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Chapter 1: Final Project Proposal

1.1. Introduction

In this technological era, everyone use technology to get updated. The students are also addiet of using smart phones. And our basic purpose is to facilitate students with latest updates of their studies, if they have installed our application. But if they are not using application, then they can check updates from our website. By using our website with application teacher will be able to easily upload the result of their students. They can also be able to upload material and attendances. And can also get assignment which student has uploaded. This application will notify the students to get their results on time or they can visit our website. They can also get material, upload assignments and get a warning notification in case of low attendances.

1.2. Project Title:

Novice Valuation

1.3. Project Overview statement:

Today, in this electronic era students want to interact with teachers to get latest updates about their studies, especially about assessments. Through this application teachers can easily upload material anytime anywhere. This will provide notification to students that can be about date sheets, results commencements of classes, official holidays and also for extra study material. In case of unavailability of smart phone with android framework they can check our website, which will make it easy for the students to access the material on time.

Our project overview can further be elaborated comprehensively in below template.

Project Overview Statement Template:

The overview statement template is as follows:

Project Title: : Novice Valuation			
Project Manager: Mami Mehwish			
Project Members:			
Name	Registration #	Email Address	Signature
Nayab Gohar	13-US-2-217	nawalqureshi302@gmail.com	
Ishrat Abbas	13-US-2-234	Ishratabbas35@gmail.com	
Alina Muneez	13-US-2-244	Alinalarybe999@gmail.com	
Project Goal:			
To keep the student updated about their current grades as well as regarding other information of their institute such as warning of low attendance, academic files, teacher updates etc			
Objectives:			
Sr.#			
1	Teacher will upload results.		
2	Student will get results.		
3	Teacher will upload extra material relevant to studies.		
4	Student will access the given material.		
5	Student will get notification about new uploads.		
6	Student will access the date sheet.		
7	Student can get a warning in case of low attendance.		
8	Student can submit assignments on time.		
9	Teacher can check assignment.		
Project Success criteria:			
User will login to access the pages of their use , then will successfully log out. Teacher will authenticate then perform his actions and will successfully log out.			

Assumption:

- Every student has smart phones(android framework).
- The person using our services has installed this application.

Risks:

- Requirement Incompleteness
- Personal skills sets and experience
- Reliability

Budget**Obstacles:**

- Have less time duration for this project.
- Expensive server.
- Inexperience persons

Organization Address (if any):

Government post graduate college for women Sargodha.

Type of project:	<input type="checkbox"/> Research	<input checked="" type="checkbox"/> Development
Target End users:	<input checked="" type="checkbox"/> Teacher	<input checked="" type="checkbox"/> Student
Development Technology:	<input checked="" type="checkbox"/> Object Oriented <input type="checkbox"/> Structured	
Platform:	Mobile application integrated with website	
Approved By:		
Date:		

1.4. Project Goals & Objectives:

Our basic purpose is to aware students for their study material which has been uploaded by teacher. They can also get a warning if they have low attendance through notification. Teacher and students, both can feel easy with our application and website for uploading and getting material related to studies.

1.5. High-level system components:

High level components are as follow:

- Registration
- Login
- Result Page
For every teacher and student there is a page where she can be able to upload and check result
- Low Attandance Warning
- Files
Teachers can upload and student can get files
- Assignments
Students can submit assignments and teacher can also check assignment after

login.

1.6. List of optional functional units:

The optional functional units are:

- Books uploading
- FAQ

1.7. Exclusions:

The exclusion is:

- Online Tests

1.8. Application Architecture:

The application architecture of our system is:

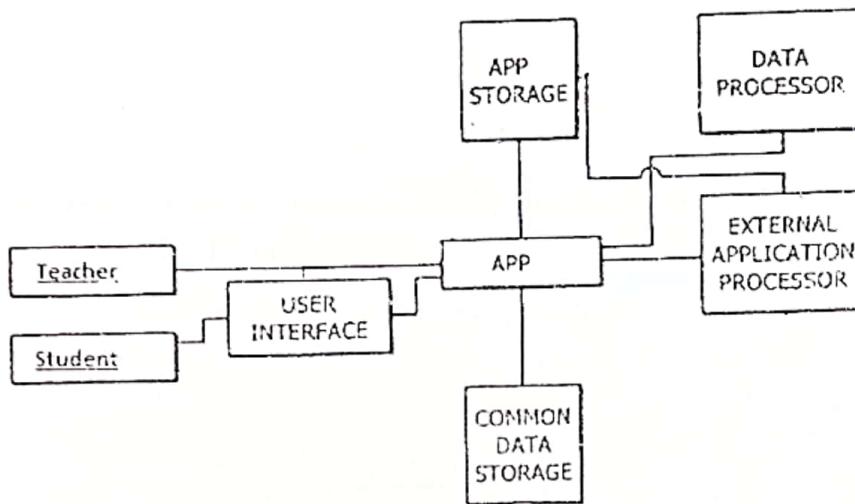
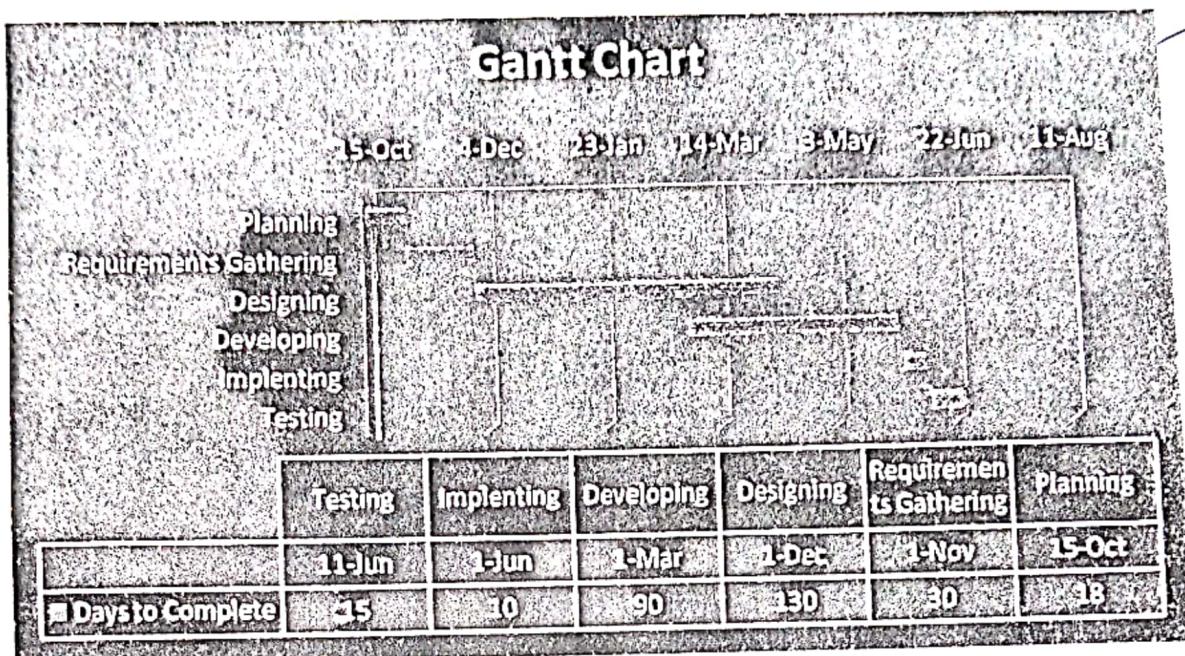


Fig:1.1. Application architecture

1.9. Gantt chart:

The Gantt's chart of our tasks is drawn below:



1.10. Hardware and Software Specification:

1. Hardware Requirements:

Processor : Intel Pentium IV 1.7 GHZ or above

System bus : 32 bits/64 bits

RAM : 256MB of RAM

HDD : 40 GB or higher

Monitor : SVGA COLOR

Keyboard : 102 keys(QWERTY)

