



FINAL REPORT

Digital Classroom System

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Project **and** Problem Statement

1. *As we know, the whole world has been affected by Covid-19 Pandemic and Students are no exception to that. All universities and schools around the world shifted to online learning and that is the foreseeable future.*
2. *Our project is about developing an app for the institutions where they can list their courses and allow the common students to choose from those courses from any location in India. After successful payment, the student will be able to see the assigned teacher, his/her attendance, his/her marks and all the assignments and video lectures at one place*

We aim towards:

1. Access to coursework from anywhere at any time
2. Combination of structure and freedom
3. Effective time management
4. Asynchronous discussions with classmates
5. Immediate feedback on tests
6. Sharpened digital skills

Limitations and Approach

LIMITATIONS:

- *Server side costs could be high.*
- *A mobile App needs to be made to suit each platform, Android, Windows, iPhone, etc. which can be costly and timely.*
- *Mobile Apps require on-going care both as regard to fresh content and technological updates.*
- *They are not as simple to optimize as a mobile website.*
- *Apps can be expensive – the more functionality they have, the more they cost, and can be hard to update.*

APPROACH:

- *First the drafting took place about what resources were available and what were the modules*
- *Then the distribution of work took place*
- *Testing phase started*
- *Then alpha-version of the project was ready*
- *After the satisfaction, beta-version was released*

Functional Requirements

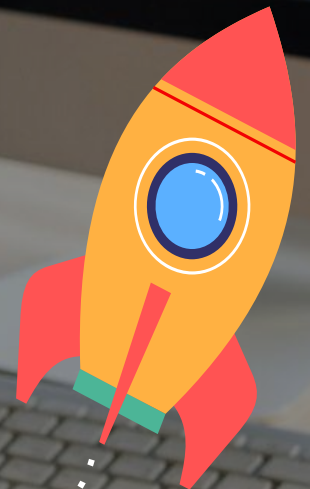
1. USER LOGIN
2. CREATING COURSE
3. CREATING ASSIGNMENT
4. CREATING ANNOUNCEMENT
5. SUBMITTING ASSIGNMENTS
6. LATE SUBMISSIONS
7. UPLOADING STUDY MATERIAL
8. READ/WRITE PERMISSIONS
9. ATTENDANCE



Non-Functional Requirements

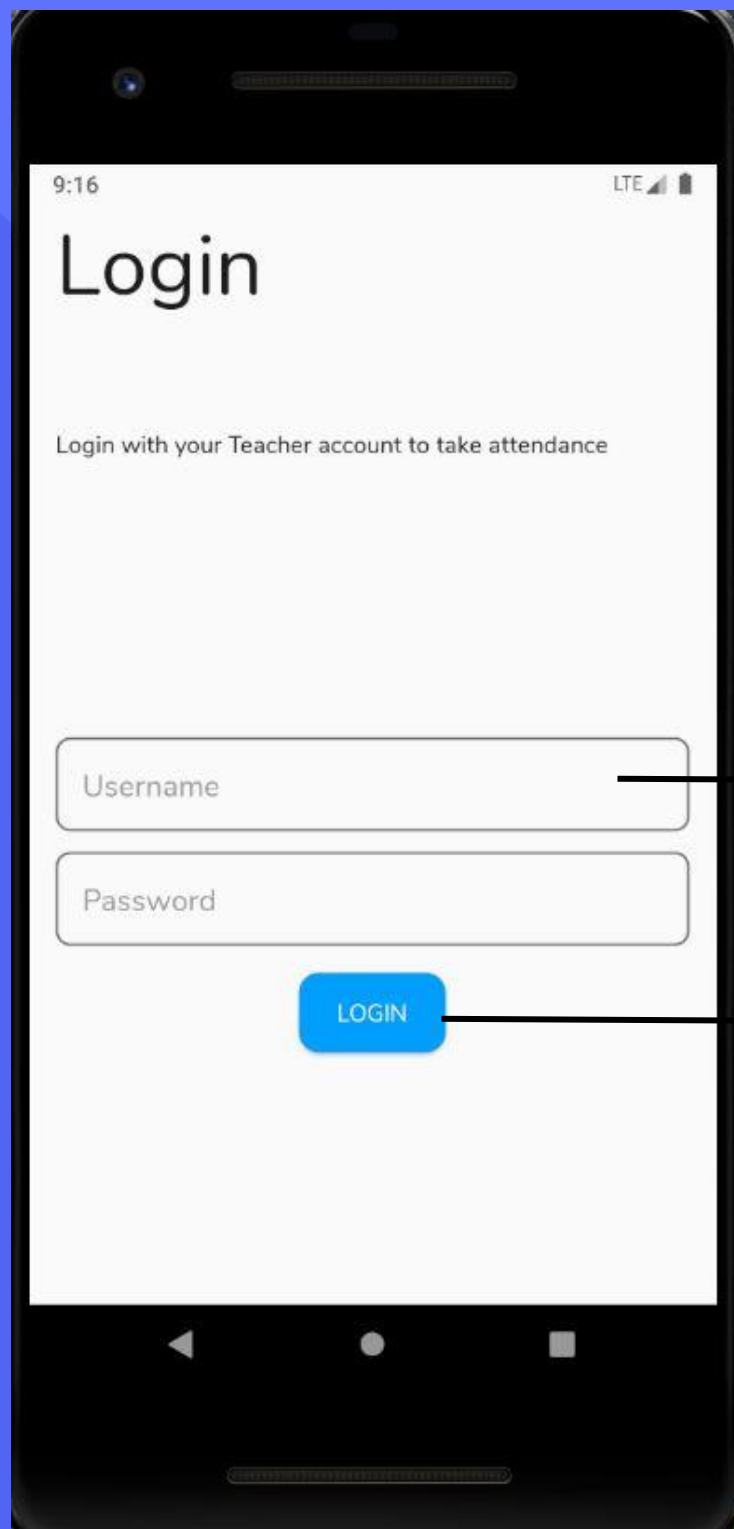
Requirement (#)	Category of NFR	Requirement Specification	Name of Business User	Status
NFR1	Performance	All pages should load within 3 seconds	End User	
NFR2	Performance	Search should bring the results less than 7 seconds	End User	
	Availability	Application should be available for 24x7	End User	
	Experience	Seamless User experience	End User	

UI/UX





LOGIN PAGE



Enter Details

Click on Login once successfully entered details

The background is a solid blue color with a subtle, wavy pattern. A vertical line is positioned on the left side of the image.

