Project Report on

" ***BOOK YOUR BOOKS – ANDROID APPLICATION*** "

BACHELOR OF ENGINEERING
in
INFORMATION SCIENCE AND ENGINEERING
by

Name

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YELAHANKA, BENGALURU-560064

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the project based learning entitled " ***BOOK YOUR BOOKS – ANDROID APPLICATION*** **"** is a bonafide work carried out by **Mr. A GAUTHAM (1BY19IS001)** during the academic year 2020-21. It is certified that all corrections/suggestions indicated for the Internal Assessment have been incorporated in the report deposited in the departmental library.

Signature of the guide	Signature of the Coordinator	Signature of the HOD
Prof. Chandrashekhara K.T	Prof. Shwetha M.S	Dr.Pushpa S.K

ABSTRACT

- This Project is aimed to develop an android application which works as an e-commerce app for purchase of stationery items from BMSIT stationery shop
- In addition this app provides Digitalization to Process like providing Direct soft copies for print out, announcements by shopkeeper , to check availability of items, and to know the Syllabus mentioned textbooks and their availability .
- To keep transparency at college level for quantity of stationary flow and to maintain adequate stock, and bookings can be taken as well.

ACKNOWLEDGEMENT

I have put in a lot of effects into this project. However, it would not have been possible without the help and support of a lot of individuals. We would like to extend our sincere thanks to all of them. We would like to extend our gratitude to our guide, Prof. Chandrashekhara K.T for his supervision as well as providing necessary information regarding the project.

We would like to extend our gratitude to our professors and friends for giving their time to help us.

Thank you.

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CHAPTER 1
INTRODUCTION

1.1 PREAMBLE

In this Project we aim to solve a Real life daily problem which we are facing around in our college campus.
Students in the Campus face lot of difficulty in purchasing Stationery and to contact the stationary shop owner in campus for say,

- We do not have accurate information about timings of the shop.
- On major days, the shop remains closed without prior information.
- Lack of clarity on availability of Items (quantity/Stock).
- Huge amount of time spent waiting during break time due to hassle created at times due to print out errors, which sometimes leads us to miss our classes.
- 1st Year students lack information about items they need or kind of textbook they should use.
- During Pandemic either of the two: students or the shopkeeper are at remote places which brakes communication. Etc…….

So as a solution We Aim to develop a platform between the Students and Shopkeeper which can lead to a hassle -free purchase and Digitalization of the transaction.

1.2 MOTIVATION

- Amount of excess time spent near shop helped us find a solution to this problem.
- Freshers finding it lot difficult to know about their requirements, and stationary items/textbooks they need.
- Pandemic has made it difficult to reach out shop from remote places
- Shop keeper finds it difficult to reach out students and update availability etc.
- Uncertainty on shop keeper availability and shop timings.

1.3 OBJECTIVES

The objectives of our project are as follows :

- To provide students, the announcements of stationery shop timings and other important announcements regarding stock etc.
- To avail booking facility to students.
- To provide Direct sending platform of printout soft copies.
- To let institute, know about shop transaction and analysis of stationery movements in the shop.
- Teachers can make announcement and give soft copies for notes/forms printout.
- To make online cash transaction easy and accountable.
- To reduce student time wasted waiting at stationary store.

1.4 PROBLEM STATEMENET

- To develop an Android Application which serves as a platform between students and Bmsit Shopkeeper, which can take student orders, and fulfil req. stock, create direct Contact to take printouts, provide home deliveries during holidays and during situations like pandemic.

CHAPTER 2

2.1 EXISTING SYSTEM

- In person visit to campus shop and purchase.
- Lack of clarity of available items and its stock.
- Shop timings uncertainty in students.
- Long queues for small items purchase at peak time.
- Lot of hassle to both students and Shopkeeper at peak times.
- Taking print outs, sending copy for the same is a long process.
- Cant get in contact with shop owner unless called or visited in person.

2.2 PROPOSED SYSTEM

- We aim to reduce student doubts regarding any concerned problems regarding college stationery shop.
- We provide various functionalities, where student have personal accounts to access the app, and the shopkeeper has admin account to update available items and stock and to make relevant announcements.
- Students can see req. textbook for their semester and make a choice of purchase. This app would be easy to access and with simple navigation.

2.3 TOOLS USED

❖ HARDWARE

- Intel Core 5 and above (recommended)
- Quad processor or higher
- CPU cores – 4
- RAM - 8 GB Min
- No of parallel threads - 4
- 8 GB of available disk space minimum
- Cache - 8 mb
- Freq - 1066 Hz
- Clock speed - 3 GHz
- 1200 x 800 min screen resolution

❖ SOFTWARE

- Programming Language – Java, xml
- Operating System – Windows 8/10 64-bit , Ubuntu, Android
- Software tool used – Android Studio
- Database – Firebase database

2.4 RELEVANCE TO SOCIETY / INDUSTRY

- ❖ Reduces wastage of time waiting at shop for small amount of purchase due to long queues.
- ❖ Availably of items given at fingertips.
- ❖ Easy for shop owner and students in time of pandemic to get in touch for the purchase of items.
- ❖ Direct chat with shopkeeper and clarify any doubts without exchange of number.
- ❖ Statistics of purchases and transactions at one database.
- ❖ Hassle free purchase and easy to take printouts.
- ❖ Dynamic Announcements/updates Students can check.
- ❖ Timely maintenance of products available in store.

