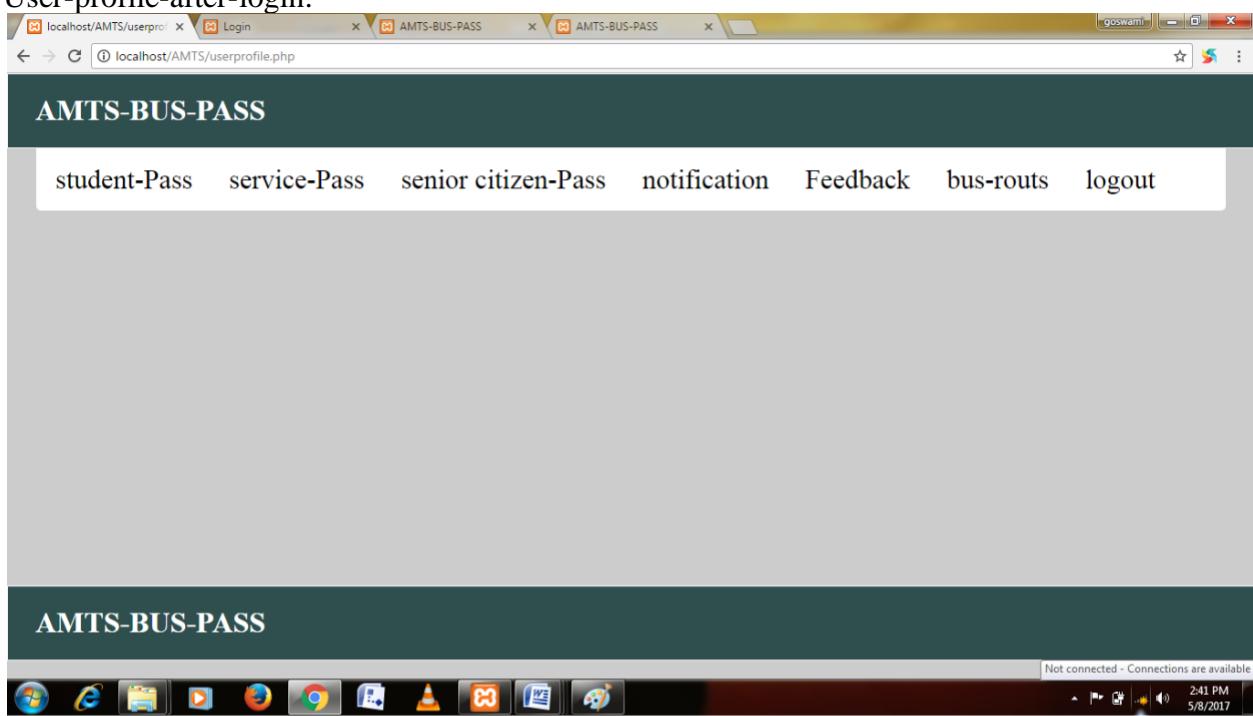
Login:

The screenshot shows a Windows desktop environment with a taskbar at the bottom. A web browser window is open, displaying a login form titled "AMTS-BUS-PASS". The browser has two tabs: "localhost/AMTS/login.php" and "AMTS-BUS-PASS". The login form includes fields for User\_id and Password, along with a "login" button. The title bar of the browser window also displays "AMTS-BUS-PASS".

Branch-login:



User-profile-after-login:



**Student-pass-request:**

**Student pass form**

First-name:   
 Last-name:   
 Address:   
 Age:  please enter your age  
 Gender:  male  female  
 collage-name:   
 collage-address:   
 collage-id-proof:  Choose File No file chosen  
 fee-receipt:  Choose File No file chosen  
 photo:  Choose File No file chosen  
 Mobile:   
 Pass-duration:

