MOBILE APPLICATION DEVELOPMENT

PROJECT REPORT

NoteHub: Effortless note-sharing and personalized collaboration made simple.

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NOTE HUB IN FLUTTER

AIM:

The **"NoteHub"** application is a collaborative platform designed for users to share and access notes effortlessly. Users can log in, view, and upload notes, explore bookmarked posts, and interact with their profile showcases. The app ensures seamless access to educational content and personal customization features, providing an engaging and efficient note-sharing experience.

ALGORITHM:

Step 1: Authenticate the user by verifying their login credentials. Grant access to the application upon successful authentication.

Step 2: Display the user's profile, including personal documents and bookmarked posts in separate tabs.

Step 3: Fetch posts associated with the user's profile or saved posts using backend controllers and render them in the UI.

Step 4: Enable editing, saving, or additional interactions for notes depending on ownership and user preferences.

Step 5: Maintain smooth navigation between tabs, ensuring a seamless user experience.

CODE:

main.dart

```dart
import 'package:flutter/material.dart';
import 'package:get/get.dart';
import 'package:hive_flutter/hive_flutter.dart';
import 'package:lottie/lottie.dart';
import 'package:notehub/controller/bottom_navigation_controller.dart';
```

```dart
import 'package:notehub/core/helper/hive_boxes.dart';

import 'package:notehub/model/user_model.dart';

import 'package:notehub/view/splash_screen/splash.dart';

import 'package:toastification/toastification.dart';


void main() async {
  WidgetsFlutterBinding.ensureInitialized();
  await Hive.initFlutter();
  Hive.registerAdapter(UserModelAdapter());
  await Hive.openBox<UserModel>("user");
  Get.put(BottomNavigationController());
  runApp(const MyApp());
}


class MyApp extends StatelessWidget {
  const MyApp({super.key});
  @override
  Widget build(BuildContext context) {
    return ToastificationWrapper(
      child: GetMaterialApp(
        title: 'Note Hub',
        theme: ThemeData(
          colorScheme: ColorScheme.fromSeed(seedColor: Colors.deepPurple),
          useMaterial3: true,
        ),
        home: const Splash(),
      ),
    );
  }
}
```

home.dart

```dart
import 'package:flutter/material.dart';
import 'package:get/get.dart';
import 'package:notehub/controller/document_controller.dart';
import 'package:notehub/controller/home_controller.dart';
import 'package:notehub/core/helper/hive_boxes.dart';
import 'package:notehub/view/home_screen/widget/home_document_section.dart';
import 'package:notehub/view/home_screen/widget/home_header.dart';

class Home extends StatefulWidget {
  const Home({super.key});
  @override
  State<Home> createState() => _HomeState();
}

class _HomeState extends State<Home> {
  @override
  void initState() {
    super.initState();
    Get.put(DocumentController());
    Get.put(HomeController());
    loadData();
  }
  loadData() async {
    var homeController = Get.find<HomeController>();
    if (!homeController.isFetched.value) {
      homeController.fetchUpdates();
    }
    Get.find<DocumentController>().fetchDocsForUsername(
      username: HiveBoxes.username,
    );
```

```dart
  }
  @override
  Widget build(BuildContext context) {
   var homeController = Get.find<HomeController>();
   if (!homeController.isFetched.value) {
    homeController.fetchUpdates();
   }
   return const Scaffold(
    resizeToAvoidBottomInset: false,
    body: Padding(
     padding: EdgeInsets.symmetric(horizontal: 12),
     child: Column(
      children: [
       SafeArea(child: SizedBox.shrink()),
       HomeHeader(),
       Expanded(child: HomeDocumentSection()),
      ],
     ),
    ),
   );
  }
}
```