COURSE LIST

5:01 LTE

✕ Create Class

Just create your class to manage daily attendance and report them. Add students in the next step

Subject name

Class name

Select theme :

CREATE

After Logging In , create a class

Add subject Name

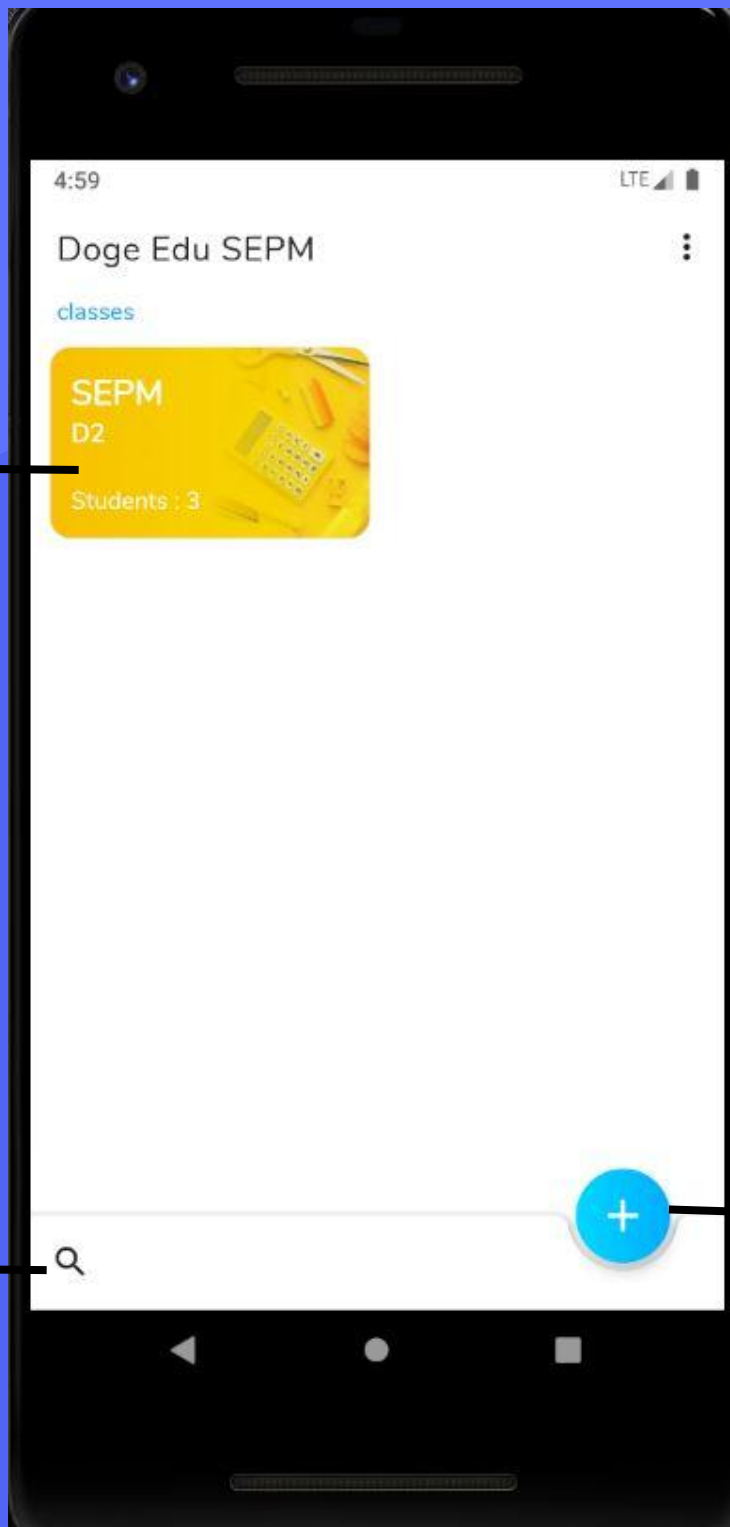
Add Class Name

Choose a Theme for the Class

Click on create once all details filled