**Service-pass-request:**

**service pass form**

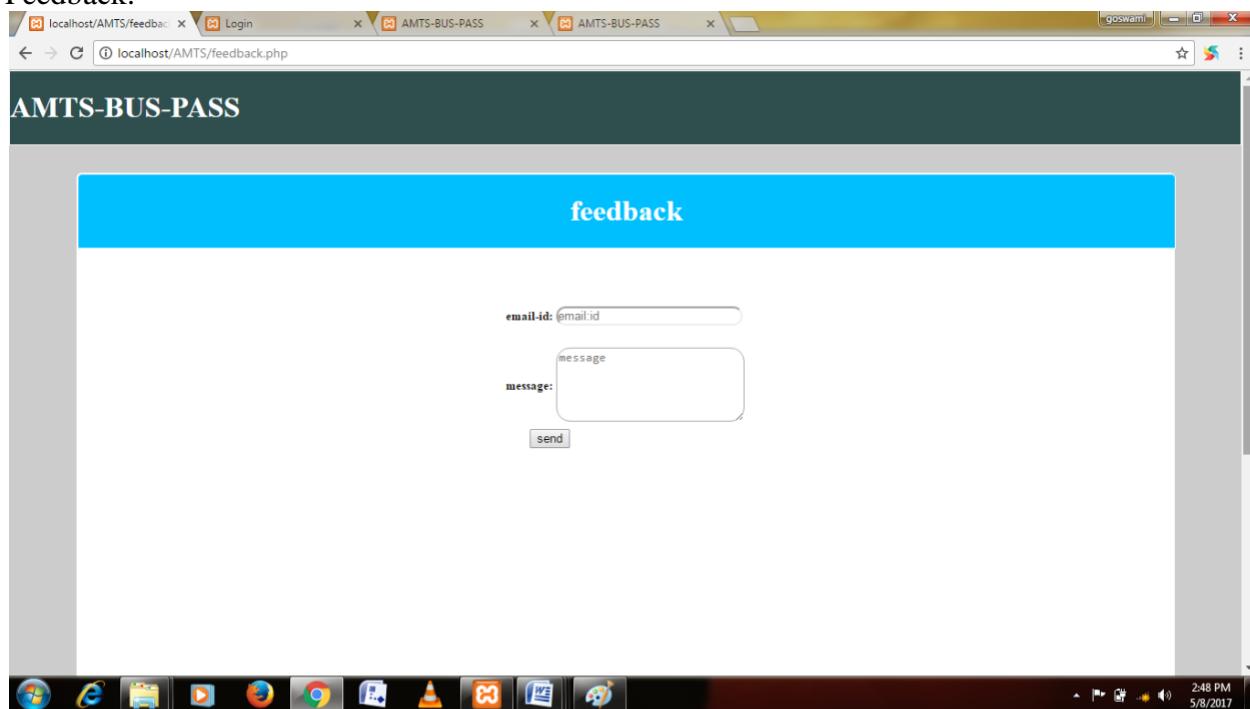
First-name:   
 Last-name:   
 Gender:  male  female  
 Age:  please enter your age  
 Address:   
 job-place:  enter your job place name  
 job-address:   
 voter-id:  Choose File No file chosen  
 photo:  Choose File No file chosen  
 Mobile:  enter your mobile  
 pass-duration:  enter your pass duration

Senior-citizen-pass:



A screenshot of a web browser window showing the "senior citizen pass form". The title bar says "AMTS-BUS-PASS". The page has a blue header bar with the text "senior citizen pass form". Below it is a form with fields for First-name, Last-name, Gender (radio buttons for male and female), Age (text input with placeholder "please enter your age"), Address (text input), photo (file upload button with placeholder "Choose File No file chosen"), voter-id (file upload button with placeholder "Choose File No file chosen"), Mobile (text input with placeholder "enter your mobile"), and pass-duration (text input with placeholder "enter your pass duration"). A "send request" button is at the bottom.

Feedback:



A screenshot of a web browser window showing the "feedback" page. The title bar says "AMTS-BUS-PASS". The page has a blue header bar with the text "feedback". Below it is a form with fields for email-id (text input with placeholder "@mail.id") and message (text area). A "send" button is at the bottom.