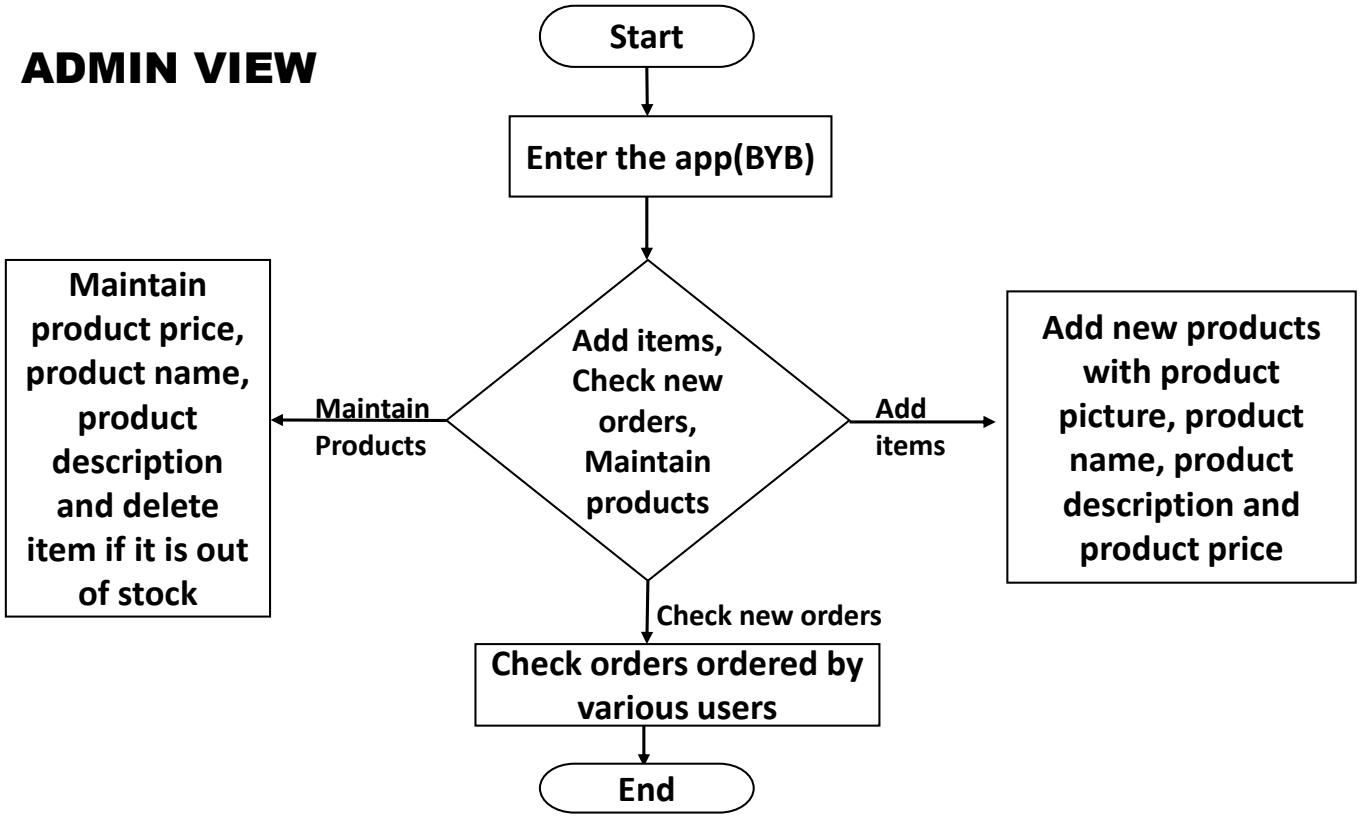
CHAPTER 3

3.1 METHODOLOGY

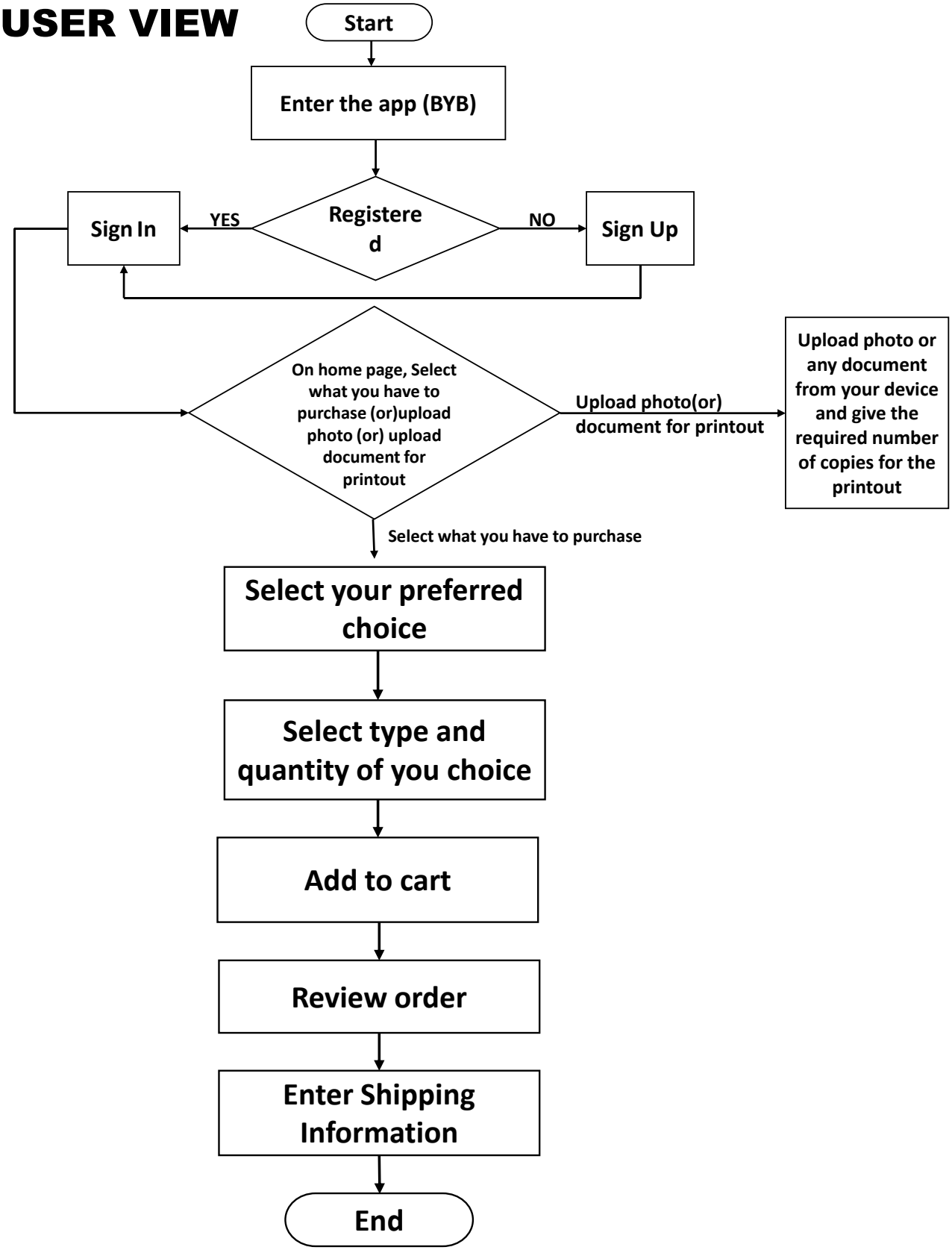
1. Create Student/Teacher and Admin login Account.
2. Check announcements of timings and Stock availability.
3. Make Req. stationery orders.
4. Confirm orders and checkout.
5. Update cart as required by the students.
6. Upload Print out Documents/forms/photos.
7. Update Student Profile if necessary.
8. Post queries if any to the Shopkeeper through chat option.
9. Admin can maintain and add new products time to time.
10. Anytime and anywhere easy logout and login.

