

Name: JANARTHANAN T

**Roll No**: 20ITR038

**CLASS**: IT-A

Course Name: Software Engineering

Course Code: 20ITT53

Title: KEC-CIRCULAR APP

### Aim:

The main aim of the project is to prevent fake circulars being spreaded inside the college also a common app for all students and faculties in KEC to view circulars and send notification to them to remind them.

## **TOOLS USED:**

#### Website:

• Front-End: EJS

• Back-End: Node JS

• Database: Mongo Db

## App:

• Front-End: React- Native

• Back-End: Node JS

• Database: Mongo Db



#### **CODING:**

```
server.js
const express = require('express')
const bodyParser = require('body-parser');
const mongoose = require('mongoose');
const ejsMate = require('ejs-mate')
const methodOverride = require('method-override')
const path = require("path")
const cookieParser = require("cookie-parser");
const sessions = require('express-session');
const dotenv = require('dotenv')
const flash = require('connect-flash');
const User = require("./models/user");
const Circular = require("./models/circular")
const Constant = require("./models/constant")
const { isLoggedIn } = require("./middleware/auth")
const userRoutes = require('./routes/user')
const circularRoutes = require('./routes/circular')
const notificationRoutes=require('./routes/notification')const app = express()
app.use(express.static(path.join(__dirname, "/public")))
app.use(methodOverride('_method'))
app.engine('ejs', ejsMate)
dotenv.config()
app.use(express.json({ extended: true }))
app.use(express.urlencoded({ extended: true }));
app.use(flash());
const oneDay = 1000 * 60 * 60 * 24;
app.use(sessions({
  secret: "webpirates",
```



```
saveUninitialized: true,
  cookie: { maxAge: oneDay },
  resave: false
}));
app.use(async (req, res, next) => {
  res.locals.success=req.flash('success');
  res.locals.error=req.flash('error');
  res.locals.currentUser = req.session._id;
  next()
})
app.use('/user', userRoutes)
app.use('/circular', circularRoutes)
app.use('/api',notificationRoutes)
app.set('view engine', 'ejs');
app.use(bodyParser.json());
app.use(bodyParser.urlencoded({ extended: true }));
app.use(cookieParser());
mongoose.connect(process.env.DB).then(() => {
  console.log('Db connection open')
}).catch(err => {
  console.log(err.message, 'oops err');
});
var session; //to make variable available in all place
app.get("/", (req, res) => {
  session = req.session;
  if (session._id) {
    res.redirect('/circular/all/web')
  }else {
     req.flash("success","Hii")
     res.render('auth_page/login')
```



```
}})
const PORT = process.env.PORT \parallel 3000
app.listen(PORT, () => \{
  console.log(`Server is running at Port ${PORT}`)
})
User.js
const express=require('express')
const {signUp, login, webSignUp, webLogin, renderLogin, renderRegister, getsignup, logout,
deleteDeviceId} = require('../controllers/user')
const {change_password,change_password_request,link_from_mail,forgotten_password }
=require('../controllers/forgotten_password.controller')
const {otp_sendEmail,resetpassword_sendEmail} = require('../controllers/mail')
const router = express.Router();
router.get('/login',renderLogin)
router.get('/register',renderRegister)
router.get('/getsignup',getsignup)
router.post('/signup',signUp)
router.post('/login',login)
router.post('/signup/web',webSignUp)
router.post('/login/web',webLogin)
router.post('/otp',otp_sendEmail)
router.post('/delete',deleteDeviceId)
router.get('/logout',logout)
router.get("/forgotten-password",forgotten_password)
router.get('/forgotten-password/:userId/:token',link_from_mail)
router.post('/forgotten-password',change_password_request)
router.post('/forgotten-password/:userId/:token',change_password)
module.exports=router;
notification.js
const express=require('express')
```



```
const router = express.Router();
const pushNotificationController=require("../controllers/push_notification.controllers")
router.get('/sendnotification',pushNotificationController.SendNotification)
router.post('/sendnotificationToDevice',pushNotificationController.SendNotificationToDevic
e)
module.exports=router;
circular.js
const express=require('express')
const {postCircular,renderCircular,getAllCircular,deleteCircular} =
require('../controllers/circular.js')
const router = express.Router();
const { storage, fileFilter } = require("../multter/upload")
const multer = require('multer');
const upload = multer({ limits: { fileSize: 2097152 }, fileFilter: fileFilter, storage: storage })
const {isLoggedIn}=require("../middleware/auth")
router.get('/',isLoggedIn,renderCircular)
router.post('/',isLoggedIn,upload.single('pdf'),postCircular)
router.get('/all/:platform',getAllCircular)
router.get('/:id',deleteCircular)
module.exports=router;
CONTROLLERS:
Circular.js
const Circular = require('../models/circular.js');
const user = require('../models/user.js');
const notify = require('../controllers/push_notification.controllers')
const Constant = require('../models/constant.js')
module.exports.postCircular = async(req,res) =>{
```



```
try{
     const result = \{
       postedOn: Date.now(),