Bus-routs:

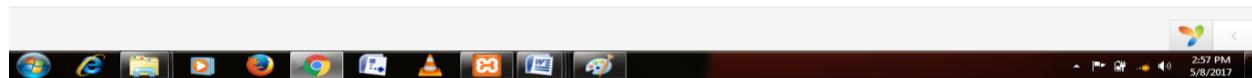
The screenshot shows a web browser window with three tabs open: 'localhost/AMTS/busroute', 'Login', and 'AMTS-BUS-PASS'. The main content area is titled 'bus-routs' and displays a search form with dropdown menus for 'From' (set to 'amraivadi') and 'To' (set to 'ambavadi'), and a 'find-rout' button. Below the form is a table listing bus routes. The table has columns: Rout-no, From, To, and Via. The data in the table is as follows:

Rout-no	From	To	Via
135	nikol	laldarvaja	tolnaka,kalupur,laldarvaja
88	nikol	ranip	nikol,kalupur,ranip
39	nikol	paldi	nikol,kaluput,astodiya,paldi
88	kankuben	bhalabhai	bhamhotiya-nagar,aighadhi
35	nikol	laldarvaja	kalupur
37	bapunagar	polytechnic	kalpupe
0	Amraivadi	Amraivadi	
0			
1355			gjbnbgfghfhg
55	ambavadi	bapunagar	lijhjhj
33	bapunagar	engage-burea	nikol,hskak
44	ambavadi	dariyapur	kalupur,nikol,ambavadi

Branch-profile-after-login:

The screenshot shows a web browser window with three tabs open: 'localhost/AMTS/bprofile', 'Login', and 'AMTS-BUS-PASS'. The main content area displays the logo and name of the service: 'Ahmedabad Municipal Transport Service!'. The top navigation bar includes links for 'Home', 'managerouts', 'Passreq', and 'Logout (branch)'. The system tray at the bottom right shows the date and time as 2:49 PM 5/8/2017.

Ahmedabad Municipal Transport Service!



**Manage-routs:**

**Routs**

Showng 1-6 of 6 items.

#	ID	R No	R Frm	R To	Via
1	1	12	1	2	nikol,uttamnagar,bapunagar
2	2	23	1	2	sdafsdafsadff
3	3	12	2	1	kalupur
4	4	12	2	1	kalupur
5	5	12	2	1	kalupur
6	6	44	1	3	nikol,bapunagar,laldarvaja

**Create-routs:**

**Create Routs**

R No

R Frm

R To

Via

**Submit**



## Pass-request:

Showing 1-8 of 8 items.

#	ID	Type	Profile ID	Start Date	Expire Date
1	1	2	1	0000-00-00	0000-00-00
2	2	2	1	0000-00-00	0000-00-00
3	3	1	1	0000-00-00	0000-00-00
4	4	1	1	0000-00-00	0000-00-00
5	5	1	(not set)	0000-00-00	0000-00-00
6	6	1	1	0000-00-00	0000-00-00
7	7	1	1	0000-00-00	0000-00-00
8	8	1	1	0000-00-00	0000-00-00

## Full-view-pass-request:

1

Approve    Reject

ID	1
Type	2
Profile ID	1
Start Date	0000-00-00
Expire Date	0000-00-00
Status	(not set)
Remark	yes
Student Fee Receipt ID	1
Payment Status	(not set)
Payment Date	(not set)
Transaction Type	(not set)
Payment Receipt No	(not set)

## Admin-Side

### Dashboard:

Ahmedabad Municipal Transport Service

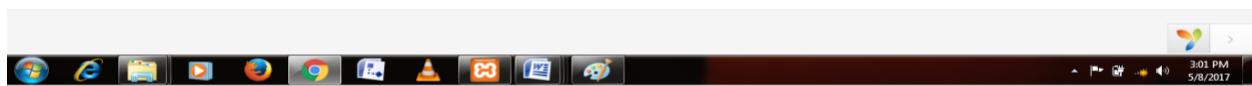
### Student-details:

ID	College Details ID	Name	Email	Contact No
1	1	jignesh	kkk@gmail.com	9090909090
2	1	bb		(not set)
3	1	asdasdasd		(not set)
4	(not set)	(not set)	(not set)	(not set)
5	(not set)	(not set)	(not set)	(not set)
6	(not set)	(not set)	(not set)	(not set)
7	1	mehul	emailasdafjsadj	7874432401
8	1	sdfjsdafsdf	asdjasd@gmail.com	7874432401
9	1	goswami kalpeshgiri	kalpesh@gmail.com	9586912008