3.2 DESIGN

ADMIN VIEW



USER VIEW


Start
Enter the app (BYB)
Registered
YES
Sign In
NO
Sign Up
On home page, Select what you have to purchase (or)upload photo (or) upload document for printout
Upload photo(or) document for printout
Upload photo or any document from your device and give the required number of copies for the printout
Select what you have to purchase
Select your preferred choice
Select type and quantity of you choice
Add to cart
Review order
Enter Shipping Information
End

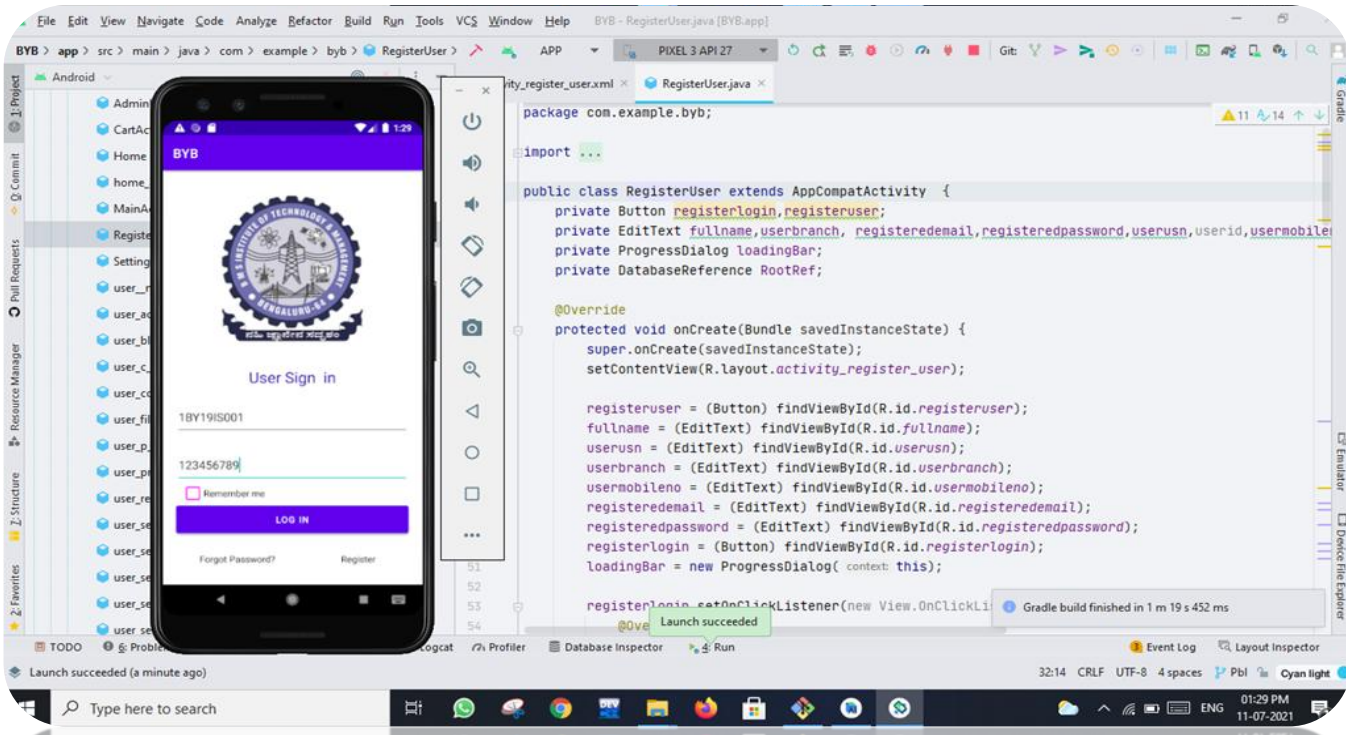
3.3 IMPLEMENTATION (Source code for one of java File)

```
package com.example.byb;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.app.ProgressDialog;
import android.content.Intent;
import android.os.Bundle;
import android.os.health.UidHealthStats;
import android.text.TextUtils;
import android.util.Patterns;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.ProgressBar;
import android.widget.TextView;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.OnFailureListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.HashMap;

import static android.widget.Toast.LENGTH_LONG;

public class RegisterUser extends AppCompatActivity  {
    private Button registerlogin,registeruser;
    private EditText fullname,userbranch,
registeredemail,registeredpassword,userusn,userid,usermobileno;
    private ProgressDialog loadingBar;
    private DatabaseReference RootRef;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_register_user);

        registeruser = (Button) findViewById(R.id.registeruser);
        fullname = (EditText) findViewById(R.id.fullname);
        userusn = (EditText) findViewById(R.id.userusn);
        userbranch = (EditText) findViewById(R.id.userbranch);
        usermobileno = (EditText) findViewById(R.id.usermobileno);
        registeredemail = (EditText) findViewById(R.id.registeredemail);
        registeredpassword = (EditText)
findViewById(R.id.registeredpassword);
        registerlogin = (Button) findViewById(R.id.registerlogin);
        loadingBar = new ProgressDialog(this);

        registerlogin.setOnClickListener(new View.OnClickListener() {
            @Override
```

```
            public void onClick(View v) {
                startActivity(new Intent(getApplicationContext(),
MainActivity.class));
                finish();
            }
        });
        registeruser.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String name = fullname.getText().toString().trim();
                String usn=userusn.getText().toString().trim();
                String branch = userbranch.getText().toString().trim();
                String mobileno = usermobileno.getText().toString().trim();
                String email = registeredemail.getText().toString().trim();
                String password =
registeredpassword.getText().toString().trim();
                if (TextUtils.isEmpty(name)) {
                    fullname.setError("Full Name is required");
                    return;
                }
                if (TextUtils.isEmpty(usn)){
                    userusn.setError("USN is Required");
                }
                if (TextUtils.isEmpty(branch)) {
                    userbranch.setError("Branch is required");
                    return;
                }
                if (TextUtils.isEmpty(mobileno)) {
                    usermobileno.setError("Mobile Number is required");
                    return;
                }
                if (TextUtils.isEmpty(email)) {
                    registeredemail.setError("Email is required");
                    return;
                }
                if (!Patterns.EMAIL_ADDRESS.matcher(email).matches()) {
                    registeredemail.setError("Please provide valid email");
                    return;
                }
                if (TextUtils.isEmpty(password)) {
                    registeredpassword.setError("Password is required");
                    return;
                }
                if (password.length() < 8) {
                    registeredpassword.setError("Min password length should
be 8 characters");
                    return;
                } else {
                    loadingBar.setTitle("Create Account");
                    loadingBar.setMessage("Please wait, while we are checking
the credentials.");
                    loadingBar.setCanceledOnTouchOutside(false);
                    loadingBar.show();

                    Validateemail(name,usn ,branch,mobileno, email,
password);
                }
                Toast.makeText(RegisterUser.this, "Data VAlidated",
Toast.LENGTH_SHORT).show();
            }
```

```
        });
    }
    private void Validateemail(final String name,final String usn, final
String branch,final String mobileno, final String email, final String
password) {
        RootRef = FirebaseDatabase.getInstance().getReference();
        RootRef.addListenerForSingleValueEvent(new ValueEventListener() {
            @Override
            public void onDataChange(@NonNull DataSnapshot dataSnapshot) {
                if (!(dataSnapshot.child("users").child(usn).exists())){
                    HashMap<String,Object>userdataMap=new HashMap<>();
                    userdataMap.put("name",name);
                    userdataMap.put("usn",usn);
                    userdataMap.put("branch",branch);
                    userdataMap.put("mobileno",mobileno);
                    userdataMap.put("email",email);
                    userdataMap.put("password",password);

RootRef.child("users").child(usn).updateChildren(userdataMap)
                            .addOnCompleteListener(new
OnCompleteListener<Void>() {
                                @Override
                                public void onComplete(@NonNull Task<Void>
task) {
                                    if (task.isSuccessful()) {
                                        Toast.makeText(RegisterUser.this,
"Congratulations your account has benn created", Toast.LENGTH_SHORT).show();
                                        loadingBar.dismiss();
                                        Intent intent = new
Intent(RegisterUser.this, MainActivity.class);
                                        startActivity(intent);
                                    } else {
                                        loadingBar.dismiss();
                                        Toast.makeText(RegisterUser.this,
"Network erreo please try again later", Toast.LENGTH_SHORT).show();
                                    }
                                }
                            });
                }else{
                    Toast.makeText(RegisterUser.this, "This " + usn + "
already exists.", Toast.LENGTH_SHORT).show();
                    loadingBar.dismiss();
                    Toast.makeText(RegisterUser.this, "Please try again using
another phone number.", Toast.LENGTH_SHORT).show();

                    Intent intent = new Intent(RegisterUser.this,
MainActivity.class);
                    startActivity(intent);
                }
            }

            @Override
            public void onCancelled(@NonNull DatabaseError error) {

            }
        });

}
}
```