Class Details

Search for class

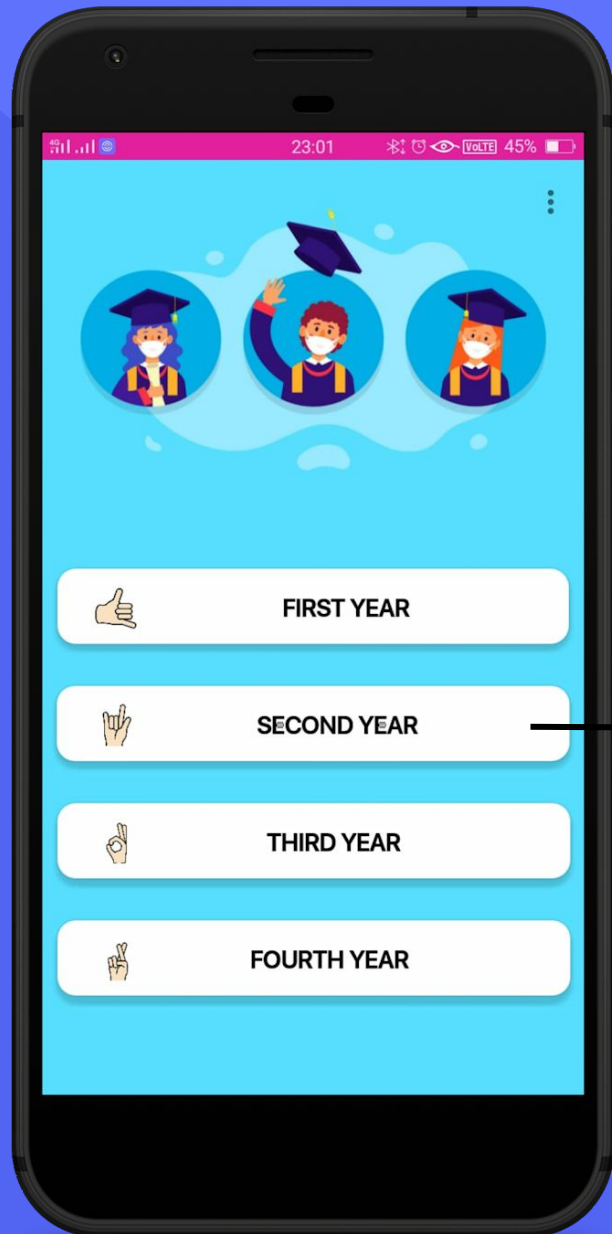


Add Class

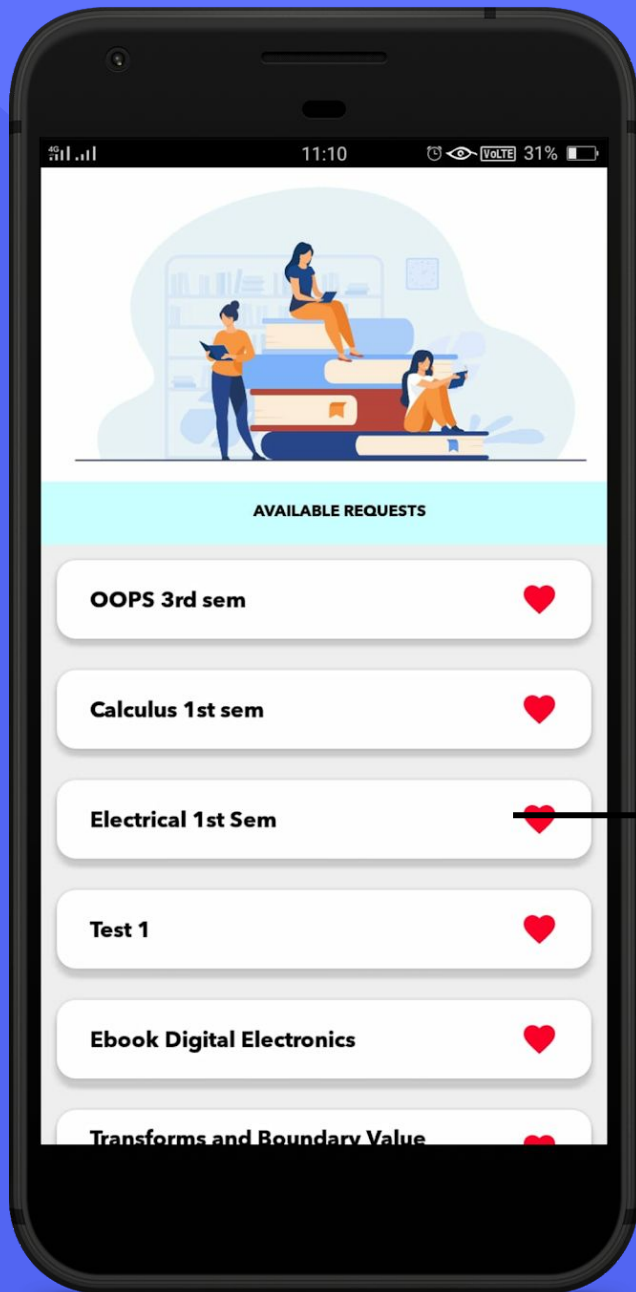
Card view to navigated for different courses

Card view to navigated for different announcements

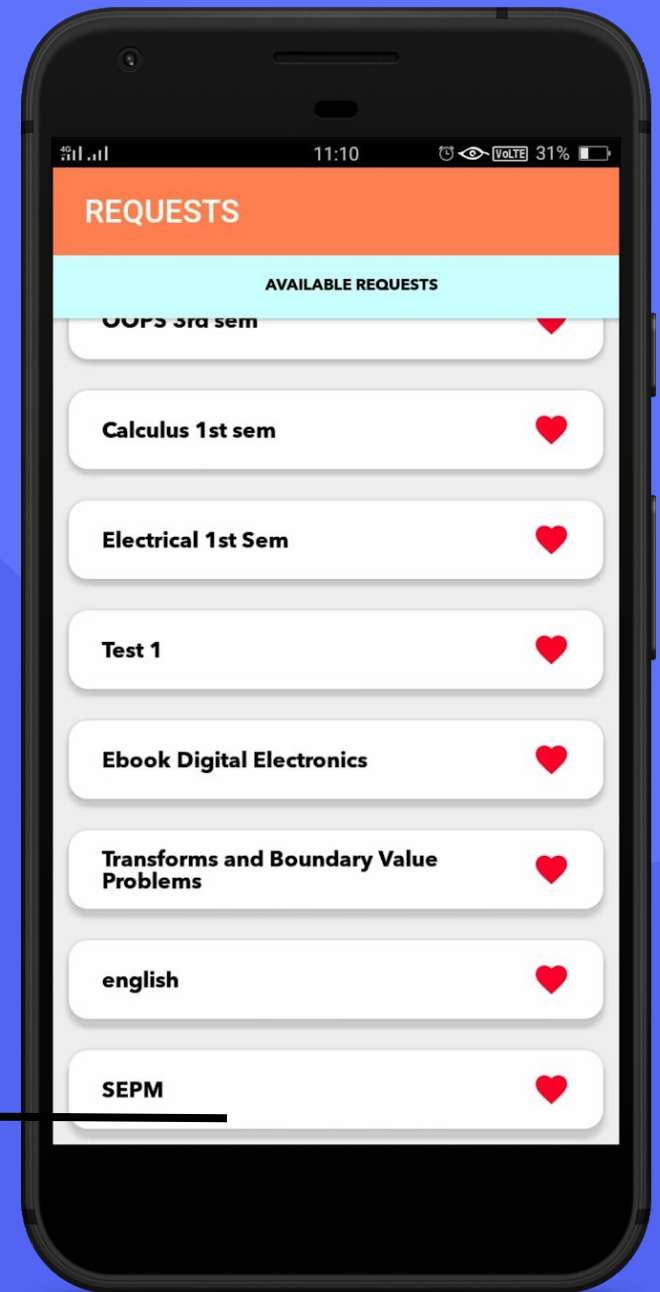




Sub-Sections of a course
(Sample shown is of a college
course)