## Service-details:

Service Pass Member Details

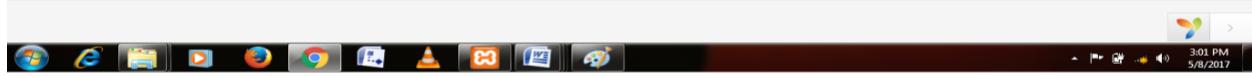
#	ID	Name	Email ID	Contact No	Profile Pic
1	1	Ankitgiri Prahladgiri Goswami	Ankit@gmail.com	7874532221	panding

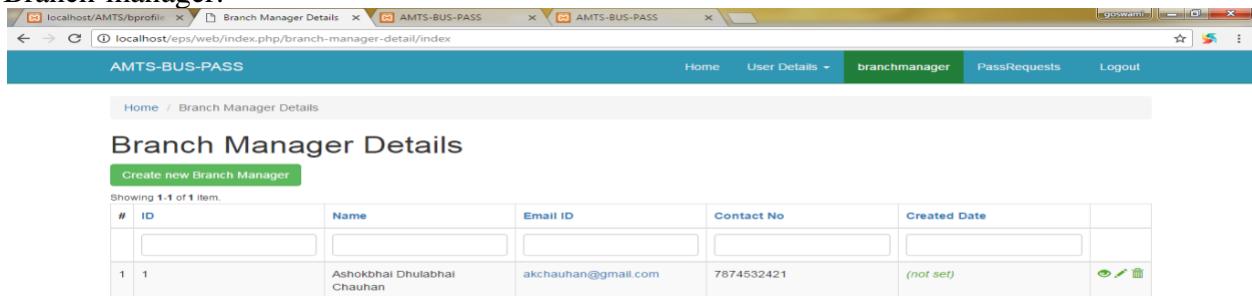


## Senior-citizen-details:

Senior Citizen Member Details

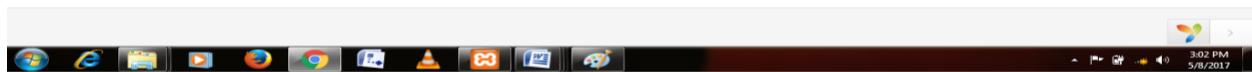
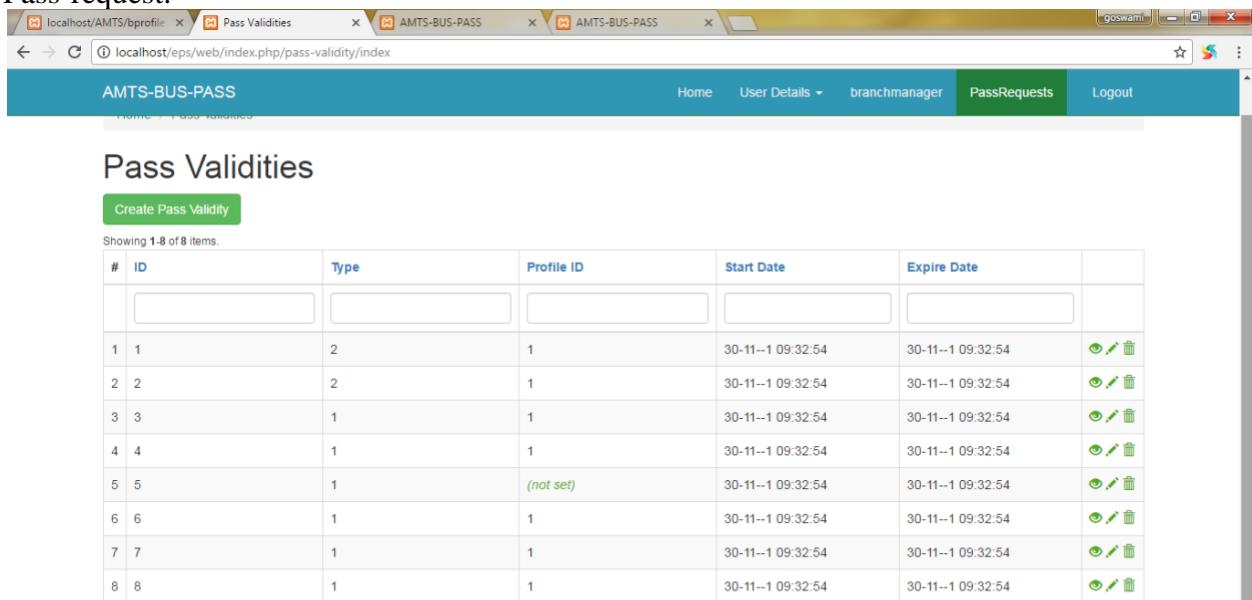
#	ID	Name	Email ID	Contact No	Profile Pic
1	1	babubugirl	babu@gmail.com	7874432304	asdf