profile.dart

```dart
import 'package:flutter/material.dart';
import 'package:get/get.dart';
import 'package:notehub/controller/profile_controller.dart';
import 'package:notehub/controller/showcase_controller.dart';
import 'package:notehub/core/config/color.dart';
import 'package:notehub/core/helper/custom_icon.dart';
import 'package:notehub/core/helper/hive_boxes.dart';
```

```dart
mport 'package:notehub/view/profile_screen/widget/profile_header.dart';
import 'package:notehub/view/profile_screen/widget/profile_showcase.dart';
import 'package:notehub/view/settings_screen/settings_drawer.dart';
import 'package:notehub/view/widgets/normal_button.dart';
import 'package:notehub/view/widgets/refresher_widget.dart';
import 'package:shimmer/shimmer.dart';


class Profile extends StatefulWidget {
  final String username;
  const Profile({super.key, required this.username});
  @override
  State<Profile> createState() => _ProfileState();
}
class _ProfileState extends State<Profile> {
  @override
  void initState() {
    super.initState();
    Get.put(SettingsDrawerController());
    loadUserData();
  }
  Future<void> loadUserData() async {
    Get.put(SettingsDrawerController());
    Get.find<ProfileController>().fetchUserData(username: HiveBoxes.username);
    Get.find<ShowcaseController>(tag: HiveBoxes.username)
        .fetchProfilePosts(username: HiveBoxes.username);
    Get.find<ShowcaseController>(tag: HiveBoxes.username)
        .fetchSavedPosts(username: HiveBoxes.username);
  }
  @override
  Widget build(BuildContext context) {
    return RefresherWidget(
      onRefresh: loadUserData,
```

```dart
        child: Scaffold(
          key: Get.find<SettingsDrawerController>().scaffoldKey,
          resizeToAvoidBottomInset: false,
          drawer: const SettingsDrawer(),
          body: Column(
            children: [
              Row(
                mainAxisAlignment: MainAxisAlignment.end,
                children: [
                  NormalButton(
                    onPressed: Get.find<SettingsDrawerController>().openDrawer,
                    child: const CustomIcon(path: "assets/icons/settings.svg"),
                  ),
                  const SizedBox(width: 24),
                ],
              ),
              GetX<ProfileController>(builder: (controller) {
                if (controller.isLoading.value) {
                  return Shimmer.fromColors(
                    baseColor: GrayscaleWhiteColors.almostWhite,
                    highlightColor: GrayscaleWhiteColors.white,
                    child: ProfileHeader(
                      profileData:
                          Get.find<ProfileController>().profileData.value,
                    ),
                  );
                }
                return ProfileHeader(
                  profileData: Get.find<ProfileController>().profileData.value,
                );
              }),
              ProfileShowcase(username: widget.username),
```
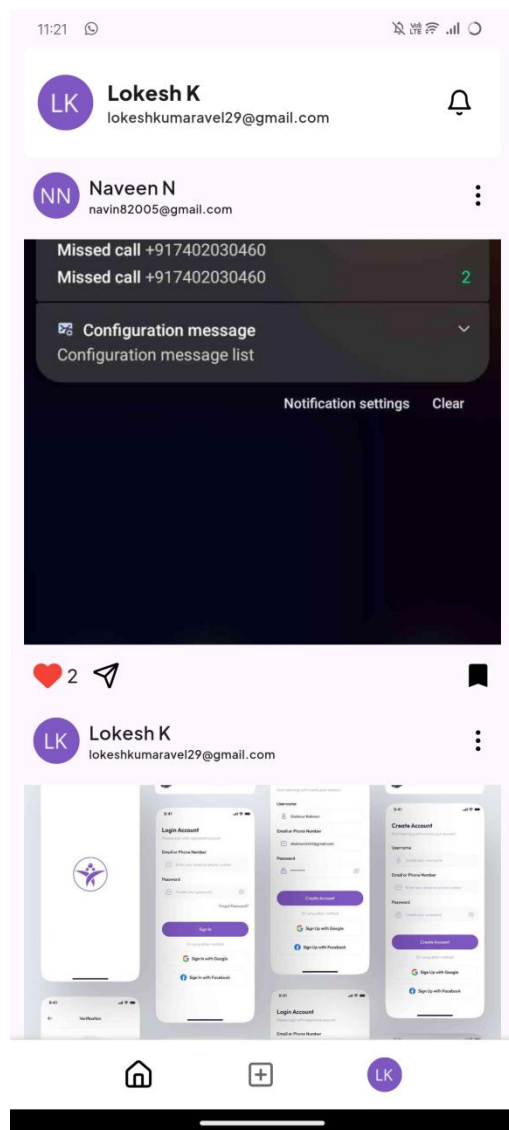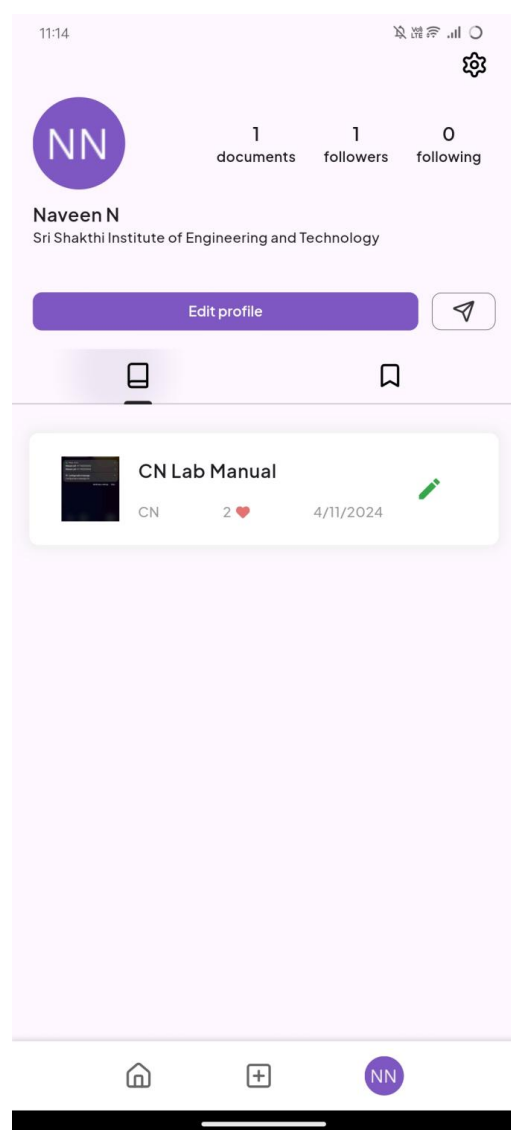
```
        ],
      ),
    ),
  );
  }
}
```

