**REGISTRATION FORM APP**

4th year project



*Project work submitted to*

IIIT Kalyani

Supervisor

Dr. Bhaskar Biswas

**Certificate**

This is to certify that the project work entitled “Registration form app” being submitted by

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and Mr.Pratik Sagar(Roll no:-39/CSE/17057/255) undergraduate students in the Department

of Computer Science and Engineering, Indian Institute of Information Technology, Kalyani,

West Bengal 741235, India, as the 4th year project work, is an original work carried by them

under my supervision and guidance. The thesis has fulfilled all the requirements as par the

regulations of IIIT Kalyani and in my opinion, has reached the standards needed for submission.

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.

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**Abstract**

We all are using the registration form and for every semester. But, no one notices the importance of being used online. This pandemic gives us a glance and also changes our perspective. For our registration form, it is quite difficult for making a time in between to the allotted period to just get the form and filling the registration form and then submit it again through going various processes in between them. So, making it online makes the half of the work done in spite of distributing all the form from different year and collecting all the form. Rest of the work is done by our dynamic button and real time request approval.

**Our Contribution**

We are trying to provide online facility for submitting the registration form. We are also facilitating for approving the request without being present physically at the allotted time and so every member are free to do their job whenever they feel free to do so. On the other hand, some effort also tried to minimize the time which is used for doing all the physical work with the registration form.

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**1. Introduction**

The Registration form allows students to register for courses through Internet within the period. The Administrator will check the details of the particular student in order to request by the student and he will recommend the possibility of courses which he / she may take in that particular semester and he/ she is having no dues that are to be cleared.

Registration eliminates the need for paperwork that has to be filled-out and saved for reference. Once students register online, they will have an account where their information is stored. This will make subsequent business, quick and efficient, because the administrator retrieves student information instantly when they log in. Students will be able to check the status of their account and find their due are pending or not so they can get the admit card as soon as possible.

This android application contains the home page where links to the register and login pages are available. New students need to register by entering their details and using college email id only. After registering they can login using their username and password.

The project has four modules decided as per the requirements of the organization namely student module, Hostel Incharge module, Librarian module and Finance module.

**2. Development**

**2.1 EXISTING SYSTEM**

Currently students submit a hardcopy of filled application form to the college/university, office staff verifies whether all details filled correctly and enters all data into excel file and write same in manual register.

**2.2 PROPOSED SYSTEM**

Proposed Android application will eliminate all the manual intervention and increase the speed of whole process. System will allow student to fill the form online, system has inbuilt validation system to validate the entered data and allows the administrator to access the students details quickly. After successful submission, student can login into system by using their user name and password they can verify.

**2.3 MODULES / USERS OF THE SYSTEM**

1. Students

2. Hostel Incharge

3. Librarian

4. Accounts department

**2.4 FUNCTIONAL DEVELOPMENT**

1. This system allows the new students to get registered and there on, students are allowed to login and register for every semester.

2. App also allows modifying, updating the details.

3. The registration application submitted by the students will be sent to the Accountant, Librarian and Hostel Incharge.

4. Students are also provided with a choice of download their registration application in case of any issues.

5. Authorized people are allowed to retrieve the details of the students.

6. All the details of every student are stored in a database.

7. Accountant accept the request of given students according to their valid information.

8. Librarian accept the request of only students who have no due left.

9. Hostel Incharge also approve the request only after checking their hostel dues.

**2.5 NON-FUNCTIONAL DEVELOPMENT**

1. App would not go down or crash when there are too many users using the system at the same time.

2. Unauthorized persons would not be allowed to access the system.

**2.6 Software Requirements**

Minimum Android 6.0

Database: Google Firebase

Android Studio

**2.7 Hardware Requirements**

Processor: i3

Processor speed: 2 GHz or faster

Hard Disk Space 2GB to 3GB

Keyboard

Ram Memory 2GB or more

**2.8 User Interface:**

The Graphical user interface provides user to interact with the system.

**2.8.1 FrontEnd Work:**

1. **LoginPage Code:**

import 'signup\_screen.dart';

import 'home\_screen.dart';

import '../models/authentication.dart';

import 'student\_login.dart';

class LoginScreen extends StatefulWidget {

static const routeName = '/login';

@override

\_LoginScreenState createState() => \_LoginScreenState();

}

class \_LoginScreenState extends State<LoginScreen> {

final GlobalKey<FormState> \_formKey = GlobalKey();

Map<String, String> \_authData = {'email': '', 'password': ''};

void \_showErrorDialog(String msg) {

showDialog(

context: context,

builder: (ctx) => AlertDialog(

title: Text('An Error Occured'),

content: Text(msg),

actions: <Widget>[

FlatButton(

child: Text('Okay'),

onPressed: () {

Navigator.of(ctx).pop();

},

)

],

));

}

Future<void> \_submit() async {

if (!\_formKey.currentState.validate()) {

return;

}

\_formKey.currentState.save();

List \_ret = await Provider.of<Authentication>(context, listen: false)