3.4 RESULTS


BYB
User Sign in
18Y19IS001
123456789
Remember me
LOG IN
Forgot Password?
Register
package com.example.byb;
import ...
public class RegisterUser extends AppCompatActivity {
private Button registerlogin,registeruser;
private EditText fullname,userbranch, registeredemail,registeredpassword,userusn,userid,usermobileno;
private ProgressDialog loadingBar;
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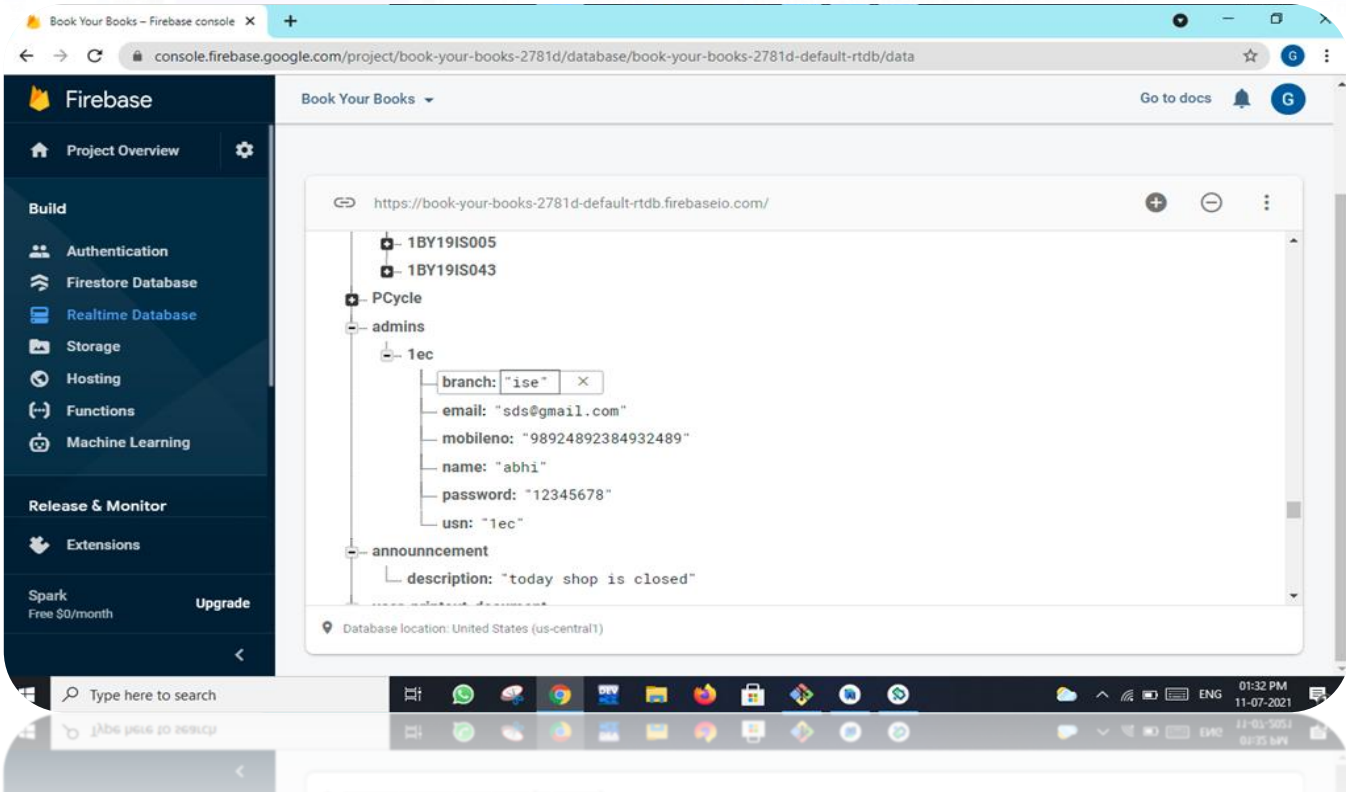
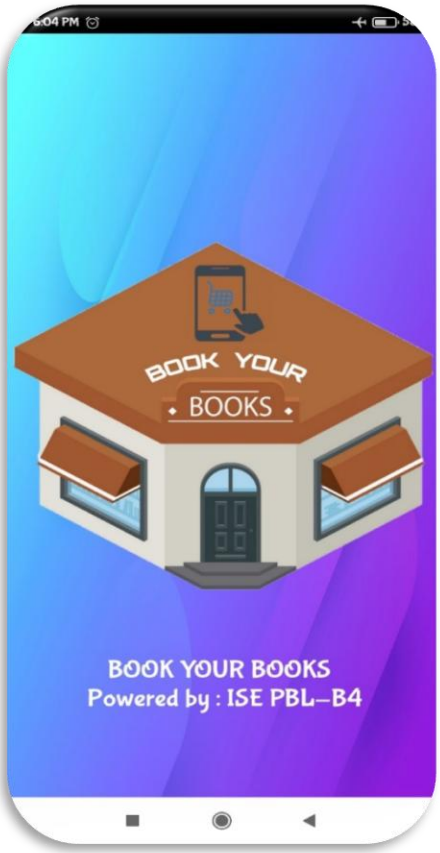
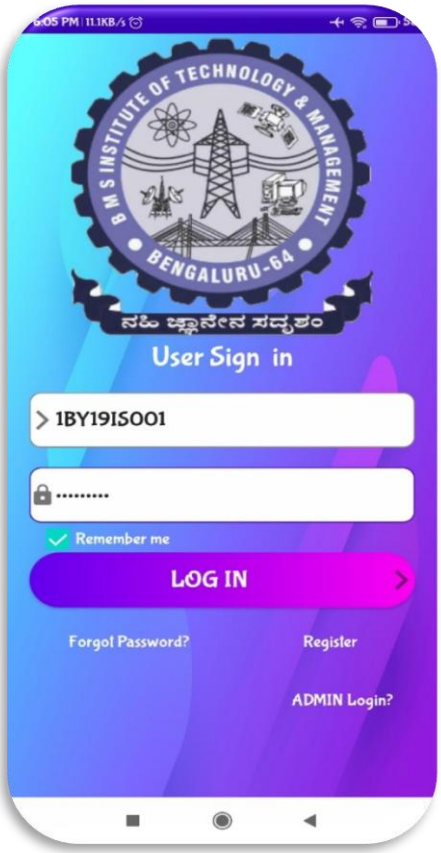
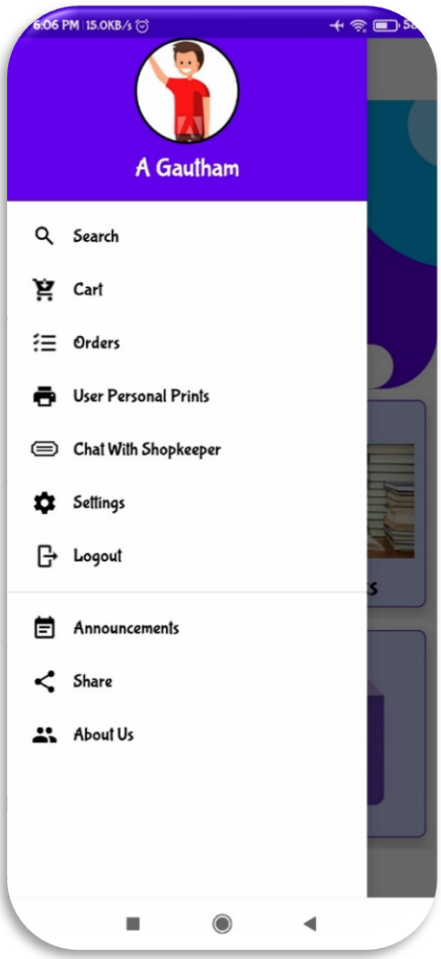
userusn = (EditText) findViewById(R.id.userusn);
userbranch = (EditText) findViewById(R.id.userbranch);
usermobileno = (EditText) findViewById(R.id.usermobileno);
registeredemail = (EditText) findViewById(R.id.registeredemail);
registeredpassword = (EditText) findViewById(R.id.registeredpassword);
registerlogin = (Button) findViewById(R.id.registerlogin);
loadingBar = new ProgressDialog(context: this);
Launch succeeded
Gradle build finished in 1 m 19 s 452 ms
Launch succeeded (a minute ago)
Type here to search
01:29 PM
11-07-2021