Mouse : 2 button mouse/Touchpad

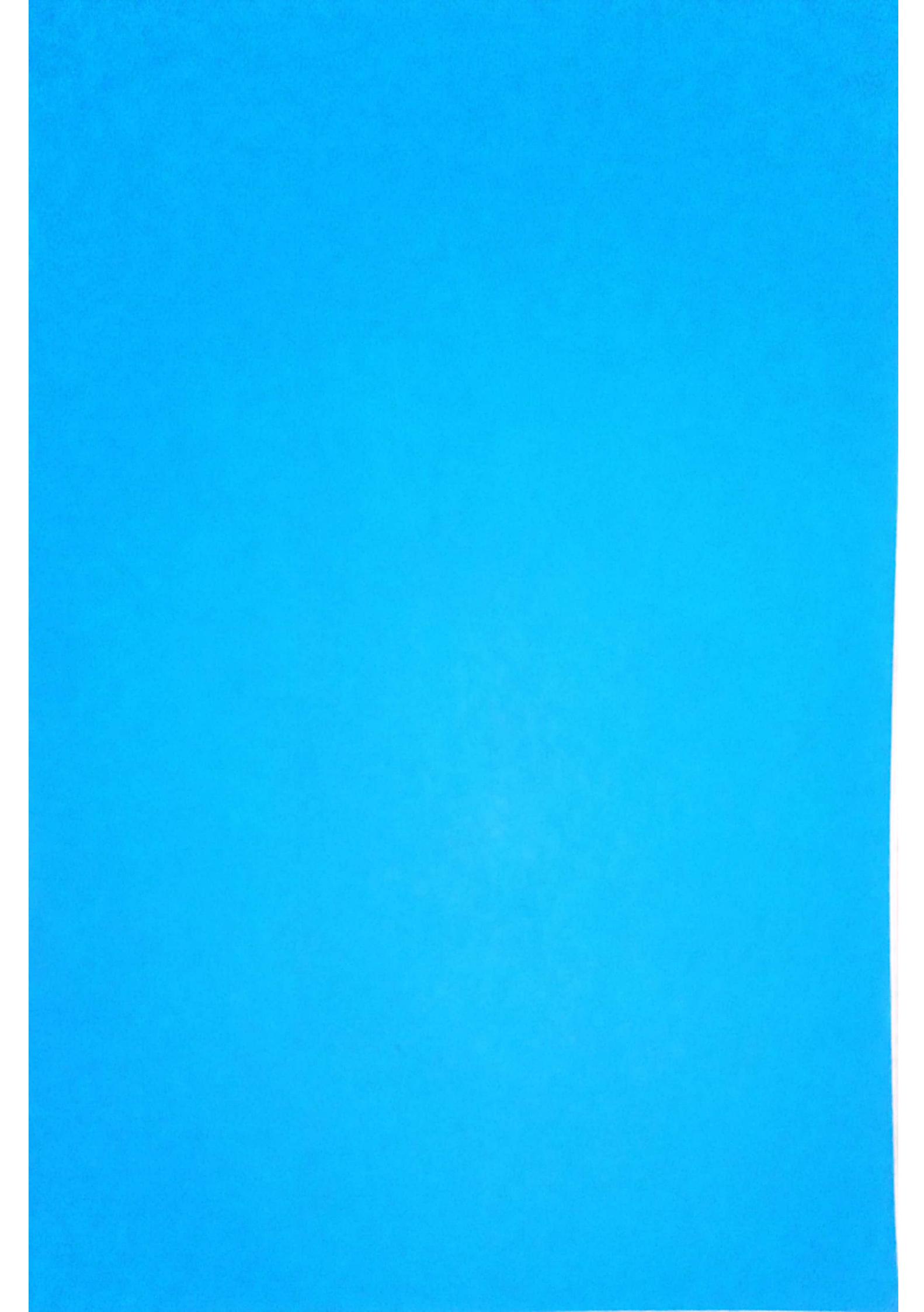
2. Software Requirements

- **OS for Website.**
Windows, Linux
- **OS for Mobile application:**
Android Mobiles
- **Front End**
The front end contains of languages and IDEs.
 - ✓ Languages:
HTML5, CSS, JAVASCRIPT, JAVA (For mobile app)
 - ✓ IDEs:
Dreamweaver, Android Studio
- **Back End**
It contains of:
 - ✓ Php,
 - ✓ SQL lite

1.11. Tools and technologies used:

The tools and technologies are as follow:

- XAMP
- SQL
- PHP
- Dreamweaver
- Adobe Photoshop
- Android Studio
- JDK
- StarUML-v2.8.0
- StarUML-v5.0
- Paint
- MS Excel



Chapter 2: First Deliverable

2.1. Introduction

We live in the era of Information Technology. We have to learn where we are? And equip us suitable to the changing scenarios. There is no end for the learning particularly to the academicians. ‘Learning that is supported by information and communication technologies’ (ICT) is the new technology. Every academician must be aware of this. Novice valuation’ aim to effect the construction of knowledge with reference to individual experience, practice and knowledge of the learner.

DURATION:

$$D = 2.5(EFFORT)^{0.38}$$

$$D = 2.5(7196.20022281)^{0.38} = 73.0531991375$$

P.M:

P.M.=EFFORT/DURATION

P.M.=7196.20022281/73.0531991375=98.5062982562

2.5. Task Dependency Table

The task dependency table is given below:

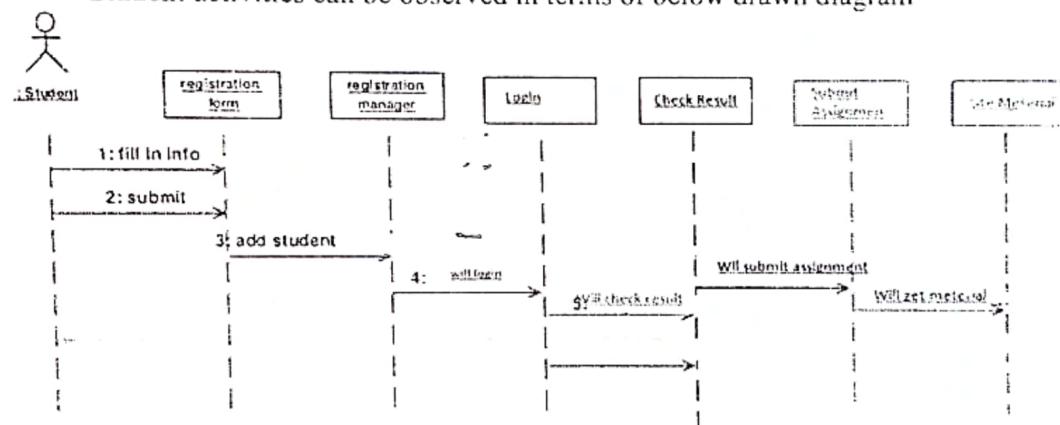
Task	Description	Dependent Upon
T1	Planning	None
T2	Requirements Gathering	T1
T3	Designing	T2
T4	Developing	T3
T5	Implementing	T3
T6	Testing	T4,T5