       title: req.body.title,
       batch: req.body.batch,
       dept: req.body.dept,
       number: req.body.number,
       filePath: req.file.path.substring(6),
       postedBy: req.session._id
     }
     var userlist;
     if (req.body.dept == 'all' && req.body.batch == 'all') {
       userlist = await user.find({});
       console.log(userlist+"alll")
     }
     else if (req.body.dept == 'all' || req.body.batch == 'all') {
       userlist = await user.find({ $or: [{ department: { $in: req.body.dept } }, { batch: {
$in: req.body.batch } }] });
       console.log(userlist+"any one")
     }
     else {
       userlist = await user.find({ $and: [{ department: { $in: req.body.dept } }, { batch: {
$in: req.body.batch } }] });
       console.log(userlist+"none")
     }
     //need to work for push notification
     devices = []
     userlist.forEach((ele) => {
       if (ele.deviceId != '-')
devices.push(ele.deviceId)
     })
```



```
notify.pushnotify(devices);
     const circular = await new Circular(result);
     await circular.save()
     req.flash('success', 'Circular Posted successfully')
     res.redirect('/');
  } catch (err) {
     console.log(err.message)
  }}
module.exports.renderCircular = async (req, res) => {
  var increment;
  var year=new Date().getFullYear()
  const batchYear=[]
  const department=await Constant.findOne({});
  for(increment=-4;increment<=4;increment++){</pre>
     batchYear.push(year-increment);
  }
  res.render("circular_page/add_circular.ejs",{batchYear,department})
module.exports.deleteCircular= async(req,res)=>{
  const {id}=req.params
  try {
     const circular=await Circular.findByIdAndDelete(id)
     req.flash('success','Circular has been deleted successfully')
     res.redirect('/circular/all/web')
  } catch (error) {
    console.log(error)
  }}
module.exports.getAllCircular = async (req, res) => {
  const currentYear = new Date().getFullYear();
```



```
const\ currentMonth = new\ Date().getMonth() + 1;
  const currentDate = new Date().getDate();
  //today timestamp
  const timestamp = [currentYear, currentMonth <= 9 ? '0' + currentMonth : currentMonth,
currentDate <= 9 ? '0' + currentDate : currentDate].join('-');
  const today = new Date(timestamp)
  //yesterday timestamp
  const previous = new Date(today.getTime());
  previous.setDate(previous.getDate() - 1);
  const yesterday = previous;
  try {
    //querry
     var yesterdayCircular = await Circular.find({ postedOn: { $gte: yesterday, $lt: today }
})
     yesterdayCircular=yesterdayCircular.sort((a,b)=>b.number-a.number);
     var todayCircular = await Circular.find({ postedOn: { $gt: today } })
     todayCircular = todayCircular.sort((a,b) => b.number-a.number);
     var allCircular = await Circular.find({ postedOn: { $lt: yesterday } })
     allCircular = allCircular.sort((a,b)=>b.number-a.number)
     //seperating according to months for all circular
     monthwise = [{ "title": "January", "data": [] },
     { "title": "February", "data": [] },
     { "title": "March", "data": [] },
     { "title": "April", "data": [] },
     { "title": "May", "data": [] },
     { "title": "June", "data": [] },
     { "title": "July", "data": [] },
     { "title": "August", "data": [] },
     { "title": "September", "data": [] },
     { "title": "October", "data": [] },
     { "title": "November", "data": [] },
```



```
{ "title": "December", "data": [] }]
    allCircular.map((ele) => \{
       index = ele.postedOn.getMonth()
       monthwise[index]. data.push(ele)
     })
    reg.params.platform == 'web'?
       res.render('circular_page/view_allcircular', { allCircular, yesterdayCircular,
todayCircular, monthwise }):
       res.status(200).json({ allCircular, yesterdayCircular, todayCircular, monthwise })
  } catch (err) {
    console.log(err)
    res.status(500).json('Something went worng...')
  }
}
User.js
const mongoose = require('mongoose')
const jwt = require('jsonwebtoken')
const bcrypt = require('bcryptjs')
const User = require('../models/user')
const Constant=require("../models/constant")
var session;
module.exports.getsignup=async (req,res)=>{
  const department=await Constant.findOne({ });
  res.status(200).json({ department })
}
module.exports.signUp = async (req, res) => {
  const { name, rollno, email, department, password, batch, type,deviceId} = req.body
  try {
    const existinguser = await User.findOne({ email })
```



```
if (existinguser) {
       return res.status(400).json({ message: 'User already found..' })
     }
     const hashPassword = await bcrypt.hash(password, 12);
     const newUser = new User({ name, rollno, email, department, batch, type,deviceId,
password: hashPassword })
     await newUser.save();
    const token = jwt.sign({ email: newUser.email, id: newUser._id }, 'token', { expiresIn:
'1h' })
       res.status(200).json({ result: newUser, token })
  } catch (err) {
     console.log(err.message)
     res.status(500).json('Something went worng...')
  }
module.exports.webSignUp = async(req,res) =>{
     const { name,department,password,email,type} = req.body