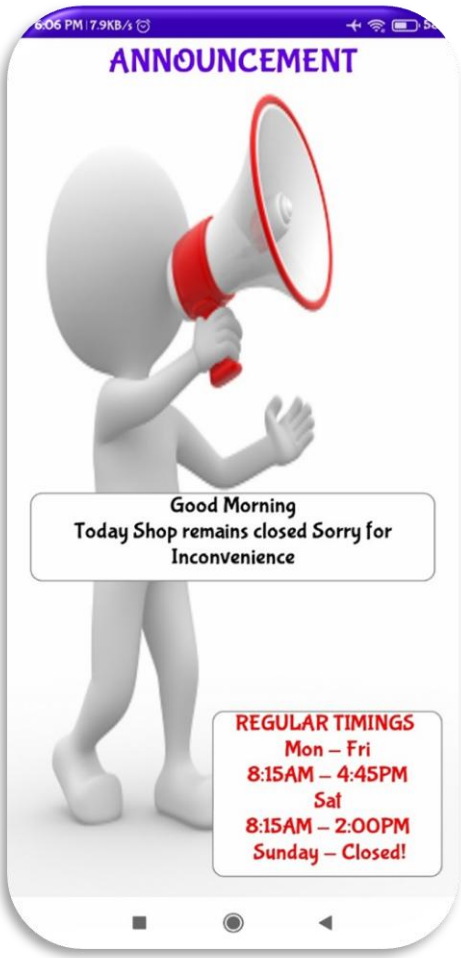

Book Your Books – Firebase console
console.firebase.google.com/project/book-your-books-2781d/database/book-your-books-2781d-default-rtdb/data
Firebase
Book Your Books
Go to docs
Project Overview
Build
Authentication
Firestore Database
Realtime Database
Storage
Hosting
Functions
Machine Learning
Release & Monitor
Extensions
Spark
Free $0/month
Upgrade
https://book-your-books-2781d-default-rtdb.firebaseio.com/
1BY19IS005
1BY19IS043
PCycle
admins
1ec
branch: "ise"
email: "sds@gmail.com"
mobileno: "98924892384932489"
name: "abhi"
password: "12345678"
usn: "1ec"
announncement
description: "today shop is closed"
Database location: United States (us-central1)
Type here to search
01:32 PM
11-07-2021


BOOK YOUR
BOOKS
BOOK YOUR BOOKS
Powered by : ISE PBL–B4


B M S INSTITUTE OF TECHNOLOGY & MANAGEMENT
BENGALURU-64
User Sign in
1BY19IS001
Remember me
LOG IN
Forgot Password?
Register
ADMIN Login?

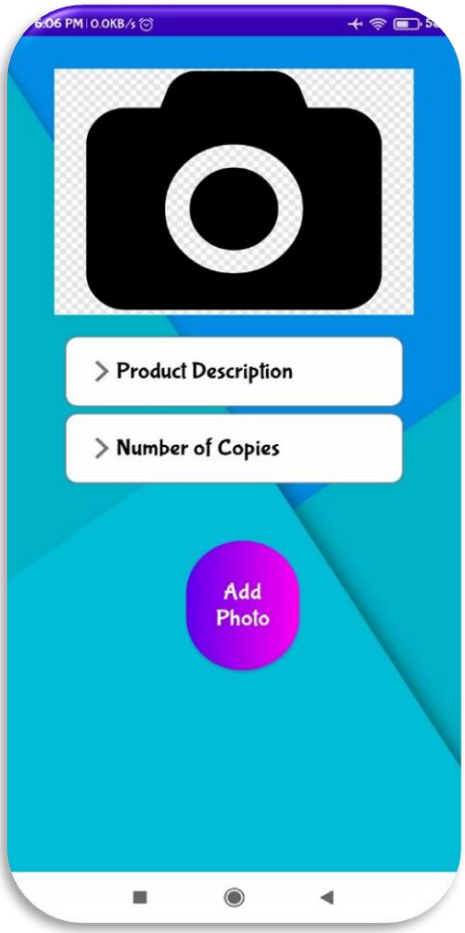

Home
BOOK YOUR BOOKS
Welcome User!!....
Happy Shopping
Search for ...
Stationery
TextBooks
Lab Manual
Forms
logged in Successfully...

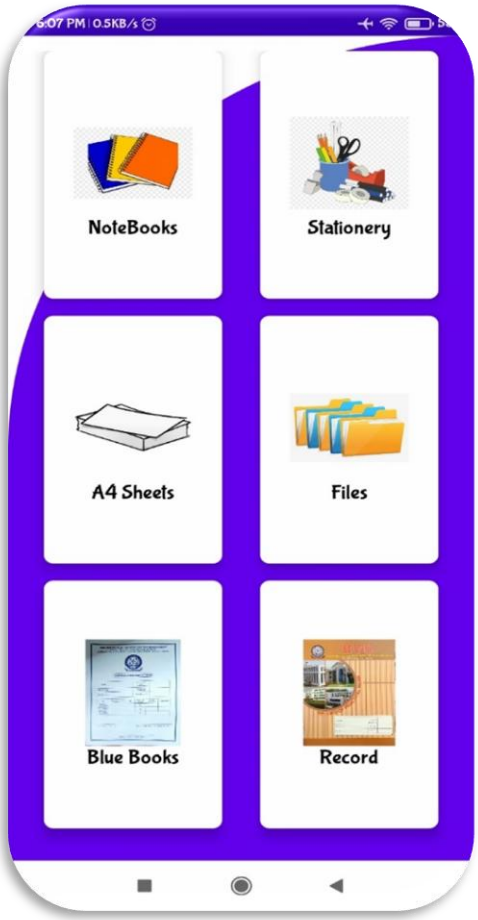

A Gautham
Search
Cart
Orders
User Personal Prints
Chat With Shopkeeper
Settings
Logout
Announcements
Share
About Us

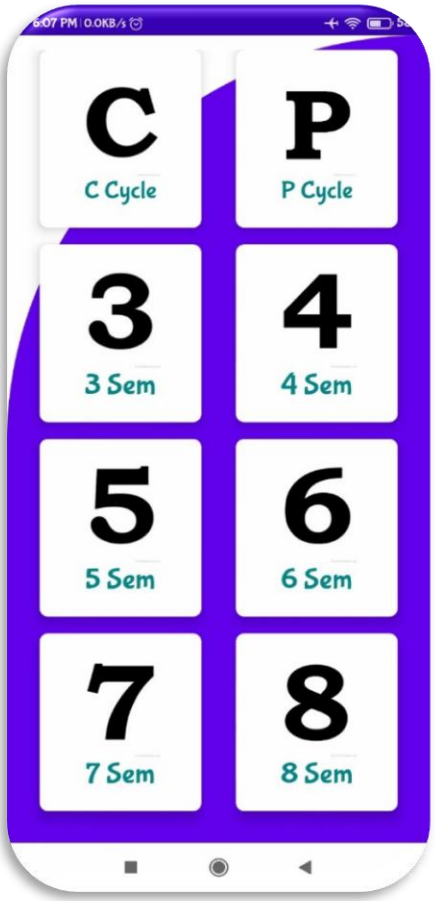

ANNOUNCEMENT
Good Morning
Today Shop remains closed Sorry for Inconvenience
REGULAR TIMINGS
Mon – Fri
8:15AM – 4:45PM
Sat
8:15AM – 2:00PM
Sunday – Closed!