1. Specify the Individual Activities

Individual activities of this project can be seen in table below

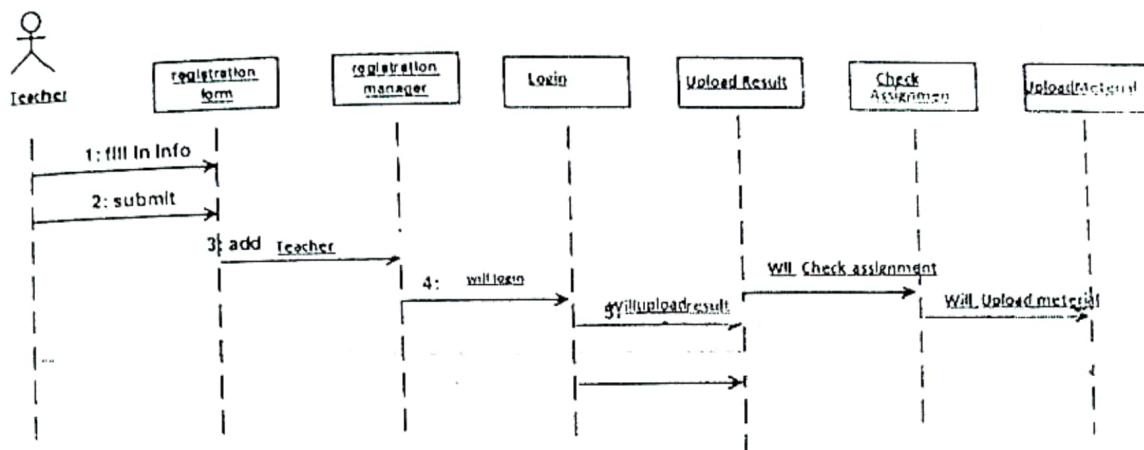
2.Determine the Sequence of the Activities

Student activities can be observed in terms of below drawn diagram



2.1 Sequence of student activities

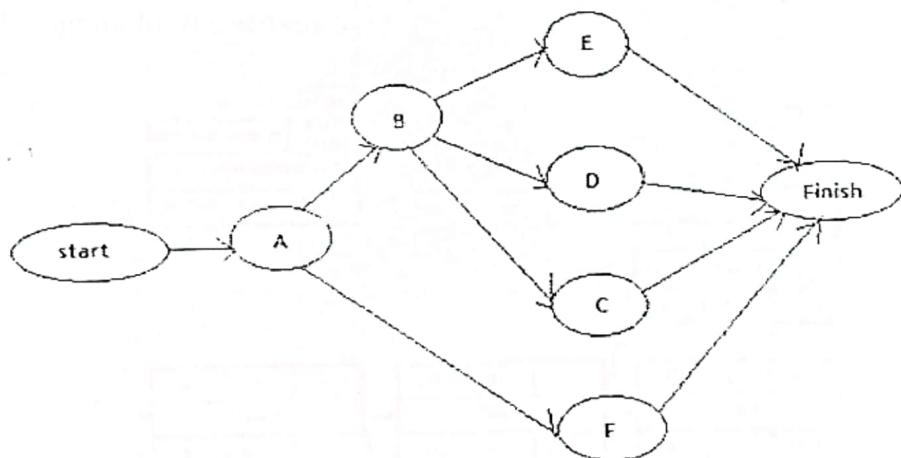
Teacher activities can be observed in terms of below drawn diagram



2.2 Sequence of Teacher activities

1. Draw the Network Diagram

The network diagram of our activities is as:



2.3 Network Diagram of activities

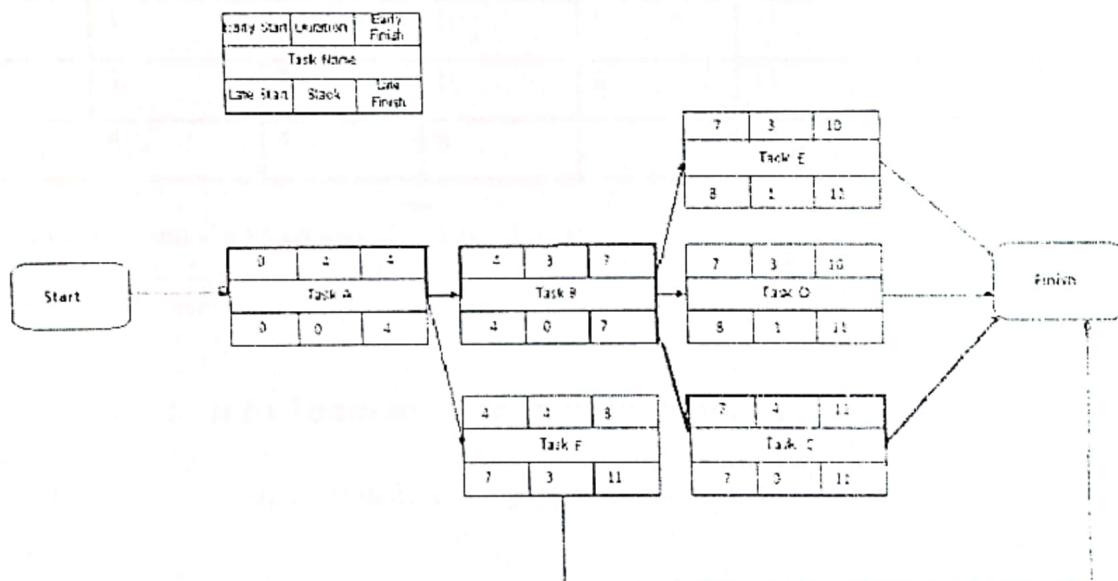
4. Estimate Activity Completion Time:

Here are activities duration with dependency of each:

ACTIVITY	DEPENDENCY	DURATION (WEEKS)
Registration(A)	None	4
Login(B)	A	3
Result(C)	B	4
Assignment(D)	B	3
Extra material(E)	B	3
Notification(F)	A	4

6. Update CPM Diagram

This is CPM diagram for the activities



2.4 CPM Diagram

Activities with immediate predecessor and duration.

Activity	Immediate Predecessor	Duration (Weeks)
A	None	4
B	A	3
C	B	4
D	B	3
E	B	3
F	A	4

The ES(Early Start), EF(Early Finish)/, LS(Late Start) and LF(Late Finish) given from critical path method.

Activity	Duration	ES	EF	LS	LF	FS
A	4	0	5	0	4	0
B	3	4	7	4	7	0
C	4	7	11	7	11	0
D	3	7	10	8	11	1
E	3	7	10	8	11	1
F	4	4	8	7	11	3

The parameters and slacks are calculated as follows:

The critical path is:

A, B, C

2.6. Introduction to Team member and their skill set

- Team

Three members are there in developing the project for Novice Valuation.

1.Nayab Gohar

2.Alina Muneer

3.Ishrat Abbas

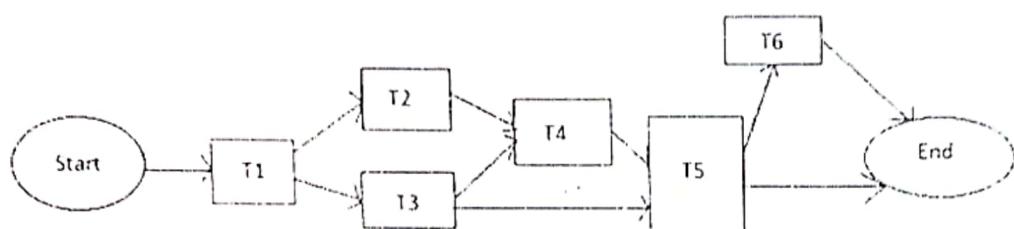
2.7. Task and Member Assignment Table

The Task of each member of our team is elaborated below:

Task	Duration (days)	Dependencies
T1	18	M1,M2,M3
T2	30	M1,M2,M3
T3	130	T1(M1,M3)
T4	90	(M1,M2,)
T5	10	T2, T4(M1,M2)
T6	15	T1, T2 (M1,M2,M3)

Task Dependency diagram:

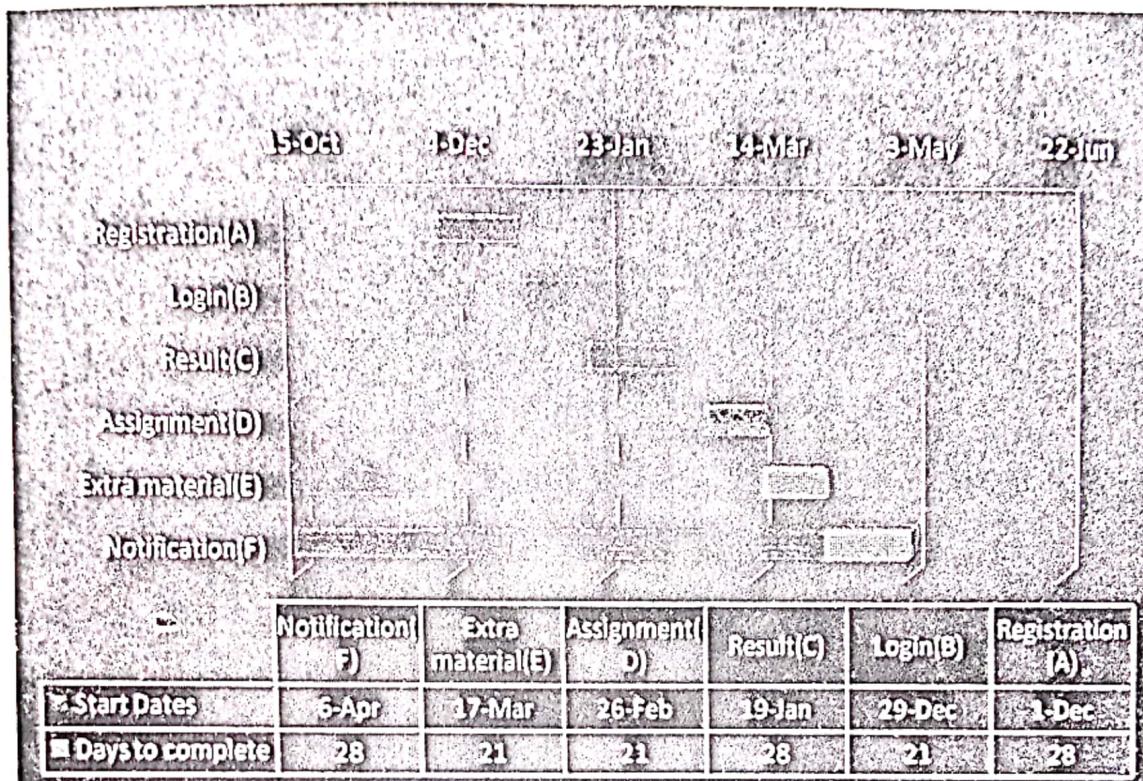
This is task dependency diagram



2.5 Task dependency diagram

Activity Bar Chart:

The activity bar chart of this project is:



2.8. Tools and Technology with reasoning

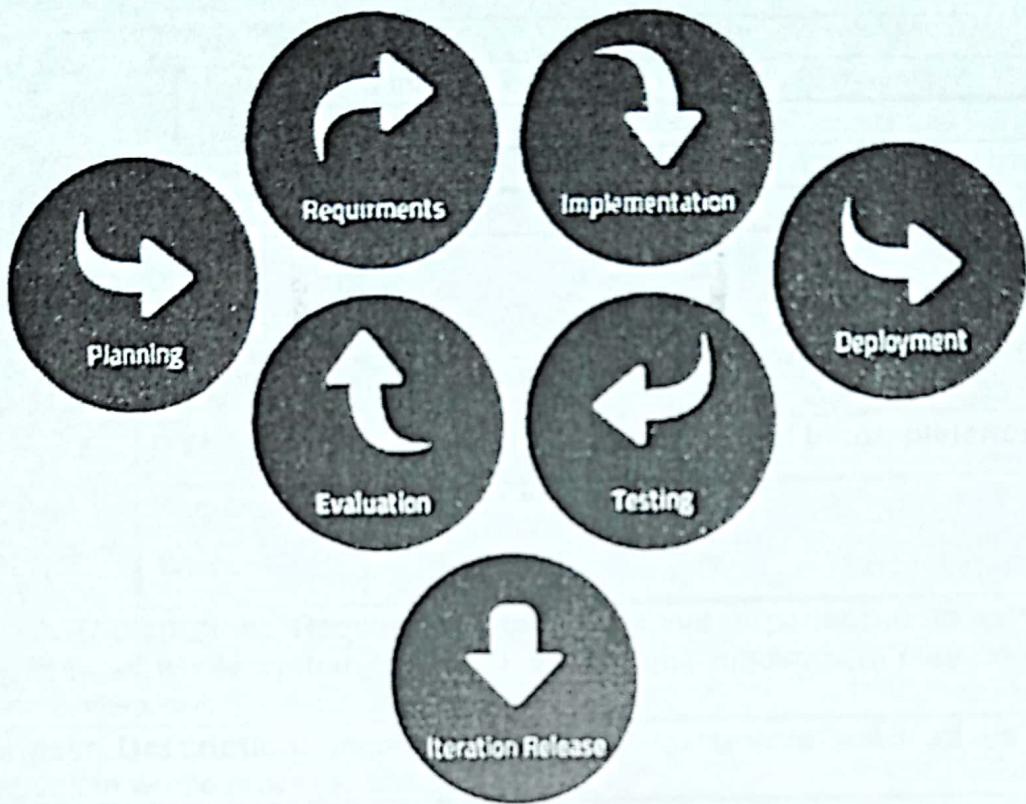
- **Dreamweaver**

Adobe Dreamweaver is a software Program for designing web pages, Essentially a more fully featured Html, Web and programming editor. Adobe Dreamweaver CC is a Web Design and Development Application that combines a visual design surface known as live view and a code editor with standard features such as syntax highlighting, code completions, and code collapsing as well as more sophisticated features such as real time syntax checking and code introspection for generating code hints to assist the user in writing code. Dreamweaver is positioned as a versatile web design and development tool that enables visualizations of web content will coding. Dreamweaver supports multiple web and programming languages including HTML, C#, Visual basic(VB), (XML) and others.

- **Android Studio**

Android Studio help us to make Mobile Applications. It can also provide a template for designing. We can implement java coding in android studio. It also provides Android Virtual Device (AVD), In which we can instantly test our application without wastage of time.

Development Process:



2.6 Deployment Diagram

2.10. Risk Tables

RISK ID#	RISK NAME
RS1	Requirement incompleteness
RS2	Time consuming
RS3	Data insecurity
RS5	Performance risk

Risk no 1:

RISK RECORD			
Risk ID	RS1	Risk Title	Requirement Incompleteness
Owner	Requirement Team	Status	Potential
Risk Description: Requirement team has not experienced to consider all aspects of whole system, due to this risk some requirement may be oversight and ambiguous.			
Impact Description: Incompleteness of requirements will lead us to more issues in whole process.			

- Risk no 2:

RISK RECORD			
Risk ID	RS2	Risk Title	Time consuming
Owner	Un experienced person	Status	Potential
Risk Description: Users has not experienced to consider all aspects of whole system, due to this risk more time is spent on this process such as making different type of reports.			
Impact Description: Much waste of time will lead us to more issues in whole process. Dissatisfaction of client, lack of interest .			

Chapter 3: Second Deliverable For Object Oriented Approach

3.1 Introduction:

One of the outstanding features of studies of assessment in recent years has been the shift in the focus of attention, towards greater interest in the interactions between assessment and classroom learning and away from concentration on the properties of restricted forms of test which are only weakly linked to the learning experiences of" students. This shift has been coupled with many expressions of hope that improvement in classroom assessment will make a strong contribution to the improvement of learning. So, One main purpose of this review is to survey the evidence which might show whether or not such hope is justified. A second purpose is to see whether the theoretical and practical issues associated with assessment for learning can be illuminated by a synthesis of the insights

arising amongst the diverse studies that have been reported.