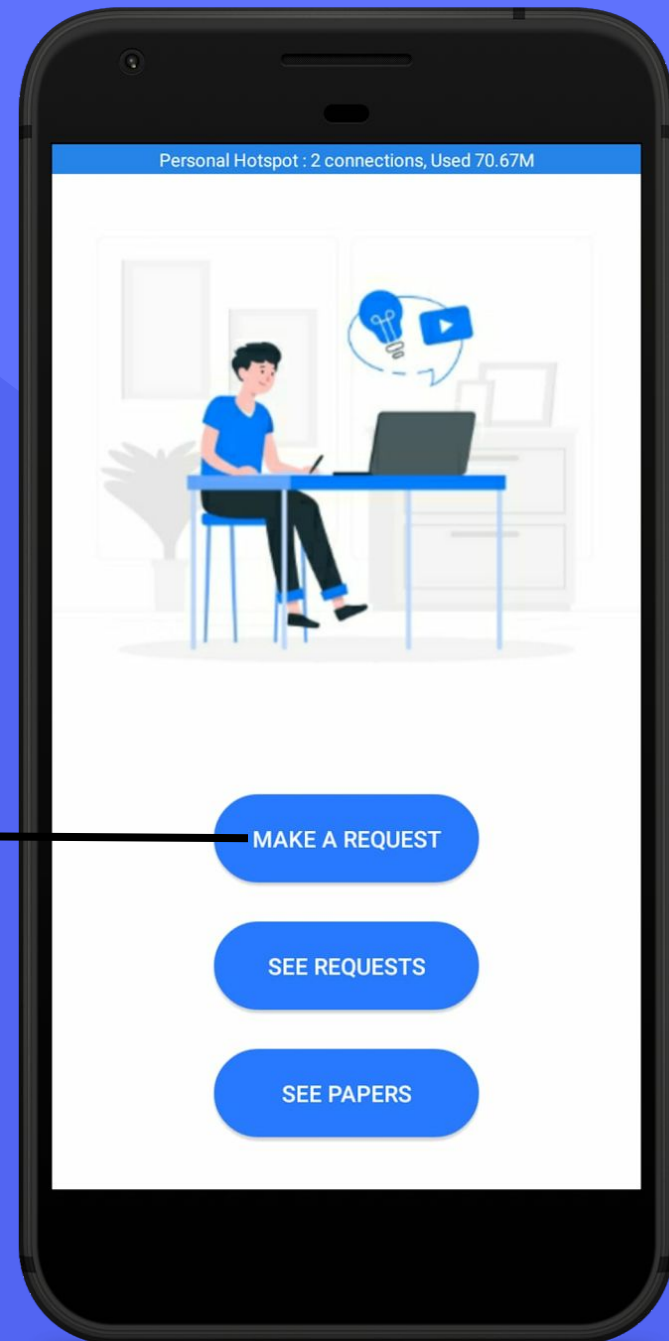


List view to present courses



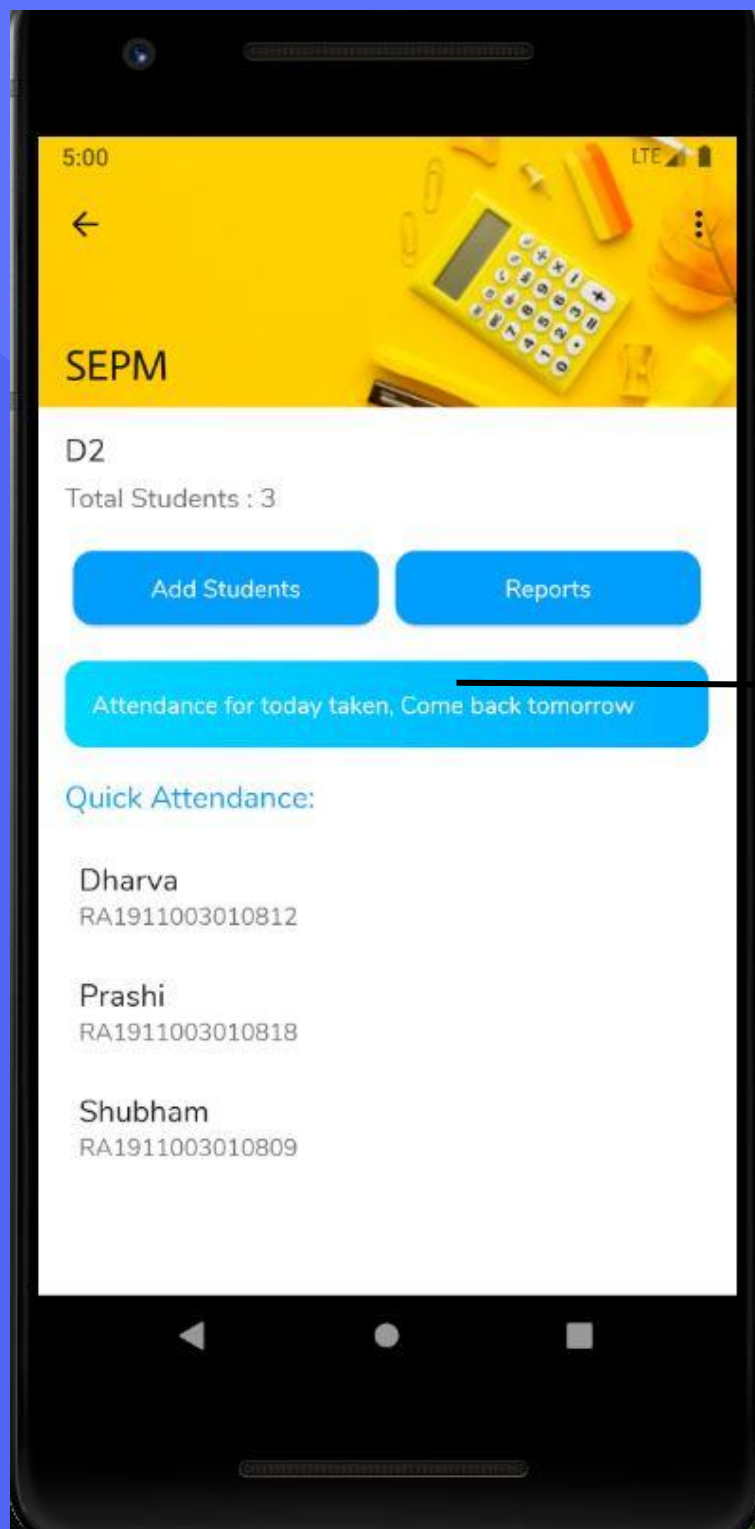
Like SEPM

You can also make request
for a course





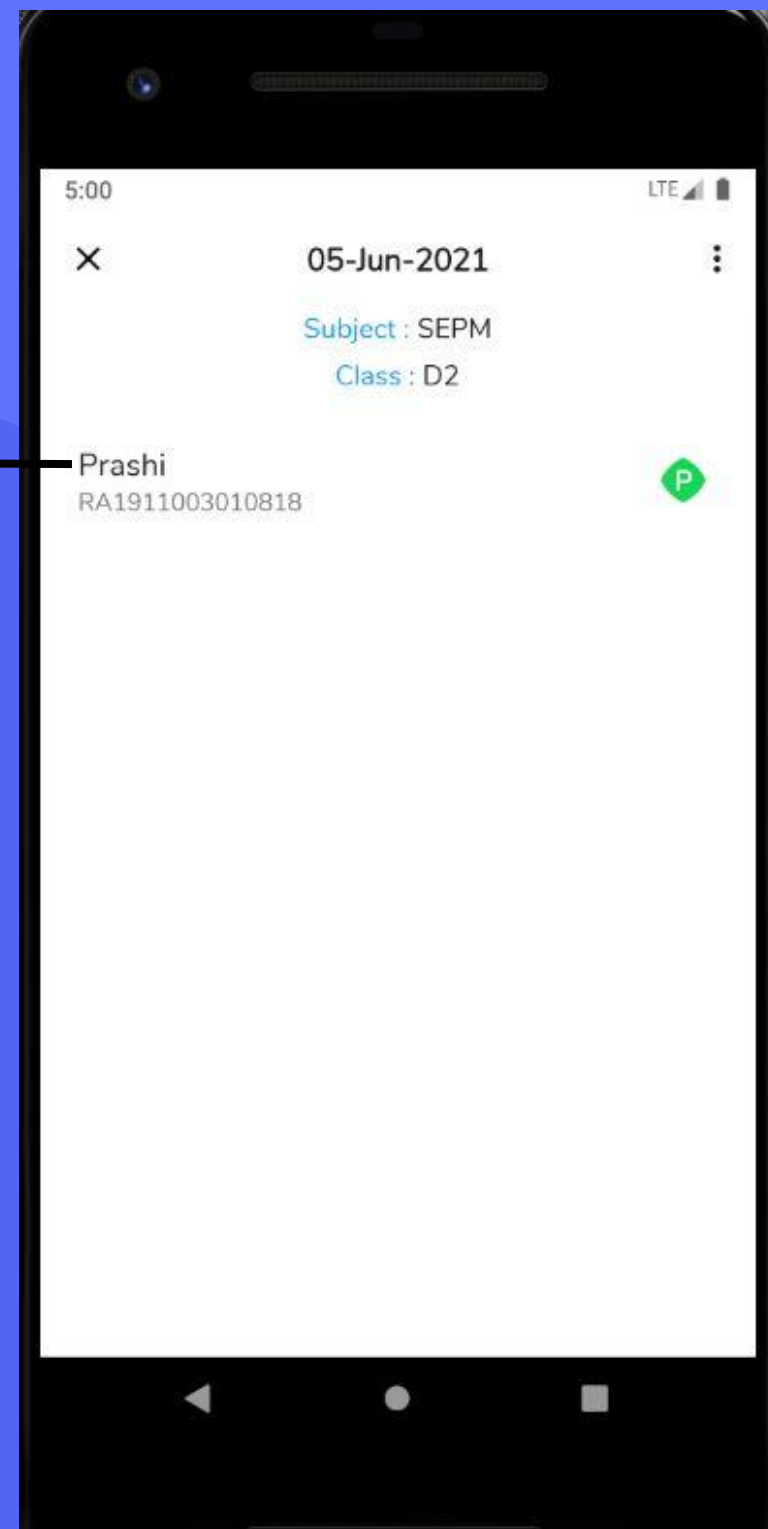
ATTENDANCE



ATTENDANCE PORTAL:

- Shows Number of Students
- Registration Number
- Reports
- Accessibility to add students

Student Information



Required Skills



UI/UX Design



Front End
Development



Back End
Development



Project
Management

Roles and Responsibilities

Name	Role	Responsibilities
Prashi	Key Business User (Product Owner)	Provide clear business and user requirements
	Project Analyst	Analysis the project
	Business Analyst	Discuss and Document Requirements
Shubham	Technical Lead	Design the end-to-end architecture
	UX Designer	Design the user experience
	Frontend Developer	Develop user interface
	Backend Developer	Design, Develop and Unit Test Services/DB
Dharva	Tester	Define Test Cases and Perform Testing
	Database Consultant	Responsible for any data inflow in terms of clients.



Stakeholder Influence



Stakeholder name	Activity/Area/Phase	Interest	Influence	Priority(high/Medium/low)
Company CEO and other Board Members	Top level, ultimate management and decision making authority.	High	High	High
Developers	Development of the app	High	High	Medium
Sales and marketing manager	Responsible for the content and sales of the app for our customers	Low	High	Medium
Human analyst(Finance and HR)	Responsible for the finance management	High	Low	High

Project Methodology

Four core principles outlined in the Agile Manifesto are:

1. Major focus is customer/client process in order to make sure that the customer/client is continuously involved during every stage
2. Re-work is inevitable with Agile. New features need to be added on a daily basis on customer and stakeholders demands.
3. High Product Owner Involvement.
4. Time to market is accelerated.