**Branch-manager:**


The screenshot shows a web browser window titled "AMTS-BUS-PASS" with the URL "localhost/eps/web/index.php/branch-manager-detail/index". The page header includes "AMTS-BUS-PASS", "Home", "User Details", "branchmanager" (which is bolded), "PassRequests", and "Logout". Below the header, a breadcrumb navigation shows "Home / Branch Manager Details". A green button labeled "Create new Branch Manager" is visible. The main content area displays a table with one row, showing the following data:

#	ID	Name	Email ID	Contact No	Created Date	Action
1	1	Ashokhai Dhalbhai Chauhan	akchauhan@gmail.com	7874532421	(not set)	

**Pass-request:**


The screenshot shows a web browser window titled "AMTS-BUS-PASS" with the URL "localhost/eps/web/index.php/pass-validity/index". The page header includes "AMTS-BUS-PASS", "Home", "User Details", "branchmanager", "PassRequests" (which is bolded), and "Logout". Below the header, a breadcrumb navigation shows "Home / Pass Validities". A green button labeled "Create Pass Validity" is visible. The main content area displays a table with eight rows, showing the following data:

#	ID	Type	Profile ID	Start Date	Expire Date	Action
1	1	2	1	30-11-1 09:32:54	30-11-1 09:32:54	
2	2	2	1	30-11-1 09:32:54	30-11-1 09:32:54	
3	3	1	1	30-11-1 09:32:54	30-11-1 09:32:54	
4	4	1	1	30-11-1 09:32:54	30-11-1 09:32:54	
5	5	1	(not set)	30-11-1 09:32:54	30-11-1 09:32:54	
6	6	1	1	30-11-1 09:32:54	30-11-1 09:32:54	
7	7	1	1	30-11-1 09:32:54	30-11-1 09:32:54	
8	8	1	1	30-11-1 09:32:54	30-11-1 09:32:54	



# Chapter – 6

## TESTING

## 8.1 RISK ANALYSIS

Risk Analysis is the important aspect of the project planning, whenever planning the software, programmer always has to consider the risks of the projects which he might face in the future during designing the software.

Risks are generally of two types:

- Proactive Risk
- Reactive Risk

### 8.1.1 Risk Identification:

During the project plan we have consider all the proactive which we have think we will face during the project period. Here I have listed the risks which we have considered during the project plan:

- Possibility that the components are not available during the project period.
- Possibility that products purchased was not compatible.
- Possibility that the hardware resources are not available during the project period.
- Possibility that Ethernet connection between computer systems may not occur, to which we have to make the connection might not available.
- Possibility that software inter-compatibility may not be there.

### 8.1.2 Risk Impact:

Risk	Effect
Possibility of getting illness	Serious
Possibility of Component not available	Catastrophic
Possibility of Component not effective	Serious
Possibility of Hardware resources are not available	Catastrophic
Possibility of Communication between System might not happen on time	Serious

Table 8.1: Risk Impact

## Proactive Risk Assessment Table:

This are the proactive risks which we can consider during the project plan period so we can cop up with them easily and we can find the solution easily but we can find other proactive risks which we haven't considered in the project plan :

Risk	Effect
Possibility of because of some people we have lost the backup of some days	Serious
Possibility of because of Finance problem we have company we won't get the full resources	Catastrophic
Possibilities that the Project manager leave the project	Serious

Table 8.2: Proactive Risk Assessment Table

## Reactive Risk Assessment Table:

Proactive risks are most dangerous risk which we haven't considered during the project period and to cop up with them is not easy. These kinds of risks are risks, so programmer must have been active to cop up with them smartly.