     try{
     let femail_pattern=/^([a-z]+) . ([a-z]{2,5}) @ ([a-z]+) . ([a-z]{2,5}) $/;
     let result1=femail_pattern.test(email)
     if(!result1 &&!email.endsWith('kongu.edu')){
       req.flash('error','Invalid email')
      return res.redirect('/user/register')
     var isAdmin=false,isDeptAdmin=false
     var rollno="
     const existinguser = await User.findOne({ email })
     if (existinguser) {
       req.flash('error','User found already')
       return res.redirect('/user/register') }
```



```
if(type=='admin'){
       isAdmin=true
       rollno='admin'
     }else if (type=='department-admin'){
       isDeptAdmin=true
       rollno=`${department}admin`
     }
    const hashPassword = await bcrypt.hash(password, 12);
    const newUser = new User({ name, email, rollno,type,
department,isAdmin,isDeptAdmin, password: hashPassword })
    await newUser.save();
    req.session._id = newUser._id;
    res.locals.currentUser = newUser._id
    req.flash('success','Account created')
    res.redirect('/')
  }catch(err){
}
module.exports.webLogin = async(req,res) =>{
  const \{ email, password \} = req.body;
    const existinguser = await User.findOne({ email })
    if (!existinguser) {
       req.flash('error','User not found')
       return res.redirect('/user/login')
     }
    const isPasswordCrt = await bcrypt.compare(password, existinguser.password)
    if (!isPasswordCrt) {
       req.flash('error','Invalid Credentials')
       return res.redirect('/user/login')
     }
    if(!existinguser.isAdmin){
```



```
req.flash('error',"Unauthorised access")
       return res.redirect('/user/login')
     }
     session = req.session;
     req.session._id = existinguser._id
     req.flash('success','Login Successfull')
     res.redirect('/')
}
module.exports.login = async (req, res) => {
  const { email, password,deviceId } = req.body;
  try {
     const existinguser = await User.findOne({ email })
     if (!existinguser) {
       console.log("User not found...");
       return res.status(404).json({ message: "User not found..." })
     }
     const isPasswordCrt = await bcrypt.compare(password, existinguser.password)
     if (!isPasswordCrt) {
       return res.status(400).json({ message: "Invalid credentials" })
     }
     existinguser.deviceId=deviceId
     await existinguser.save()
     const token = jwt.sign({ email: existinguser.email, id: existinguser._id }, 'token', {
expiresIn: '48h' })
     res.status(200).json({ result: existinguser, token })
  } catch(err) {
     console.log(err.message)
     res.status(500).json(err.message)
module.exports.renderLogin = async(req,res) =>{
```



```
res.render('auth_page/login.ejs')
}
module.exports.renderRegister = async(req,res) =>{
  const department=await Constant.findOne({});
  res.render('auth_page/signup.ejs',{department})
}
module.exports.logout=async(req,res)=>{
  if (req.session) {
     req.session.destroy();
   res.redirect("/user/login")
}
module.exports.deleteDeviceId = async(req,res)=>{
  const {id}=req.body
  try {
     const user=await User.findById(id)
     user.deviceId ='-'
    await user.save()
     res.status(200).send('Logout successfull')
  } catch (error) {
     res.status(500).send(error)
  }
CLIENT:
Index.js
import {AppRegistry} from 'react-native';
import App from './App';
import {name as appName} from './app.json';
AppRegistry.registerComponent(appName, () => App );
```



```
App.js
```

```
import React, { useEffect } from 'react';
import { SafeAreaView, StyleSheet} from 'react-native';
import AppNavigation from './src/screens/AppNavigation';
import { Provider } from 'react-redux';
import Reducers from './src/reducers'
import {createStore,applyMiddleware,compose} from 'redux'
import thunk from 'redux-thunk';
const store = createStore(Reducers,compose(applyMiddleware(thunk)))
import OneSignal from 'react-native-onesignal';
OneSignal.setAppId('1e8e3e87-0155-46a5-aa28-545f0512a0fb');
const App = () \Rightarrow \{
 return (
  <Provider store={store} >
    <SafeAreaView style={styles.root}>
        <AppNavigation />
    </SafeAreaView>
  </Provider );};
const styles = StyleSheet.create({
  root:{
   flex:1,
   backgroundColor:"#F9F7F7"
  }
});
export default App;
AppNavigation.js
import React from 'react'
import { NavigationContainer } from '@react-navigation/native';
import { createNativeStackNavigator } from '@react-navigation/native-stack';
```



```
import Home from '../Home';
import Circular from '../Circular';
import Auth from '../Auth';
import VerifyOTP from '../../components/VerifyOTP';
import ForgetPassword from '../../components/ForgetPassword/ForgetPassword';
import CircularPreview from '../CircularPreview';
const Stack = createNativeStackNavigator();
const AppNavigation = () => {
 return (
  <NavigationContainer>
    <Stack.Navigator screenOptions={{headerShown: false}} initialRouteName="Home">
         <Stack.Screen name='Home' component={Home} />
         <Stack.Screen name='Circular' component={Circular} />
         <Stack.Screen name='CircularPreview' component={CircularPreview} />