Communication Process

Method of communication:

1. Monthly report for High Interest and Low Influence
2. Walk through of progress to High Interest and High Influence stakeholders
3. We would hold weekly progress update meetings with the module head, and other module teams, giving them progress updates and to coordinate the work.
4. The team members would hold daily update scrum meetings for updates on the work they have to do and have done on the module.



External Stakeholders

- *B2C Customers*
- *B2B Clients: The external institutions which will be using the app for their business*
- *Developers : play a major role in the development of the project*
- *IT Support: who would maintain the app and manage its content*



Project Cost

WBS	Activity	Activity Description	Sub Task	Sub Task Description	Effort (in hours)
T1	T1M1	Application Development	T1M1S1	Set up domain	2
			T1M1S2	layout and design	2
			T1M1S3	Backend development	3.5
			T1M1S4	Login, Homescreeen	1.5
			T1M1S5	Server	2
			T1M1S6	Course details page	1

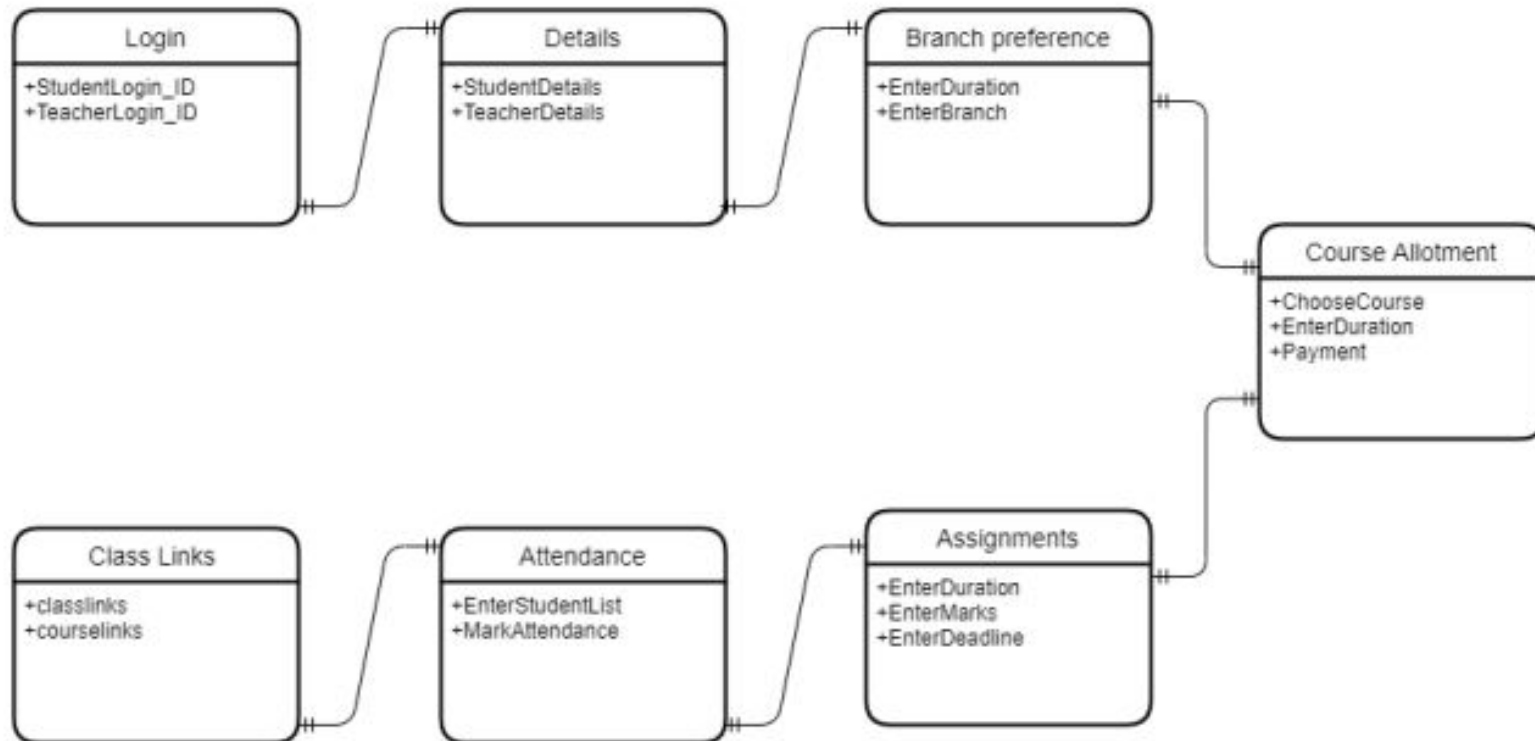
			T1M1S7	Frontend development	1.5
T2	T2M1	Database	T2M1S1	Development and Communication with database providers	3
			T2M1S2	Database management	2
			T2M1S3	Continuous updating	Quarterly
T3	T3M1	Buying and Transaction Portal	T3M1S1	Communication with payment gateway providers (3rd party)	2
			T3M1S2	Development of portal	2