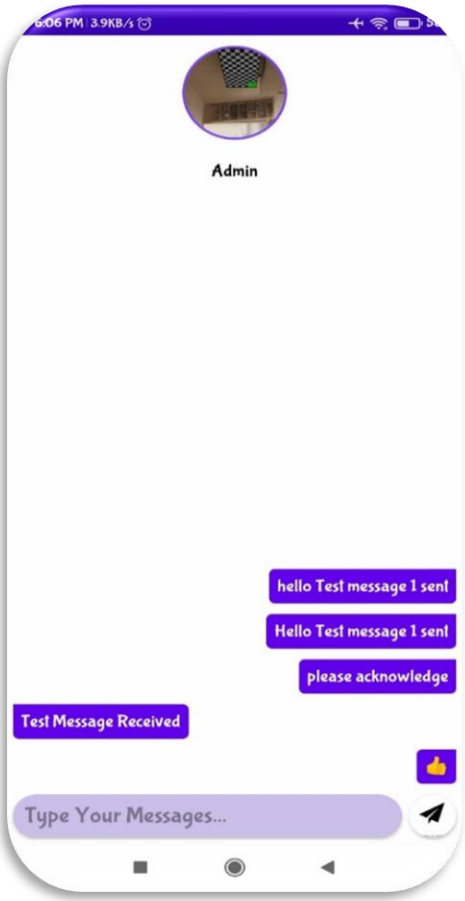

Product Name
SEARCH
BLUE BOOKS
Price = 20Rs
For IAs & Assignment
CLASSMATE GELGLIDE
Price = 5Rs
Smooth Writing with Low Cost
CLASSMATE LONG NOTEBOOK

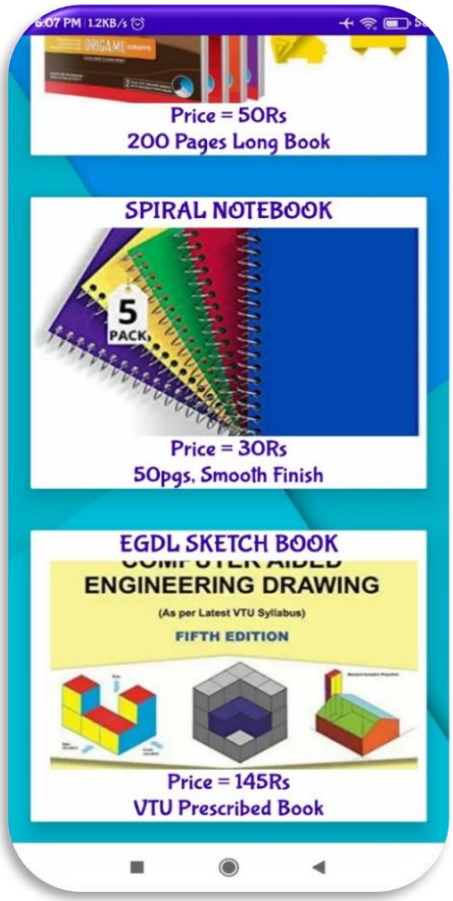

Close
Update
Change Profile
A Gautham
ISE
9959291343
1by19is001@bmsit.in
Banglore, Karnataka
Set Security Questions