         <Stack.Screen name='Auth' component={Auth} />
         <Stack.Screen name="VerifyOtp" component={VerifyOTP} />
         <Stack.Screen name='Forget' component={ForgetPassword} />
   </Stack.Navigator>
</NavigationContainer>
 );
export default AppNavigation
Auth.js
import React, { useEffect, useState } from 'react'
import {Text, View, Image, ScrollView, StyleSheet} from 'react-native'
import Login from '../../components/Login'
import CustomButton from "../../components/CustomButton"
import AuthLayout from '../../components/AuthLayout'
import Register from '.../../components/Register/Register'
```



```
import { useDispatch } from 'react-redux'
import { getAllCircular } from '../../actions/circular'
const Auth = (\{navigation\}) \Rightarrow \{
 const [login,setLogin]=useState(true)
 const dispatch=useDispatch()
 useEffect(()=>{
  dispatch(getAllCircular())
 })
 return (
    <AuthLayout>
    <View style={styles.btnWrapper}>
      <View style={styles.btn}>
      <CustomButton text='Log In'
onPress={()=>setLogin(true)} type={login?'selected':'auth'}/>
      </View>
      <View style={styles.btn}>
      <CustomButton text='Sign Up'
onPress={()=>setLogin(false)} type={!login?'selected':'auth'}/>
      </View>
    </View>
    <View style={styles.form}>
     {login?
      <Login navigation={navigation} />:
      <Register navigation={navigation}/>
    </View>
    </AuthLayout>
const styles=StyleSheet.create({
 btnWrapper:{
```



```
flexDirection:'row',
  backgroundColor:"#F9F7F7",
  borderRadius:20
 },
form:{
  marginVertical:20,
 },
 btn:{
  flex:1
export default Auth
Circular.js
import { View, Text, StyleSheet, FlatList, SectionList, ActivityIndicator } from 'react-native'
import React, { useEffect, useState } from 'react'
import { useDispatch,useSelector } from 'react-redux'
import CustomButton from '.../../components/CustomButton'
import CircularCard from '../../components/CircularCard'
import { getAllCircular } from '../../actions/circular'
import Icon from 'react-native-vector-icons/MaterialIcons'
import AsyncStorage from '@react-native-async-storage'async-storage'
import { deleteDeviceId } from '../../actions/auth'
const Item = ({ data,navigation }) => {
 return(
 <View style={styles.item}>
  <CircularCard item={data} navigation={navigation} />
 </View>
```



```
const\ Circular = (\{navigation\}) => \{
 const [dis,setDis]=useState(false)
 const [today,isToday]=useState(true)
 const [yesterday,isYesterday]=useState(false)
 const [earlier,isEarlier]=useState(false)
 const dispatch=useDispatch()
 const Circulars = useSelector((state) =>(state.circularReducer))
 const [todayCircular,setTodayCircular] = useState()
 const [yesterdayCircular,setYesterdayCircular] = useState()
 const [ earlierCircular,setEarlierCircular] = useState()
 const [monthWiseCircular,setMonthWiseCircular]=useState()
 const User = useSelector((state)=>(state.currentUserReducer))
const\ setToday = () => {
  isToday(true)
  isYesterday(false)
  isEarlier(false)
 const\ setYesterday = () => \{
  isToday(false)
  isYesterday(true)
  isEarlier(false)
 const\ setEarlier = () => {
  isToday(false)
  isYesterday(false)
  isEarlier(true)
 const handleLogout =async()=>{
  const id=User?.result?._id
  console.log(id)
```



```
dispatch(deleteDeviceId({id},navigation))
}
useEffect(()=>{
  if(Circulars.data!=null){
   const data = Circulars.data
   setTodayCircular(data.todayCircular)
   setYesterdayCircular(data.yesterdayCircular)
   setEarlierCircular(data.allCircular)
   const month = data.monthwise
   let fullData=[];
   for(let i of month){
    if(i.data.length){
     fullData.push(i)
     }
   }
   setMonthWiseCircular(fullData)
   setDis(true)
  }
},[Circulars])
useEffect(()=>{
 dispatch(getAllCircular())
},[dispatch])
return (
 <View style={styles.container}>
   <View style={styles.header}>
   <View style={styles.profile}>
       <Icon name="account-circle" color="#3F72AF" size={30}/>
       <Text style={styles.title}>{User?.result?.name}</Text>
   </View>
```



```
<View>
        <CustomButton type='logout' onPress={handleLogout} text='Logout' />
    </View>
     </View>
    <View style={styles.buttons}>
      <CustomButton text='Today' onPress={setToday} type={today ?'selected':'normal'}</pre>
/>
      <CustomButton text='Yesterday' onPress={setYesterday} type={yesterday</pre>
?'selected':'normal'} />
      <CustomButton text='Earlier' onPress={setEarlier} type={earlier ? 'selected':'normal'}</pre>
/>
    </View>
    <View>
      {!dis && <ActivityIndicator /> }
      {today &&
       <FlatList
       data={todayCircular}
        keyExtractor={item => item._id}
        renderItem={({item}) => <CircularCard item={item} navigation={navigation} />}
       />
        {yesterday &&
         <FlatList
          data={yesterdayCircular}
           keyExtractor={item => item._id}
            renderItem={({item}) => <CircularCard item={item} navigation={navigation}
/>}
            />
        }
                   {earlier &&
         <SectionList
                 sections={monthWiseCircular}
```