- Requirements elicitation
- Requirements analysis and negotiation
- Requirements specification
- System modeling
- Requirements validation
- Requirements management

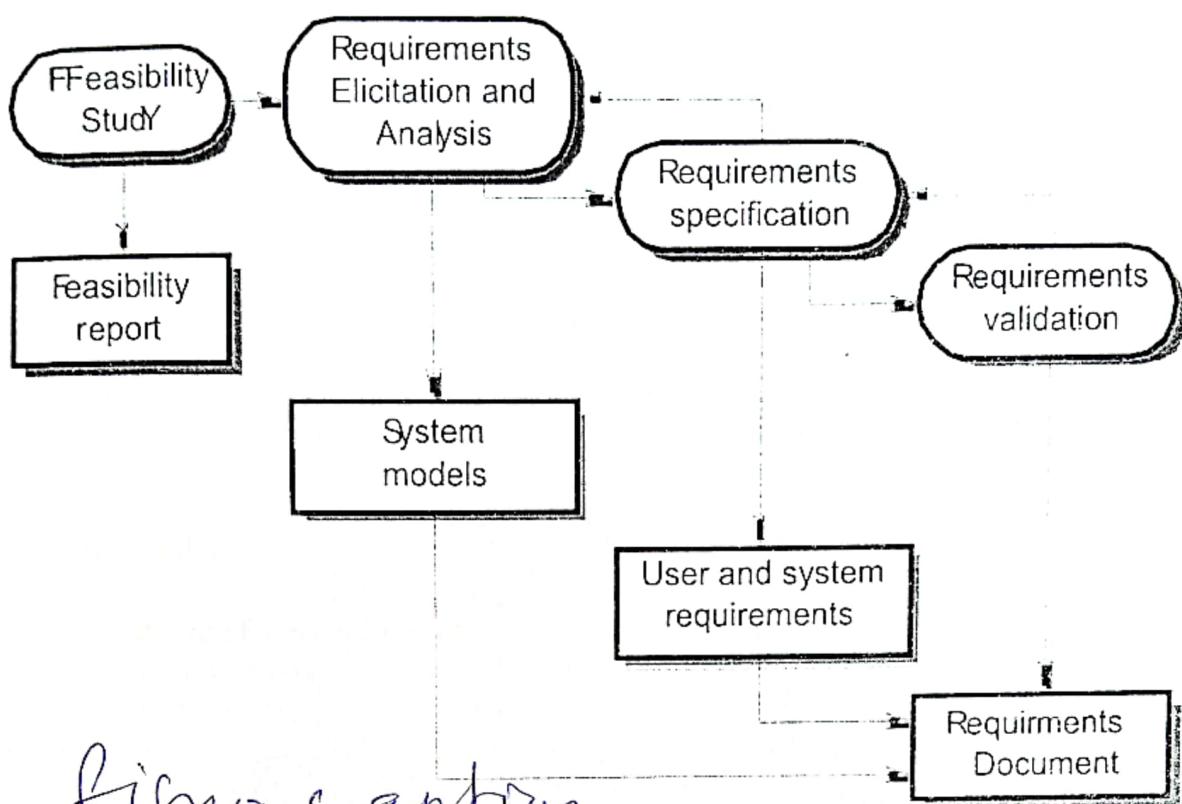


figure caption
Here, requirements specification is to be discussed. Requirements specification would lead to the following steps:

- Identify external interfaces
- Development of context diagram
- Capture "shall" statements
- Allocate requirements
- Prioritize requirements
- Development of requirements traceability matrix
-

3.1.1 Systems Specifications

The following are the clauses that must be included while describing the system

3.1.3. Context Level Data Flow Diagram:

This is the context level data flow diagram of our application:

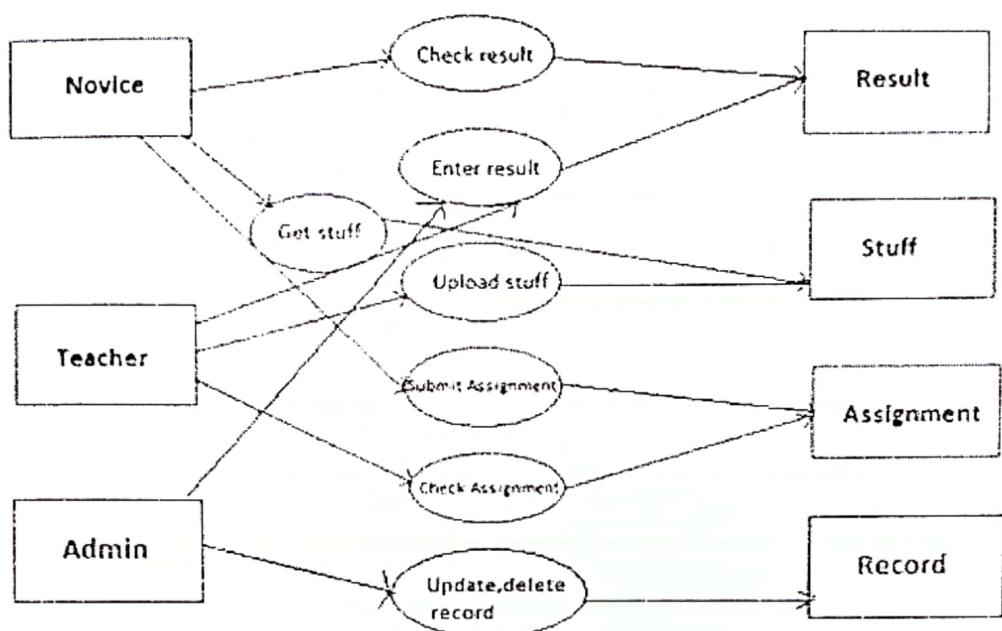


Figure 3.1 Context Level Diagram

3.2. Capture “shall” Statements:

PROJ		PROJECT REQUIREMENTS
1.0		A teacher “shall” register himself
1.0		A student “shall” register himself to the system
1.0		The system “shall” provide two types of registration process, normal and privileged
1.0		System will provide notification.
1.0		A teacher “shall” login to the system and can change his password
1.0		System “shall” update the Teacher’s Request
1.0		System “shall” process different types of updating e.g. updating of his personal details, or upgrading of his status from registered to privileged customer.
1.0		A student “shall” view his details for verification purposes

3.3. High Level Use case Diagram:

The high level use case diagram is as below:

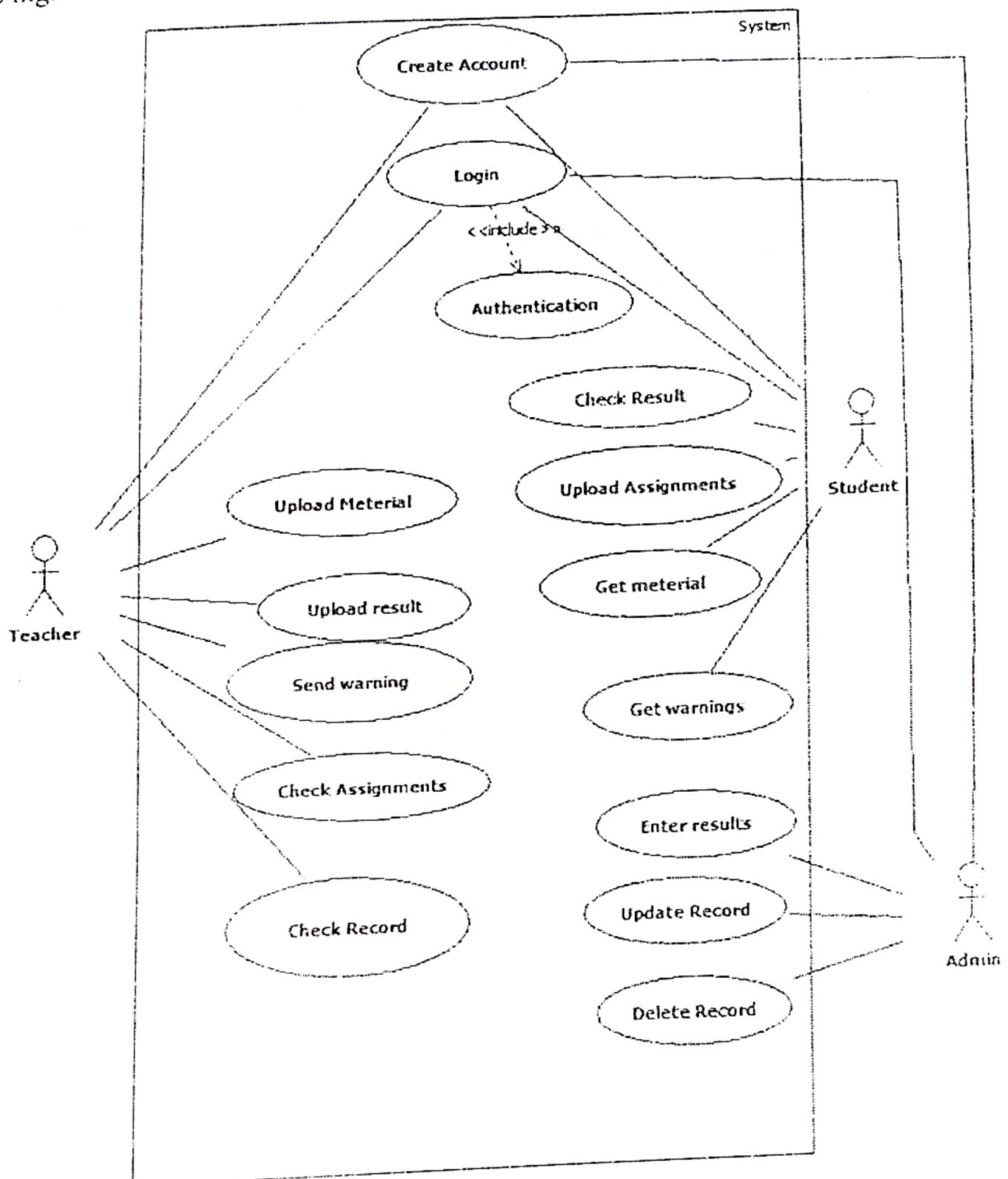


Figure 3.2 Work of student,teacher and admin usecase

Usecase Section	Comment
Usecase name	Work of student,teacher and admin
Primary actor	Student Teacher and admin
Level	Access Application and do work
Stakeholders and interset	Application and want to provide access and allow to upload
Precndition	Login
Main Success scenerio	Actors will create account, then login to system to perform duties and will logout.
Extensions	Can not login if not created account first

Usecase Section	Comment
Usecase name	Analysis of system
Primary actor	Student, Teacher and admin
Level	Access Application and do work
Stakeholders and interset	Application and want to display interface, provide access and allow to upload
Precondition	Login
Main Success scenerio	System wil check authentication then display application to the user.
Extensions	Can not access if not login

UC_1: Authentication of teacher usecase

Teacher firstly create an account then login to our application:

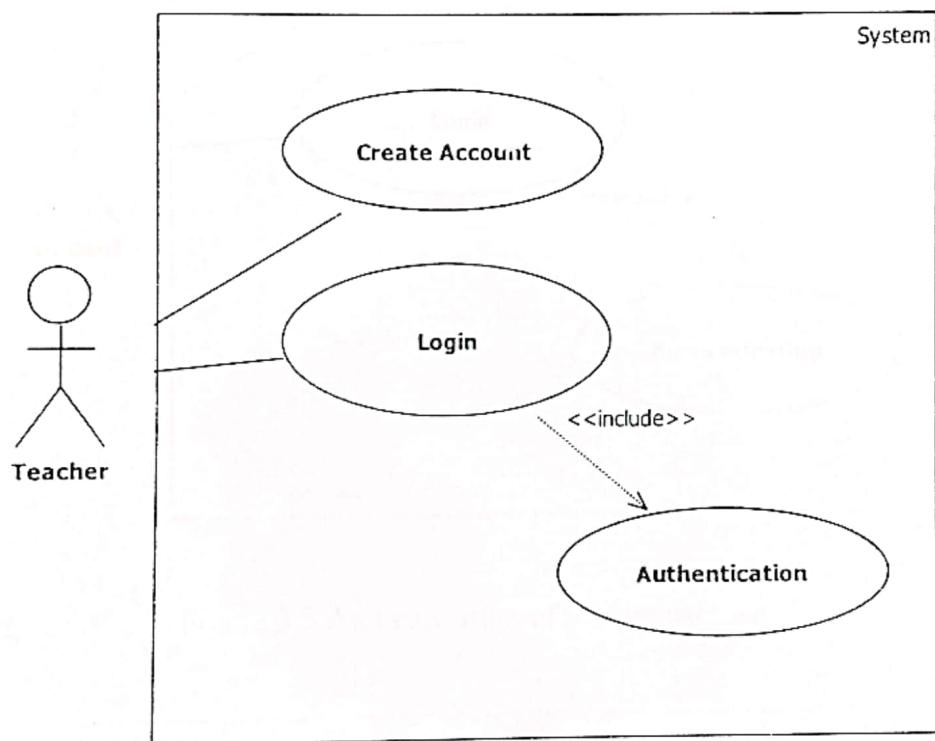


Figure 3.4 Authentication of teacher usecase

Usecase Section	Comment
Usecase name	Authentication of teacher
Primary actor	Teacher
Level	Login and register
Stakeholders and interset	Application and want authenticate teacher
Precondition	Create account

4.4. Sequence Diagram

A novice will login in our application, if he is not registered yet then he will register. Authentication is really matters in study 's system, So, When he will authenticate then other process will continue..

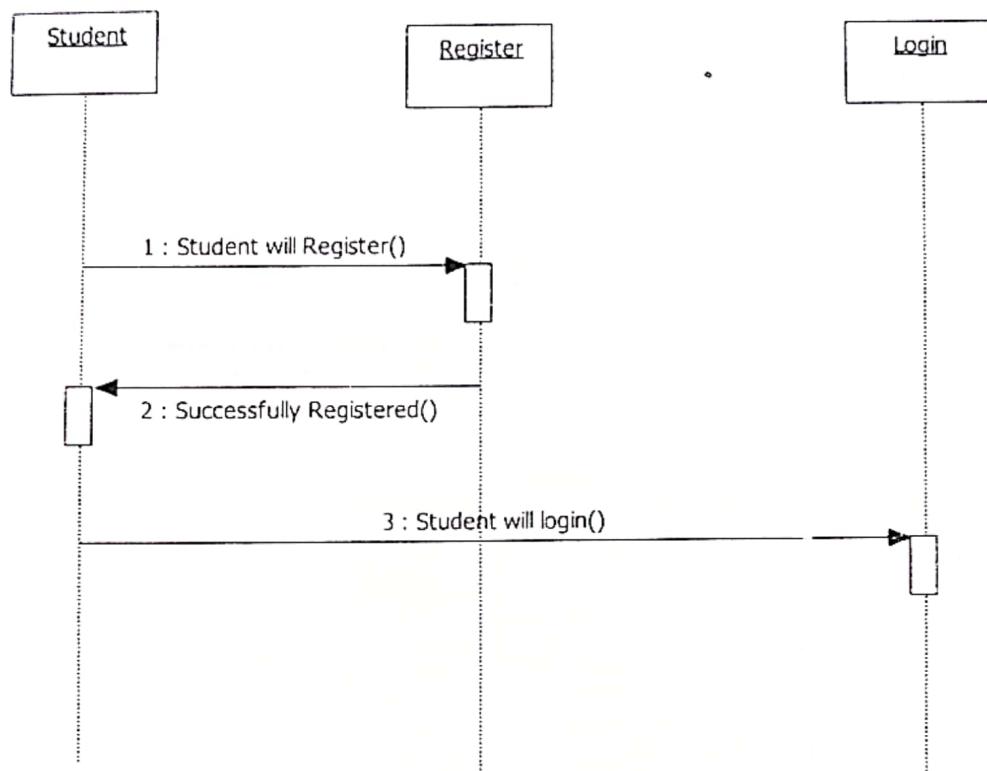


Figure 4.2 Sequence of student's Authentication

4.5. Collaboration Diagram

4.5.1. Novice Authentication

Novice will firstly register then will be login.