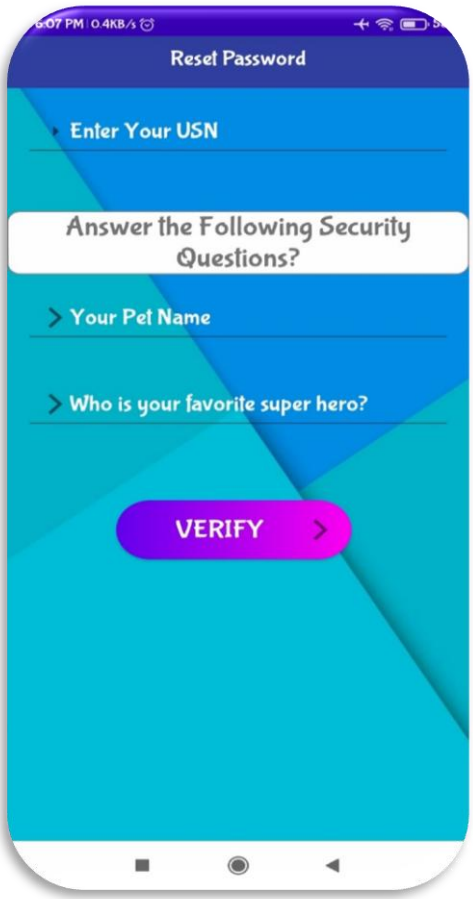

Product Description
Number of Copies
Add Photo

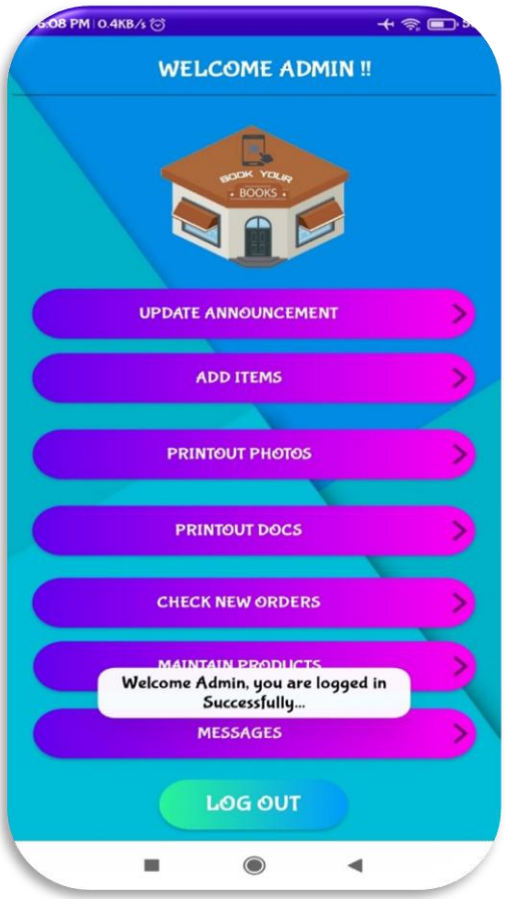

NoteBooks
Stationery
A4 Sheets
Files
Blue Books
Record


C
C Cycle
P
P Cycle
3
3 Sem
4
4 Sem
5
5 Sem
6
6 Sem
7
7 Sem
8
8 Sem

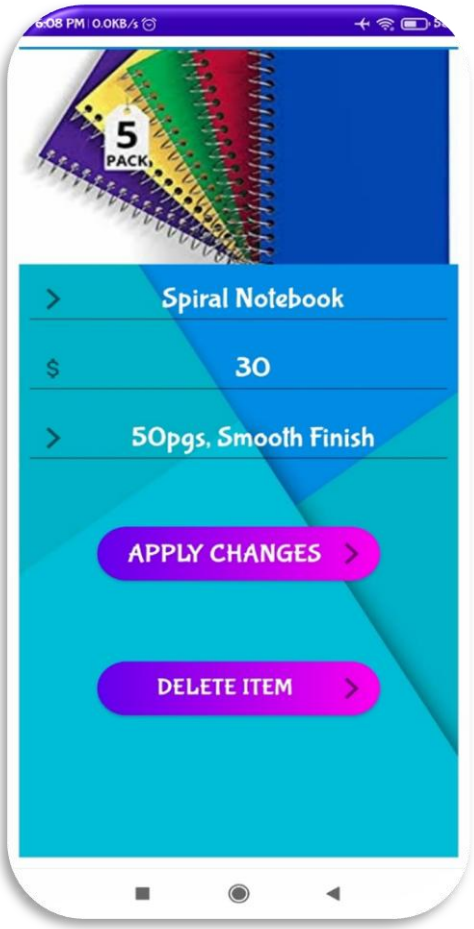

Admin
hello Test message 1 sent
Hello Test message 1 sent
please acknowledge
Test Message Received
Type Your Messages...

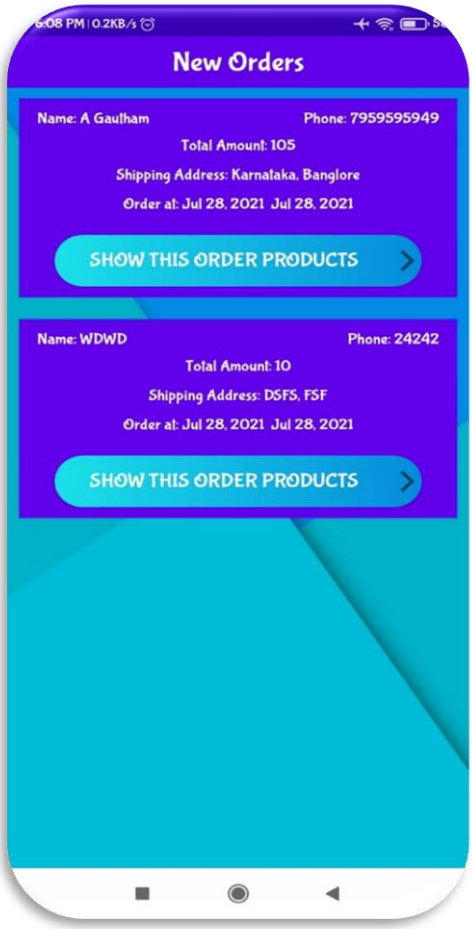

Price = 50Rs
200 Pages Long Book
SPIRAL NOTEBOOK
5 PACK
Price = 30Rs
50pgs, Smooth Finish
EGDL SKETCH BOOK
ENGINEERING DRAWING
(As per Latest VTU Syllabus)
FIFTH EDITION
Price = 145Rs
VTU Prescribed Book


Reset Password
Enter Your USN
Answer the Following Security Questions?
Your Pet Name
Who is your favorite super hero?
VERIFY


WELCOME ADMIN !!
BOOK YOUR BOOKS
UPDATE ANNOUNCEMENT
ADD ITEMS
PRINTOUT PHOTOS
PRINTOUT DOCS
CHECK NEW ORDERS
MAINTAIN PRODUCTS
Welcome Admin, you are logged in Successfully...
MESSAGES
LOG OUT


USN = 1BY19IS001
Number of Copies = 2
Name = MES mod--4 Notes
Full PDF print request
DOWNLOAD
USN = 1BY19IS001
Number of Copies = 1
Name = Operating System Notes
Only first 3 Pages Print Required (b/w)
DOWNLOAD
USN = 1BY19IS001
Number of Copies = 5
Name = DC Mod--1
Colour PrintOut
DOWNLOAD


5 PACK
Spiral Notebook