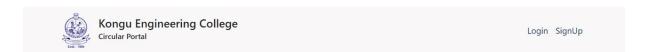
```
keyExtractor={(item, index) => item + index}
                 renderItem={({ item }) => <Item data={item} navigation={navigation} />}
                 renderSectionHeader={({ section: { title} }) => (
                   <Text style={styles.Sectiontitle}>{title }</Text>
               )}
  />}
     </View>
  </View>
const styles= StyleSheet.create({
  container: \{
    flex:1
  },
  ctitle:{
   fontSize: 32,
   backgroundColor: "#fff"
  },
  header:{
   flexDirection:"row",
   justifyContent:"space-between",
   alignItems:"center",
   margin:10
  },
  buttons:{
    flexDirection:"row",
    justifyContent:"space-between",
    alignItems:"center",
    padding:14,
```



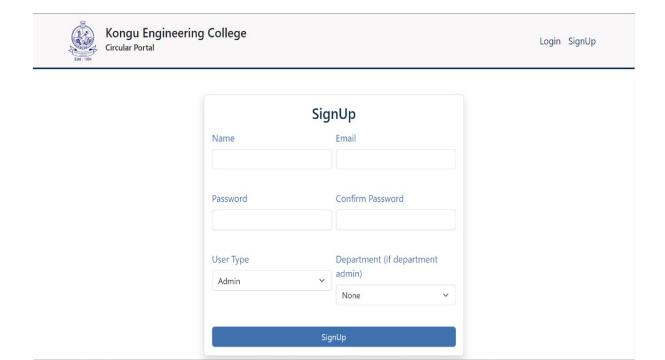
```
},
  title:{
   // marginHorizontal:30,
   // marginVertical:20,
   fontSize:24,
   fontWeight:'500',
   color:"#112D4E",
   marginLeft:5,
   textTransform:'capitalize'
  },
  Section title: \{
   margin:10,
   fontSize:28,
   color:"#112D4E",
   fontWeight:'bold'
  },
  profile:{
   flexDirection:'row',
   justifyContent:'center',
   alignItems:"center",
  }
})
export default Circular
```