### Risk Estimation:

Risk estimation attempts to rate each risk in two ways:

- The likelihood or probability that risk is real and.
- The consequences of the problems associated with the risk should it occurs.
- The project planner, along with other managers and technical staff, performs four risk projection steps:
  - Establish a scale real that reflects the perceived likelihood of a risk.
  - Delineate the consequences of the risk.
  - Estimate the impact of the risk on the project and the product.
  - Note the overall accuracy of the risk projection so that there will be no misunderstanding.

The intent if these steps are to consider risk in a manner that leads to prioritization. No software team has the resources to address every possible risk with the same degree of rigor. By prioritizing risk, the team can allocate resources where they will have the most impact.

## 8.2 Risk Management

After estimating all the risk and risk effects, we will look how to manage this kind of risks: With the kind of proactive risks we will prepare the plan for how to manage these

risks, we will think about their options, if their kinds of risks are facing and if they are reactive risks we have to manage them on the spot to avoid their dangerous effects.

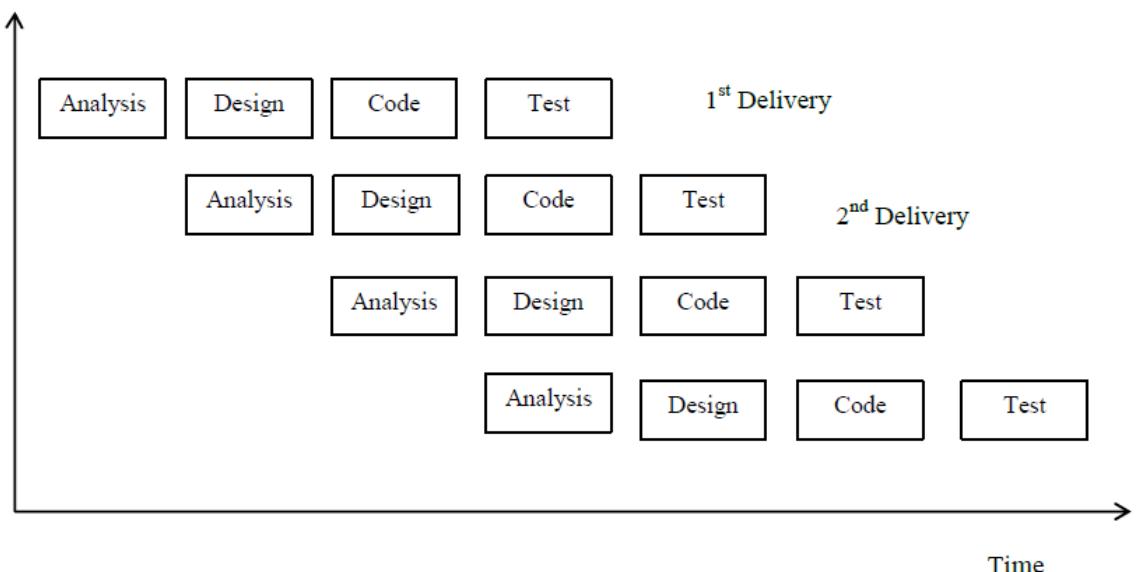
### **Process Model:**

To solve actual problems in an industry setting, a software engineer or a team of engineers must incorporate a development strategy that encompasses the process, methods and tools layers. This strategy is referred to as a process model. A software process model is chosen based on the mature of the project and application, the methods and tools to be used, and the controls and controls and delivers those are required.

### **Incremental Model:**

This website is based on **Incremental software process model**.

The Incremental Model combines elements of the liner sequential model with the iterative philosophy of prototyping. The incremental model applies linear sequences in a staged fashion as calendar time progresses.



## **8.3 System Testing**

### **8.3.1 Testing Principles:**

Following are testing principals which are used.

- All tests should be traceable to customer's requirement.
- Tests should plan long before testing begins.
- Testing should begin in small and progressed towards testing in the large.
- Exhausting testing is not possible.
- To be most effective testing should be conducted by an independent third party.

### **8.3.2 System Testing and Debugging:**

The phase of system development life cycle tests system design. Testing of system decides whether the newly designed system works properly or not. After the development of documentation manually about the system this checked, and if the system working property then it will be find out generated errors of problems and to find out its solution. This process is known as debugging.

For any software system testing means to check out it's coding. If we are not getting proper or required output then we have to debug the system coding. So, the debugging is also a subpart of the testing selection. If the system runs correctly during testing of our project we have to face different types of errors. Especially, errors annoyed us but at last we solved it, successfully. Some of the errors is listed below with their cause and solution.