Project Cost

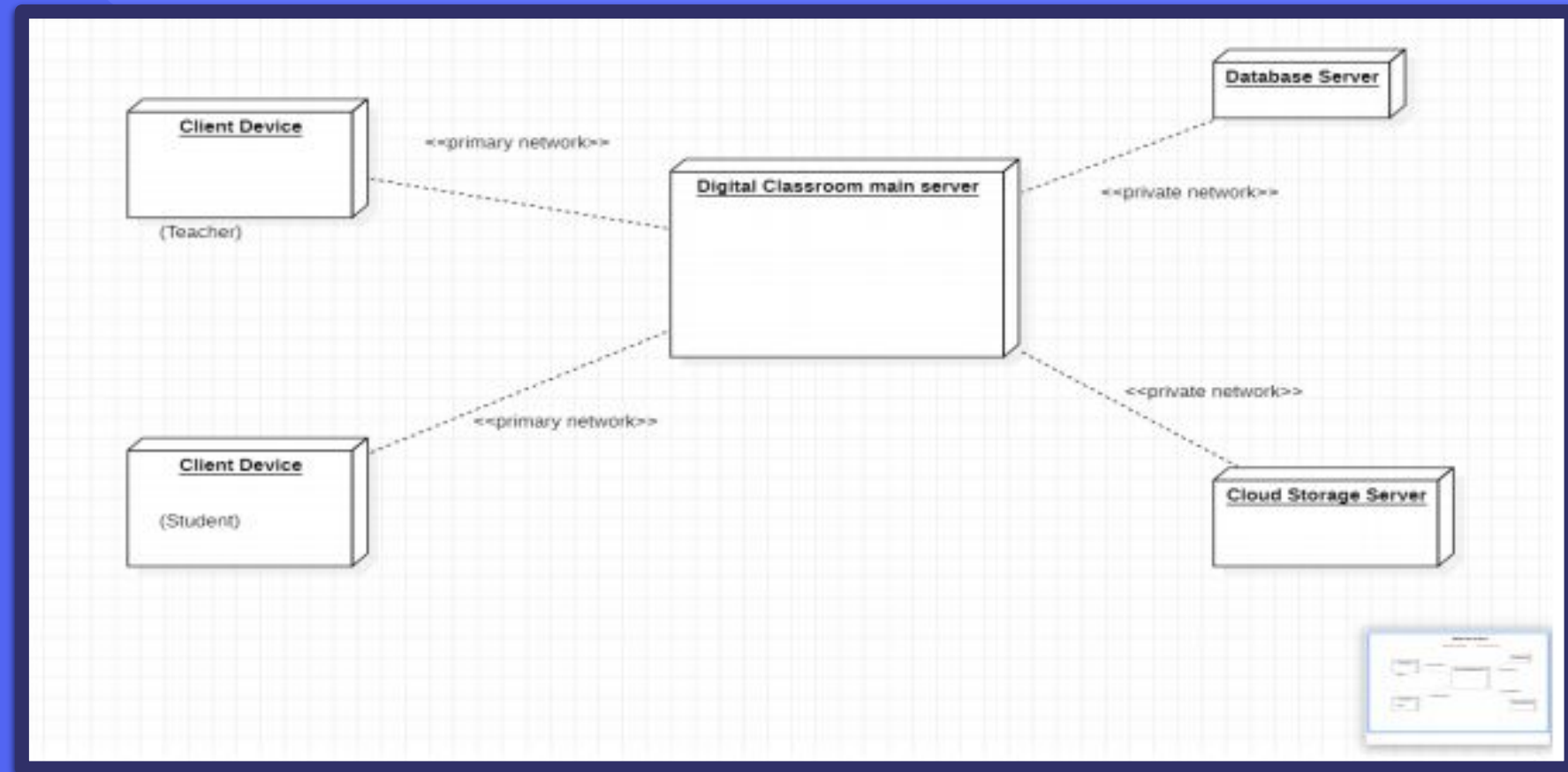
Infrastructure Requirement	Quantity
<i>IR1- Domain</i>	1
<i>IR2- Database</i>	2
<i>IR3- Buying and Transaction Portal</i>	1
<i>IR4- Server</i>	3

Category	Details	Quantity
<i>People</i>	<i>Developers, Team Leaders, Managers, Consultant (3rd party)</i>	6
<i>License</i>	<i>Domain</i>	1
<i>Infrastructures</i>	<i>Database, Server</i>	3