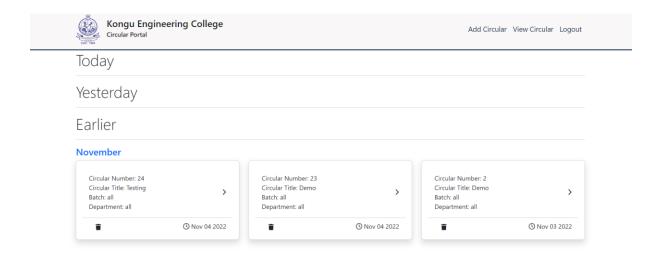
# **OUTPUT:**

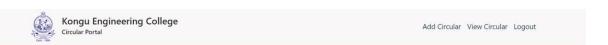






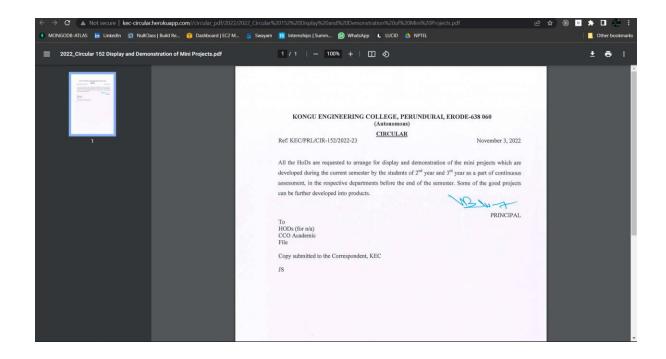


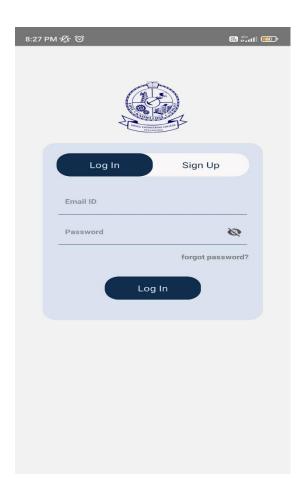


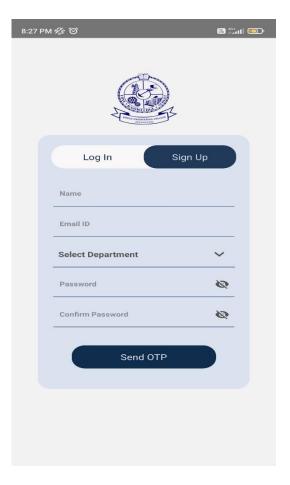




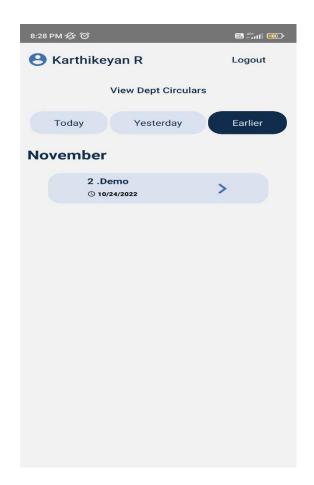


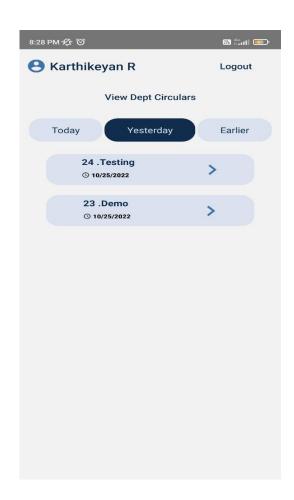
















<u>HOSTIN</u>	G ADDRESS:
https://	<u>/kec-circular.herokuapp.com/</u>
Result:	
	Thus the KEC Circular web and mobile application was created and hosted in onlin
	platform successfully

Tue Nov 15 2022 09:24:06 GMT+0530 (India Standard Time)