### **8.3.3 Testing Objectives:**

There are several testing objectives. They are as follows:

- Testing is process of executing a program with the intent of finding an error.
- A good test case is one that has a high probability of finding an as yet undiscovered error.
- A successful test is one that uncovers an as yet undiscovered error.

### **Testing:**

Testing requires understanding the software and what it is supposed to do. Then software testers must verify the correctness and completeness of the software. Testing verifies that the system meets its intended functionalities.

Correctness of software verifies that the software does what it is supposed to do correctly. Completeness verifies that the software covers all aspects of the problem it tries to solve. Testing is usually performed by operating the software. In controlled fashion to determine its correctness, completeness, robustness, and reliability. Software testing must be planned carefully to avoid wasting development time and resources. Testing begins "In the Small" and progress "To the large". Initially individual components are created using white box and black box techniques after the individual components have been tested and added to the system, integrating takes place. Once the full software product is copulated, system testing is performed.

### **Testability:**

Software testability is simply how easily a computer program can be tested. The checklist that follows provides a set of characteristics that lead to testable software.

- Operability
- Observables
- Controllability
- Decomposability
- Simplicity
- Stability
- Understandability

Following are the attributes of the good test:

- A good test has a high probability of finding an error.
- A good test should be “best of breed”.
- A good test is not redundant.
- A good test would be neither too simple nor too complex.

### **8.3.4 Model of testing:**

There are different models of testing. On the basis of Testing methods there are two types of testing:

1. Black –box testing
2. White-box testing

Black-box tests are used to demonstrate that software functions are operational , that input is properly accepted and output is correctly produced, and that integrity of external information is maintained.

Whiter-box tests are used to examine the procedural details. It checks the logical paths by test case. It can also check the conditions, loops used in the software coding. It checks that loops are working correctly on defined boundary value.

#### **1. White Box Testing:**

White-box testing sometimes called glass box testing, is a test case design method that users the control structure of the procedural design to drive the test case.

Always we are thinking that there is no necessary to execute or checks the loops and conditions. And so that the large number of errors is uncovered.

With using white-box testing methods, we have checked that:

- All independents paths within a function have been executed at least once.
- All logical decisions are on their true and false side.

- All loops working correctly at their boundary values and within their specified conditions.

In our coding we test that all the loops works truly in each module. The one technique of white box testing is basis path testing. It contains two parts, one is flow graph notation and the second is cyclometer complexity. In flow graph notation we are checking logical control of flow. By using cyclometer complexity we find complexity of our project structure.

## 2. Black Box Testing:

Black-box testing focuses on the functional requirement of the software. That is black-box testing enables the software engineer to drive set of input conditions that will fully exercise all functional Requirements for the program.

Black-box testing is not an alternative to white-box testing techniques. Rather, it is a complementary approach that is likely to uncover a different class of errors than white-box methods.

We use in our coding to find errors in the following categories:

- Incorrect or missing functions
- Interface errors
- Performance errors
- Initialization and termination errors.

Unlike white-box testing, which is performed earlier in the testing process, black-box testing tends to be applied during later stages of testing. Because black-box testing purposely disregards control structure, attention is focused on the information domain. By applying black-box techniques, we derive a set of test cases that satisfy following criteria

Test cases that reduce, by a count that is greater than one, the number of additional test cases must be designed to achieve reasonable testing.

## 8.4 Test Cases

Test Cases are defined to find out whether the functionality is running successfully or not and some of the test cases are mentioned below in table.