$ 30
50pgs, Smooth Finish
APPLY CHANGES
DELETE ITEM


New Orders
Name: A Gaulham
Phone: 7959595949
Total Amount: 105
Shipping Address: Karnataka, Banglore
Order at: Jul 28, 2021 Jul 28, 2021
SHOW THIS ORDER PRODUCTS
Name: WDWD
Phone: 24242
Total Amount: 10
Shipping Address: DSFS, FSF
Order at: Jul 28, 2021 Jul 28, 2021
SHOW THIS ORDER PRODUCTS


PRODUCTS
Classmate Long NoteBook
Quantity = 2
Price = 50Rs
Classmate GELGLIDE
Quantity = 1
Price = 5Rs

CHAPTER 4

4.1 FUTUTRE ENHANCEMENTS

- Application, Payment Gateway for direct payments.
- Enhanced Security, for authentication for login of user and admin.
- Complete order status update to mobile as SMS and to emails.
- Application publishing to large scale of admins(shops)

4.2 CONCLUSION

- We develop an application which clears lack of gap between the students and stationery shopkeeper.
- We reduce the time wasted at the Stationery Shop,
- We make way to hassle free transaction of stationary items, and other concerned activities. We keep an upto-date announcements of the timings and stock of the books or stationary in the shop.

4.3 REFERENCES

Professional Internet Site
[1] Android Studio Documentation https://developer.android.com
[2] material.angular.io
[3] https://github.com/
- Youtube Videos in process of real time learning.