FLUTTER

TASK-1

Create a sign-in/sign-up page in Flutter which includes, building the user interface (UI) and implementing the authentication logic.

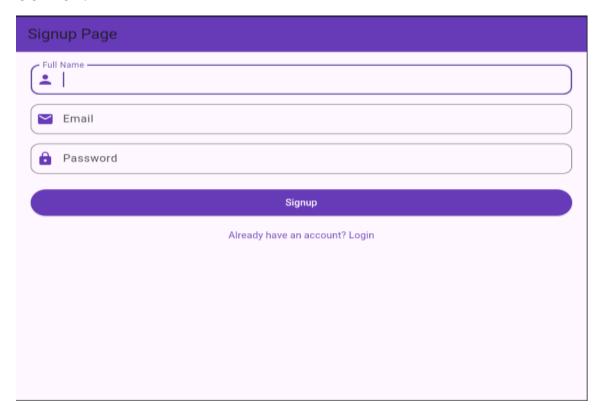
```
import 'package:flutter/material.dart';
void main() {
 runApp(const MyApp());
class MyApp extends StatelessWidget {
 const MyApp({super.key});
@override
 Widget build(BuildContext context) {
  return const MaterialApp(
   debugShowCheckedModeBanner: false,
   home: AuthPage(),
  );
class AuthPage extends StatefulWidget {
 const AuthPage({super.key});
@override
 State<AuthPage> createState() => AuthPageState();
class AuthPageState extends State<AuthPage> {
 final formKey = GlobalKey<FormState>();
final TextEditingController emailController = TextEditingController();
 final TextEditingController passwordController = TextEditingController();
 bool isLogin = true;
 final Map<String, Map<String, String>> users = {};
void submit() {
  if ( formKey.currentState!.validate()) {
   String name = nameController.text.trim();
   String email = emailController.text.trim();
   String password = passwordController.text.trim();
if (isLogin) {
    if ( users.containsKey(email) &&
       users[email]!["password"] == password) {
     String savedName = users[email]!["name"]!;
      showMessage(" \sqrt{Login successful. Welcome back, $savedName!");
    } else {
     _showMessage("X Invalid email or password.");
```

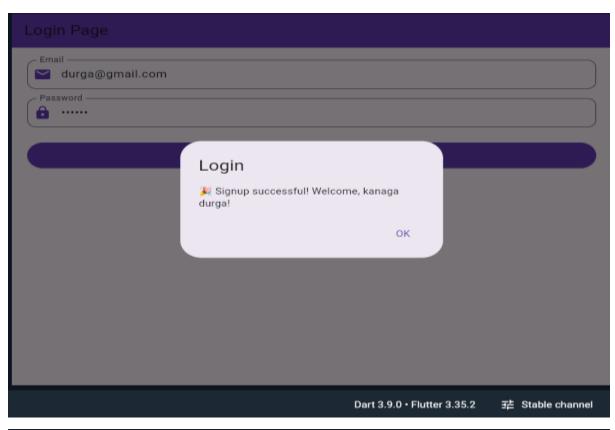
```
} else {
    if ( users.containsKey(email)) {
      showMessage(" / User already exists. Please login.");
     } else {
     // Save new user
      _users[email] = {"name": name, "password": password};
      showMessage(" Signup successful! Welcome, $name!");
      setState(() {
       isLogin = true;
      });
void showMessage(String message) {
  showDialog(
   context: context,
   builder: ( ) => AlertDialog(
    title: Text(isLogin? "Login": "Signup"),
    content: Text(message),
    actions: [
      TextButton(
       onPressed: () => Navigator.pop(context),
       child: const Text("OK"),
InputDecoration myDecoration(String label, IconData icon) {
  return InputDecoration(
   labelText: label,
   prefixIcon: Icon(icon, color: Colors.deepPurple),
   border: OutlineInputBorder(
    borderRadius: BorderRadius.circular(12),
   ),
@override
 Widget build(BuildContext context) {
  return Scaffold(
   appBar: AppBar(
    title: Text(isLogin? "Login Page": "Signup Page"),
    backgroundColor: Colors.deepPurple,
   ),
   body: Padding(
    padding: const EdgeInsets.all(20),
    child: Form(
      key: formKey,
      child: Column(
```

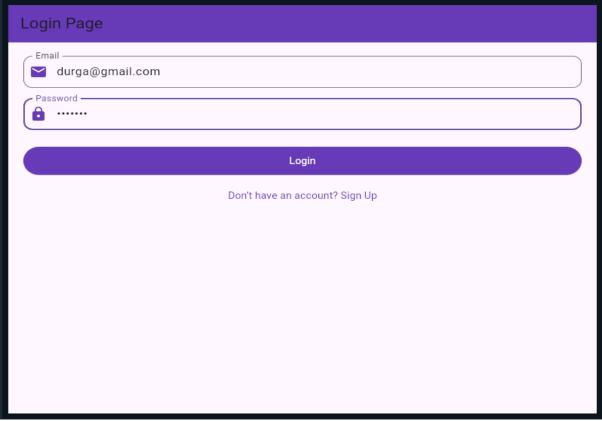
```
children: [
 if (!isLogin) ...[
  TextFormField(
   controller: nameController,
   decoration: myDecoration("Full Name", Icons.person),
   validator: (value) =>
      value!.isEmpty? "Enter your name": null,
  const SizedBox(height: 15),
 TextFormField(
  controller: emailController,
  decoration: myDecoration("Email", Icons.email),
  validator: (value) =>
    value!.isEmpty? "Enter email": null,
 ),
 const SizedBox(height: 15),
 TextFormField(
  controller: passwordController,
  obscureText: true,
  decoration: myDecoration("Password", Icons.lock),
  validator: (value) => value!.length < 6
    ? "Password must be at least 6 characters"
    : null,
 ),
 const SizedBox(height: 25),
 ElevatedButton(
  onPressed: submit,
  style: ElevatedButton.styleFrom(
   backgroundColor: Colors.deepPurple,
   foregroundColor: Colors.white,
   minimumSize: const Size(double.infinity, 50),
  child: Text(isLogin? "Login": "Signup"),
 const SizedBox(height: 15),
 TextButton(
  onPressed: () {
   setState(() {
    isLogin = !isLogin;
   });
  },
  child: Text(
   isLogin
      ? "Don't have an account? Sign Up"
      : "Already have an account? Login",
   style: const TextStyle(color: Colors.deepPurple),
],
```

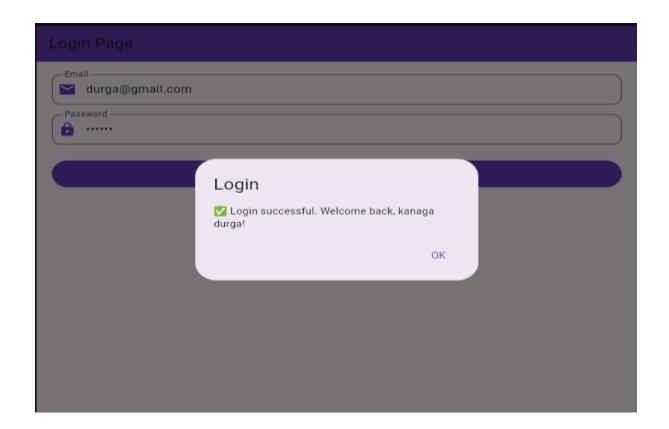
```
),
),
);
}
```

OUTPUT:









 $Github\ link: \underline{https://github.com/KanagaDurga-code/Flutter/tree/main}$