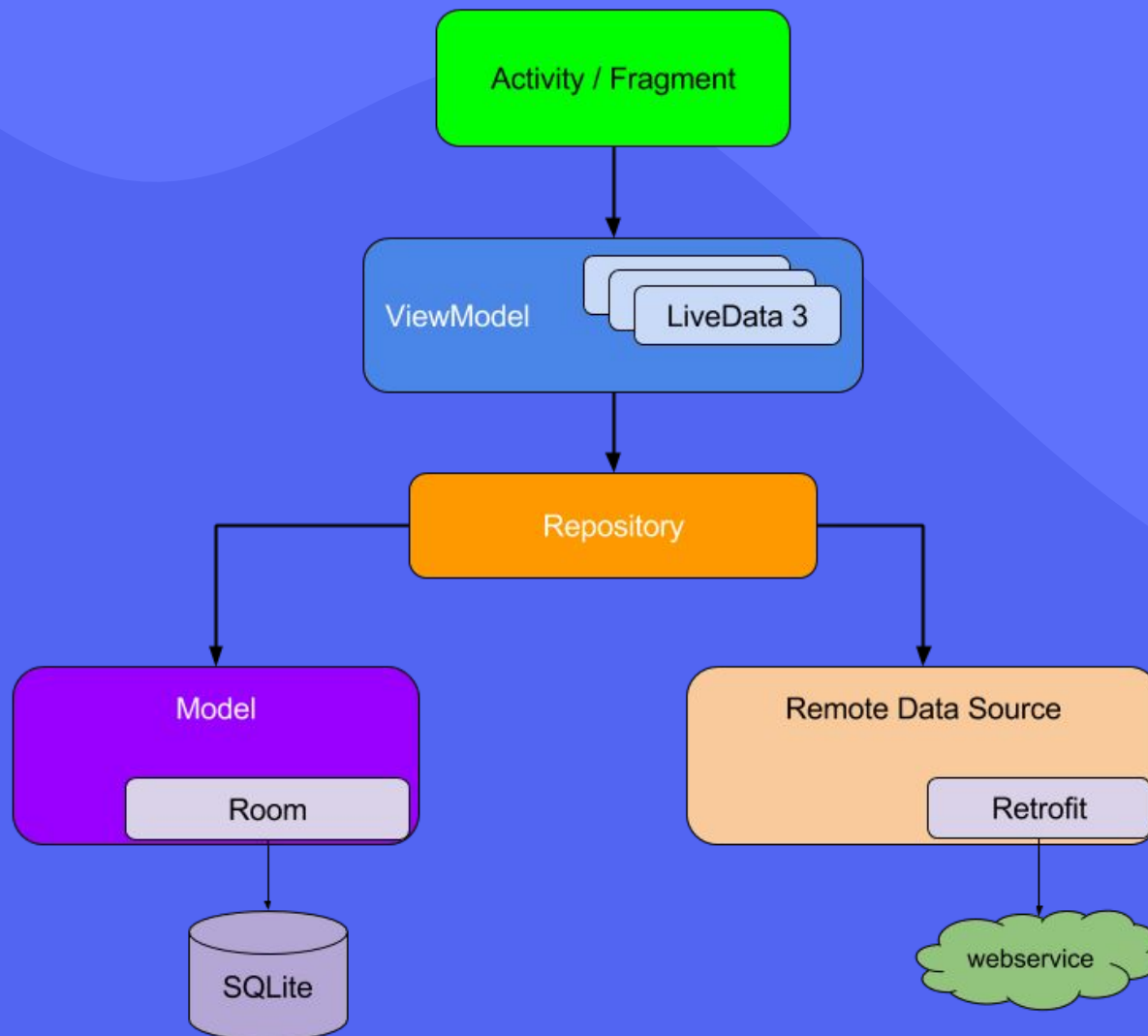
Entity Diagram



Deployment Diagram



Architecture Design



Test Cases

Test ID	1	
Name	Login Page	
Test Scenario	Check login with right data	
Assumptions & Preconditions	Assumption: The user is trying to access the login process on an android application	
Test Steps	Go to application Enter User ID Enter Password Click Sign in	
Test Data	User Id = abc@DogeEdu.com Password = Pass	
Expected Outcome	User should be able to login	
Actual Outcome	Logged in and redirected to home page	Page refreshes with incorrect Credentials warning
Result	PASS	FAIL

Test ID	2	
Name	Selecting Course	
Test Scenario	Confirm Selection	
Assumptions & Preconditions	Assumption: The user is trying to buy a course on a supported application	
Test Steps	Go to application Select a suitable service Enter the Buying Details Confirm The Payment Confirm Buying with Link/OTP on the Email/SMS	
Test Data	Name : ABC Email id : abc@DogeEdu.com Phone number: 976550**** (example) Date range : dd/mm/yyyy to DD/MM/YYYY Number of guests : 2 (Example) Payment option : Net banking (Redirected to payment portal)	
Expected Outcome	User should Get and SMS/Email with Buying confirmation and further details.	
Actual Outcome	Email/SMS Recieved	Email/SMS Not recieved
Result	PASS	FAIL

Test Cases

Test ID	3	
Name	Payment	
Test Scenario	Confirm Payment	
Assumptions & Preconditions	Assumption: The user is trying to access payment process on a supported application	
Test Steps	Go to application Select a suitable service Enter the Buying Details Initiate The Payment process Finish Payment with suitable details	
Test Data	Name : ABC Email id : abc@DogeEdu.com Phone number: 976550**** (example) Date range : dd/mm/yyyy to DD/MM/YYYY Number of guests : 2 (Example) Payment option : Net banking (Redirected to payment portal)	
Expected Outcome	User should receive a confirmation SMS/Email regarding the payment	
Actual Outcome	Email/SMS Received	Email/SMS Not received
Result	PASS	FAIL

Test ID	4	
Name	Contact US (optional)	
Test Scenario	Provide confirmation for contact established	
Assumptions & Preconditions	Assumption: The user is trying to access the contact (customer support) process on a supported application	
Test Steps	Go to application Go to contact Us page Fill the contact us form Fill recipient Email/SMS Click on send	
Test Data	**Contact message** [TEXT]	
Expected Results	Getting a reply Email/SMS on the provided details	
Actual Results	Email/SMS Received	Email/SMS Not received
Result	PASS	FAIL

Test Cases

Test ID	5	
Name	Contact US (if signed in)	
Test Scenario	Provide confirmation for contact established	
Assumptions & Preconditions	Assumption: The user is trying to access the contact (customer support) process on a supported application	
Test Steps	Go to application Go to contact Us page Fill the contact us form The recipient Email/SMS will be linked to User Acoount Click on send	
Test Data	**Contact message** [TEXT]	
Expected Results	Getting a reply Email/SMS on the provided details	
Actual Results	Email/SMS Recieved	Email/SMS Not recieved
Result	PASS	FAIL

Test Cases

Test ID	7	
Name Test Scenario	<i>Taking attendance</i>	
Assumptions & Preconditions	Assumption: the teacher is trying to take the attendance and save the attendance report.	
Test Steps	Go to application Go to the attendance page Select the class Enter the attendance	
Test Data	Student name and registration number	
Expected Results	Attendance marked succesfully and report is saved	
Actual Results	Warning Pops UP	Warning does not Pop UP
Result	PASS	FAIL

Test Cases

Test ID	7	
Name	Existing User	
Test Scenario	Check for Existig User	
Assumptions & Preconditions	Assumption: The user is trying to access the sign-up process with esisting details on a supported application	
Test Steps	Go to application Enter User ID Enter Password Click Sign Up	
Test Data	Userid = abc@DogeEdu.com Password = Pass	
Expected Results	Warning for pre-existing case	
Actual Results	Warning Pops UP	Warning does not Pop UP
Result	PASS	FAIL

Test ID	6	
Name	Feedback	
Test Scenario	Provide Feedback	
Assumptions & Preconditions	Assumption: The user is trying to access feedback process on a supported application	
Test Steps	Go to atlantis.com Navigate to Feedback Form Name Email Phone Provide The Feedback Click Send	
Test Data	Name : ABC Email id : abc@DogeEdu.com Phone number: 976550**** (example) Feedback : **Feedback message** [TEXT]	
Expected Results	User should recieve a Thank you Eemail/SMS/On-site message and the form should refresh	
Actual Results	Email/SMS/Msg Recieved	Email/SMS/Msg Not recieved
Result	PASS	FAIL

Test Cases

Login Page: Logged In and redirected to the Homepage.

Select a Course: User should get notification via Email intimating the selection of the course.

Taking Attendance Attendance successfully saved to the database

Call the Students: Call button to call the students did not respond correctly

Existing user The user is trying to access the sign up process with an existing account

Feedback The user is trying to access the feedback process