.logIn(\_authData['email'], \_authData['password']);

if (\_ret[0]) {

Navigator.of(context).pushReplacementNamed(HomeScreen.routeName);

} else {

var errorMessage = 'Authentication Failed. Please try again later.';

\_showErrorDialog(errorMessage);

}

}

1. **SignUp Page:**

import 'home\_screen.dart';

import 'login\_screen.dart';

class SignupScreen extends StatefulWidget {

static const routeName = '/signup';

@override

\_SignupScreenState createState() => \_SignupScreenState();

}

class \_SignupScreenState extends State<SignupScreen> {

final GlobalKey<FormState> \_formKey = GlobalKey();

TextEditingController \_passwordController = new TextEditingController();

Map<String, String> \_authData = {'email': '', 'password': ''};

void \_showErrorDialog(String msg) {

showDialog(

context: context,

builder: (ctx) => AlertDialog(

title: Text('An Error Occured'),

content: Text(msg),

actions: <Widget>[

FlatButton(

child: Text('Okay'),

onPressed: () {

Navigator.of(ctx).pop();

},

)

],

));

}

Future<void> \_submit() async {

if (!\_formKey.currentState.validate()) {

return;

}

\_formKey.currentState.save();

bool ret = await Provider.of<Authentication>(context, listen: false)

.signUp(\_authData['email'].trim(), \_authData['password'],index);

if (ret) {

Navigator.of(context).pushReplacementNamed(HomeScreen.routeName);

} else {

var errorMessage = 'Authentication Failed. Please try again later.';

\_showErrorDialog(errorMessage);

}

}

**2.8.2 BackEnd Part:**

**1)Registration Form**

**import 'package:flutter/material.dart';**

**import 'package:login\_app/screens/login\_screen.dart';**

**import 'package:login\_app/screens/request.dart';**

**class Studentdetail extends StatefulWidget {**

**static const routeName = '/registration-page';**

**@override**

**\_StudentdetailState createState() => \_StudentdetailState();**

**}**

**class \_StudentdetailState extends State<Studentdetail> {**

**@override**

**Widget build(BuildContext context) {**

**return Scaffold(**

**appBar: AppBar(**

**title: Text('Student Registration form '),**

**leading: IconButton(icon: Icon(Icons.arrow\_back),onPressed: (){**

**Navigator.of(context).pop();**

**},**

**),**

**),**

**body: Padding(**

**padding: const EdgeInsets.all(12.0),**

**child: Flexible(**

**child: SingleChildScrollView(**

**child: Column(**

**children: [**

**Container(**

**child: Column(**

**children: [**

**Row(**

**children: [],**

**),**

**// UnderlineInputBorder(),**

**Text('REGISTRATION FORM'),**

**Row(),**

**Row(**

**children: [**

**Text('STUDENT NAME'),**

**SizedBox(width: 10),**

**Flexible(child: TextField())**

**],**

**),**

**Row(**

**children: [**

**Text('ROLL NO'),**

**SizedBox(width: 10),**

**Flexible(child: TextField())**

**],**

**),**

**Row(**

**children: [**

**Text('REG NO'),**

**SizedBox(width: 10),**

**Flexible(child: TextField())**

**],**

**),**

**Row(**

**children: [**

**Text('GENDER'),**

**SizedBox(width: 10),**

**Flexible(child: TextField())**

**],**

**)**

**2)**

**2.9 Communication Layer:**

The Internet is a global system of interconnected computer networks that use the standard Internet protocol suite (TCP/IP) to link several billion devices worldwide. A firewall is a device installed between the internet network of an organization and the rest of Internet. The main purpose of a firewall is to separate a secure area from a less secure area and to control communications between the two.

**2.10 Functional Layer:**

This layer provides the functions of each user with different privileges. For example a student is only allowed for registration and the layer is to develop accomplish the same, the Admin is responsible for all management and monitoring tasks. The Admin has the highest privileges in the system.

**2.11 Data Storage Layer:**

The web server is connected to one or more storages. For the purpose of this data storage is the saving of any data that may be made and stored electronically.

**3. Conclusion**

The Android is easy to use, full-featured and flexible for Student Registration Form web portal. Students can sign up online when and wherever is most convenient for them in just a few minutes without having to manually fill-out and submit the paper forms. The administrator would get the details of the student directly. This system will be helpful in accessing the details of any students quickly without any use of paper. This will be helping to skip the steps of distributing the registration form and collecting the registration form. This will build a system to get out of hustle and pressure to get signature from all the department within a particular time.

**4. Future Scope**

Some of the future scope are providing the better way rather than the buttons to approve request for every single student for the different department of the institution. There may be chance of some human error if someone by mistake disapprove the request but he was already eligible for getting approved of the request. Every approved request get the signature from the registrar and for this he have to approve all request whatever the number of students, So this can also by some sorting technique.

**5. Reference**

[1] Development of Student Information System- [N.M.Z. Hashim1, S.N.K.S. Mohamed]

[2] Web Based Student Information Management System- [S.R.Bharamagoudar, Geeta R.B., S.G.Totad]