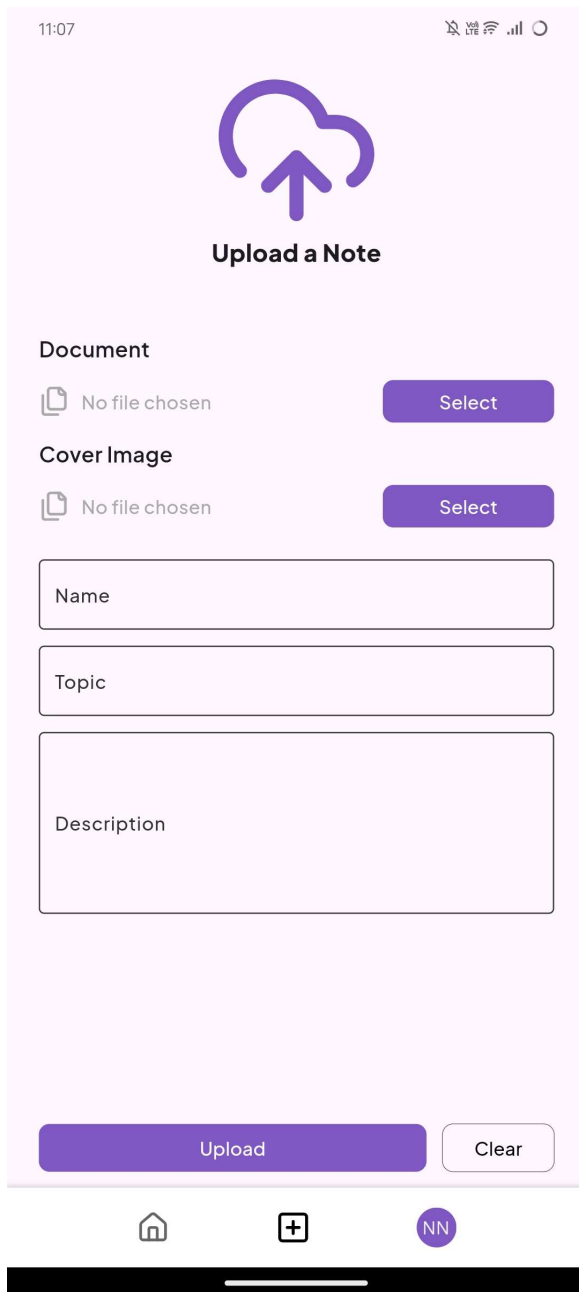## OUTPUT:

Fig: Home Screen

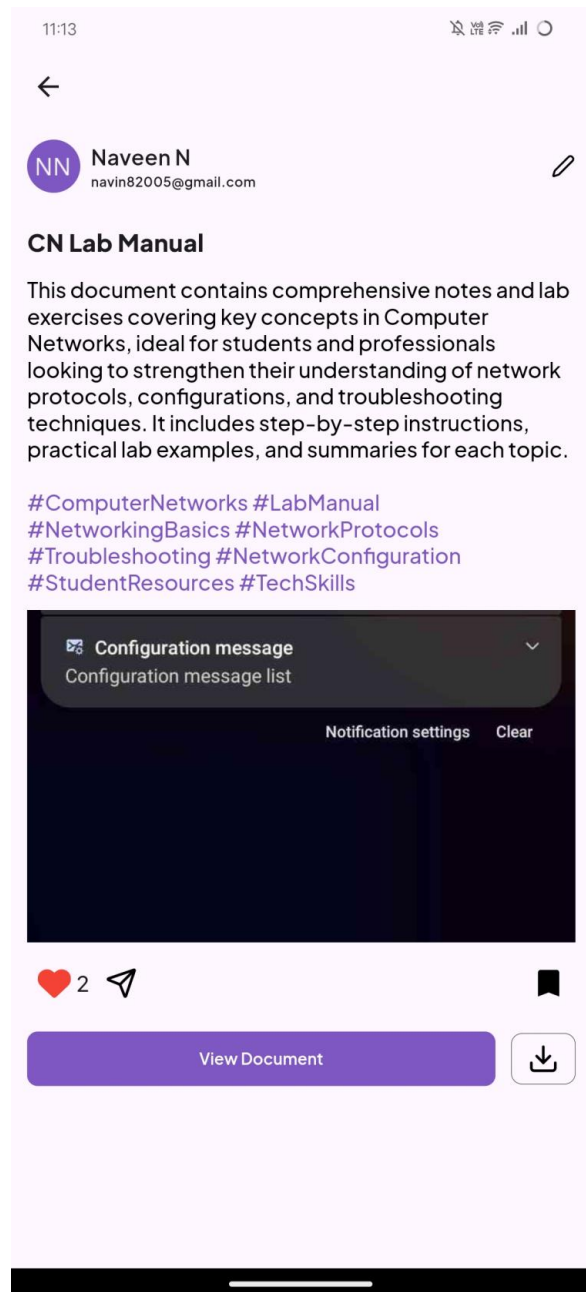

Fig: Profiel Upload

Fig: Document Upload

Fig: Document Discription

RESULT:

The **"NoteHub"** application successfully facilitates user authentication and dynamic content rendering. It enables users to explore and manage notes, view bookmarked posts, and interact with profile showcases. The app provides a seamless note-sharing experience, with features like dynamic tabs, custom icons, and smooth scrolling enhancing user engagement and usability.