1. Install Choco package manager

1.1. Open PowerShell as administrator and run the following commands:

Get-ExecutionPolicy

Set-ExecutionPolicy AllSigned

Set-ExecutionPolicy Bypass -Scope Process

Set-ExecutionPolicy Bypass -Scope Process -Force;

[System.Net.ServicePointManager]::SecurityProtocol =

[System.Net.ServicePointManager]::SecurityProtocol -bor 3072; iex ((New-Object

System.Net.WebClient).DownloadString('https://community.chocolatey.org/install.ps1'))

2. Install Dart:

2.1. Open cmd as administrator and run the following commands:

choco install dart-sdk dart --version

You should fine the following output: Dart SDK version: 3.2.4 (stable) (Thu Dec 21 19:13:53 2023 +0000) on "win $\times 64$ "

3. Install Flutter

- $3.1. \underline{https://docs.flutter.dev/get-started/install/windows/desktop?tab=download}$
- 3.2. Extract compressed folder and move it to C (In its own folder)
- 3.3.In the Windows search box, type env.
- 3.4. Click Edit the system environment variables.
- 3.5. Click Environment Variables
- 3.6.In the user variable section, select Path and click Edit
- 3.7. Click New and enter the path to the bin folder directory.

4. Configure Flutter in VS code

- 4.1.Install Dart extension
- 4.2.Install Flutter extension

5. Create Flutter project

- 5.1.Create new folder
- 5.2. Navigate to it
- 5.3. Open cmd there
- 5.4. Run the following command:

flutter create your project name

Project name should be all in lowercase and separated by underscore only

6. Create Firebase account: https://firebase.google.com/

7. Install NodeJS: https://nodejs.org/en

- 7.1.In the Windows search box, type env.
- 7.2. Click Edit the system environment variables.
- 7.3. Click Environment Variables
- 7.4. In the user variable section, select Path and click Edit
- 7.5.Click New and enter the following path:
 C:\Users\USERPROFILE\AppData\Roaming\npm\
- 7.6.Replace USERPROFILE with your name (Ahmed for ex)

8. Install Firebase CLI

8.1.Run the following commands in cmd

npm install -g firebase-tools firebase login

If you encountered error when running firebase login command:

Delete firebase.ps1 file located at:

C:\Users\USERPROFILE\AppData\Roaming\npm\

Replace USERPROFILE with your name (Ahmed for ex)

Then rerun the firebase login

9. Create Firebase project from console

10. Add Firebase to project

- 10.1. Inside your flutter project, open terminal
- 10.2. Run the following commands:
 dart pub global activate flutterfire_cli
 flutterfire configure

Choose your project using arrows and select using enter

flutter pub add firebase_core flutter pub add firebase_database

- 11. Receive notification in the app
- 12. Send notification from firebase console
- 13. Rename your app
- 14. Test the app using phone
- 15. Publish the apk file

flutter build apk -release

Please change functions, variables, classes to avoid cheating.

```
1 void main() async {
     WidgetsFlutterBinding.ensureInitialized();
     await Firebase.initializeApp(
      options: DefaultFirebaseOptions.currentPlatform,
     FirebaseMessaging.onMessage.listen(foregroundNotificationHanlder);
    FirebaseMessaging.onBackgroundMessage(backgroundNotificationHandler);
     runApp(const MyApp());
18 class MyApp extends StatelessWidget {
    const MyApp({super.key});
    @override
    Widget build(BuildContext context) {
       return const MaterialApp(
        home: MyHomePage(),
29 class MyHomePage extends StatelessWidget {
    const MyHomePage({super.key});
    @override
    Widget build(BuildContext context) {
     return const SafeArea(
        child: Scaffold(
           body: Center(
             child: Text('Welcome to my app!'),
```

بشمهندس أشرف:

بشمهندسة ندى:

```
void foregroundNotificationHanlder(RemoteMessage message) async {
  try {
   await Firebase.initializeApp(
      options: DefaultFirebaseOptions.currentPlatform,
   );

  DatabaseReference messagesRef = FirebaseDatabase.instance.ref("messages");

  await messagesRef.push().set({
      'title': message.notification?.title,
      'body': message.notification?.body,
      'date': message.sentTime.toString(),
   });
  } catch (e) {
   print(e.toString());
  }
}
```

لا تنسونا من صالح الدعاء