**APE = As per Expected**

**Module Name: Registration**

**Testing Date: 13/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter All User's Information	Checking that all fields are filled, they are in correct format and email-id is unique	APE
CS2	Click on Submit button	Insert all User's Information in Database	APE
CS3	Click on Reset button	Clear All Information of User In Registration Form	APE
CS4	Successful Logout from Account	Logout from Account and displays Login Screen	APE

**Module Name: Login**

**Testing Date: 13/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter Username and Password	Checking Username and Password	APE
CS2	Unsuccessful operation due to wrong Username and Password	It should display Login Screen again	APE
CS3	Successful Login into Account	Display Main Screen of User according to User Type	APE
CS4	Successful Logout from Account	Logout from Account and displays Home Screen	APE

**Module Name: branch manager Login****Testing Date: 13/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter Username and Password	Checking Username and Password	APE
CS2	Unsuccessful operation due to wrong Username and Password	It should display Login Screen again	APE
CS3	Successful Login into Account	Display Main Screen of User according to User Type	APE
CS4	Successful Logout from Account	Logout from Account and displays Home Screen	APE

**Module Name: User Home****Testing Date: 16/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Student-pass-request	Display student-pass-form	APE
CS2	Service-pass-request	Display service-pass-form	APE
CS3	Senior-citizen-pass-request	Displays senior-citizen-form	APE
CS4	Give feedback	Displays the give feedback screen	APE

**Module Name: Admin Home****Testing Date: 16/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	User-profiles	Displays student, service, senior-citizen-profiles	APE

CS2	Manage-payment	Manages the payment	APE
CS3	feedback	View and delete feedback	APE

**Module Name: Pass Request****Testing Date: 16/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter All User's Information	Checking that all fields are filled, they are in correct format and id proof is unique	APE
CS2	Click on Submit button	All the information is stored in the database and simultaneously go to the branch manager profile	APE
CS3	Clicking the cancel	Information will be removed from the database	APE

**Module Name: Search routs****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter information of what you want to search	Checking that all the information is valid and in the correct format	APE
CS2	Clicking on the submit	Correct rout information Is displayed	APE

**Module Name: feedback****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter email id	Checking that the email is valid and in the correct format	APE
CS2	description	Checking the description id not null	
CS3	Clicking on the submit	All the information will be stored in database and will be sent on branch profile feedback	APE

**Module Name: pass requests****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	pass requests	Displays table of the pass requests to check whether it info Is true or false	APE
CS2	Clicking on approve button	Request will be approved and message will sent to user notification	
CS3	Clicking on the Reject	Request will be deleted by the branch manager and message will be sent to the user notification	APE

**Module Name: Manage routs****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter information	Checks all the information is correct and	APE
CS2	Clicking on the submit button	New rout will be added in the rout table	APE
CS3	Clicking on the update button	Information will be updated as per choice	APE
CS4	Clicking on delete button	Rout information will be deleted from the rout table	APE

**Module Name: Branch manager details****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Branch manager	Displays the information of branch manager	APE

CS2	New branch manager	New branch manager will be created by the admin	APE
CS3	Clicking on the update button	Information of branch manager will be updated as per choice	APE
CS4	Clicking on delete button	Branch manager will be deleted from the table	APE

**Module Name: User details****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Student details	Displays the information of student	APE
CS2	Service details	Displays the information of service members	APE
CS3	Senior citizen details	Displays the information of the senior citizen	APE
CS4	Clicking on the block button	User will not able to login into the system	APE

**Module Name: Manage payment****Testing Date: 18/4/2017**

Case ID	Test Case	Expected Result	Actual Result
CS1	Enter all the information	All the information will be checked weather it is not wrong or blank	APE
CS2	Clicking on the submit button	All the information will be stored in the database and will be applied	APE
CS3	Clicking on the reset button	All the information will be cleared	APE
CS4	Clicking on the delete button	Payment information will be deleted	APE

# Chapter – 7

## CONCLUSION AND FUTURE SCOPE

## **Limitations of our project**

The proposed system is developed to overcome the shortcomings of the manual system, but still there are many limitations to this new system.

The limitations are as follows:

We have not developed an android application of this system

## **Conclusion**

At the time submitting the report we have successfully designed the website to handle a department of an educational institute

We have tried our best to make our website user friendly and useful to manage a department.

## **Future scope**

Software development is ever changing process. Website is also a kind of software , so it always prone to changes.

There is always a chance of improvement as technology evolves.

As we discussed in the limitations section, we can upgrade the website to incorporate those changes.

We can make the website more dynamic and we can also extend it to manage more than one department.

We will add the renew pass functionality  
We will develop android application at client side

## BIBLIOGRAPHY

Web Reference (website names)

- 1.<http://www.google.com>
- 2.<http://www.W3schools.com>
- 3.

Books

- 1
- 2
- 3