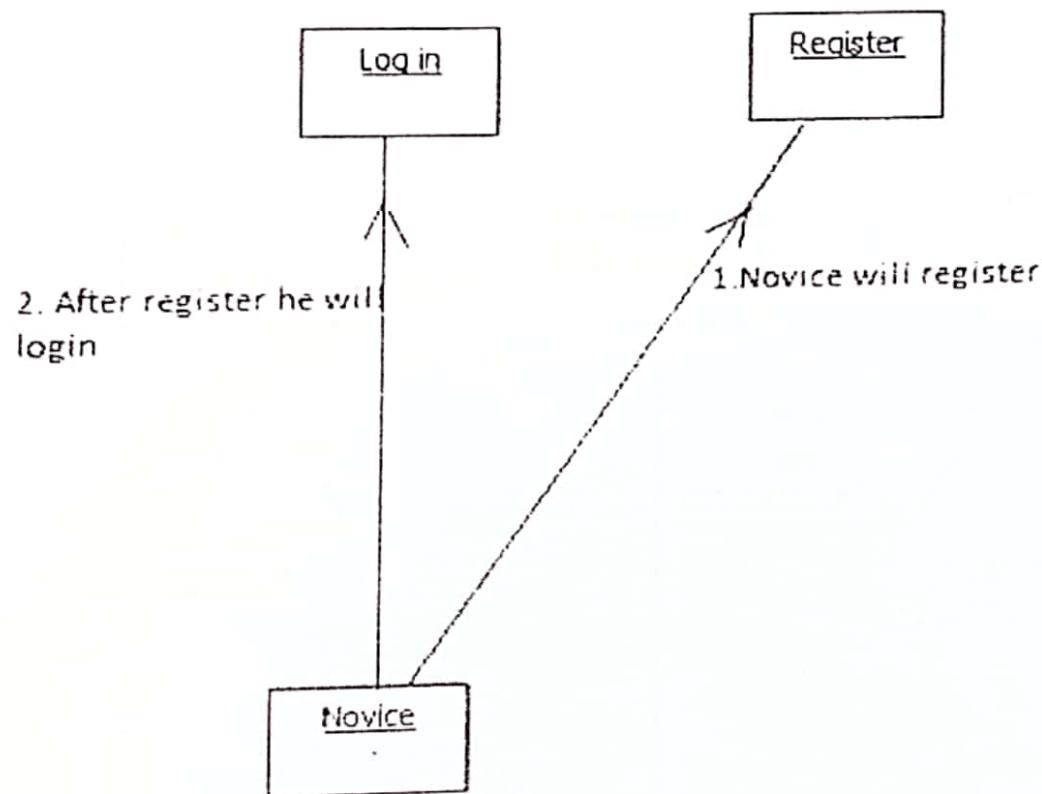


Figure 4.8: Novice Authentication

4.6. Activity Diagram

4.6.1. Access of system's Activity

Activity diagram for access is as given below:

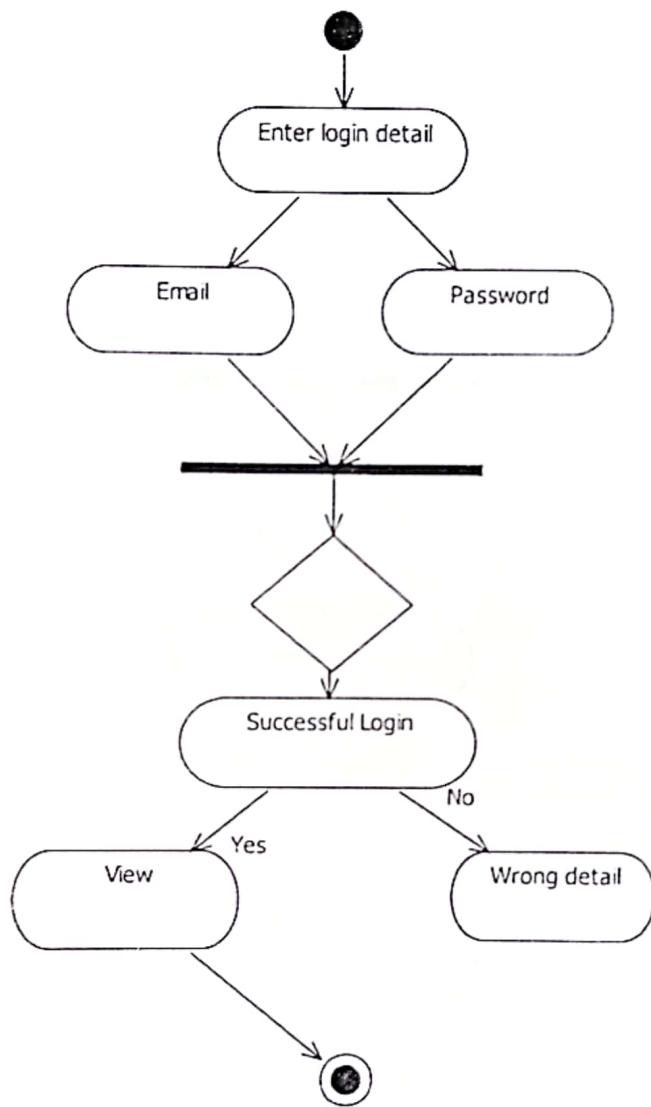


Figure 4.14 Access of system's Activity

4.7. Design Class Diagram

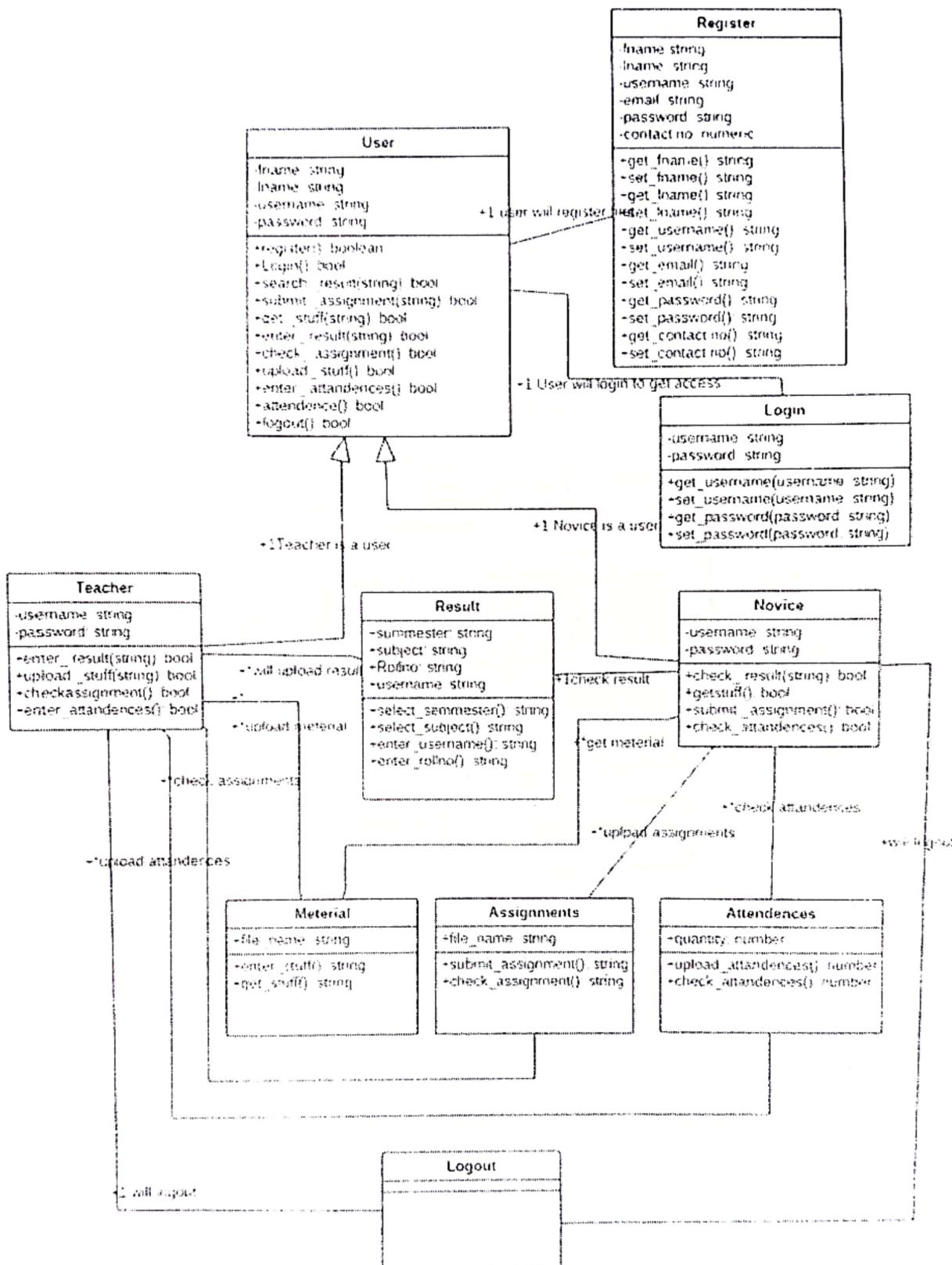


Figure 4.16 class diagram

4.8. State chart diagram

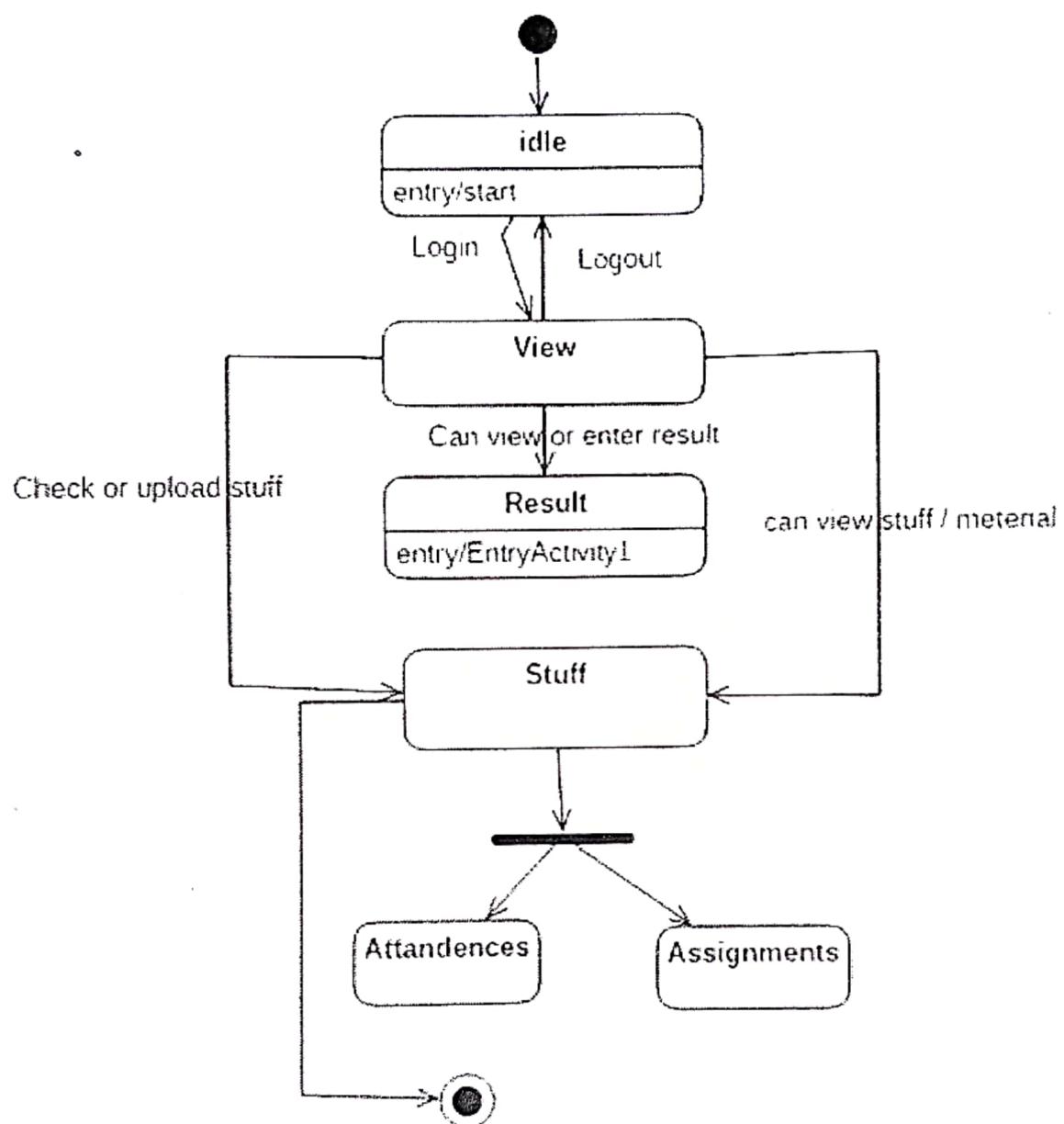


Figure 4.17 state chart diagram

Chapter 5: 4th Deliverable (User Interface Design)

5.1. Introduction

Now we have designed our web and mobile application. Here we will insert some images to describe some functionality of our system, By using:

1. Site maps
2. Storyboards

5.2. Story Board

Firstly a user has to register in our application then he will login. If a user is a teacher then he can enter students's marks, Check assignments and also can upload material (Datesheets, Files of studies, Attendences). But if a novice will login then he can check his result, Submit assignment and can also get material uploaded by teacher. And teacher can also notify for assignments. Admin can update and delete record. An admin will also enter marks which are delivered by teachers to admin.

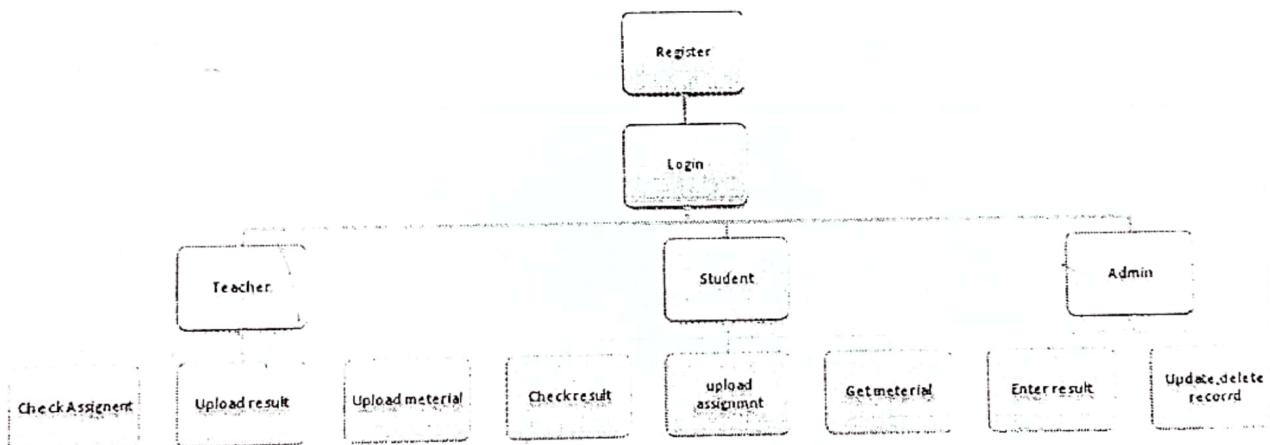


Fig 5.1: Story board