

Flutter Web App ko Deploy Karne ki Step-by-Step Guide

Bhai, yeh guide tere Flutter web app ko **Firebase Hosting** par live karne ke liye hai. Firebase sabse aasaan aur powerful tareeka hai Flutter web apps ke liye.

Zaroori Cheezein (Pre-requisites)

Deploy karne se pehle, yeh cheezein ready rakh:

1. **Flutter Installed:** Tere computer mein Flutter SDK hona chahiye.
2. **Firebase Account:** Ek Google account se Firebase pe free account bana le.
3. **Node.js aur npm:** Firebase ke command-line tool (CLI) ke liye yeh zaroori hai.
4. **Code Editor:** VS Code ya Android Studio.

Step 1: Apna Flutter App Build Karo

Sabse pehle, apne app ko web ke liye build karna hai.

Apne project ke root folder mein terminal khol aur yeh command chala:

```
flutter build web --web-renderer canvaskit
```

- `--web-renderer canvaskit` use karne se performance behtar milti hai.
- Yeh command tere project mein ek `build/web` naam ka folder bana dega. Isi folder ko humein live karna hai.

Step 2: Firebase Mein Project Banao

1. [Firebase Console](#) pe jaa.
2. **Add project** pe click kar aur apne app ke liye ek naya project bana. Naam kuch bhi de sakta hai.
3. Google Analytics ko abhi ke liye disable kar sakta hai (optional hai).

Step 3: Firebase CLI Install aur Login Karo

Ab humein Firebase ke command-line tool ki zaroorat padegi.

Apne computer ke terminal mein yeh command chala:

```
npm install -g firebase-tools
```

Install hone ke baad, apne Google account se login kar:

```
firebase login
```

Yeh browser mein ek login window kholega.

Step 4: Apne Flutter Project ko Firebase se Connect Karo

1. Ab apne Flutter project ke root folder mein waapis aa jaa terminal mein.
2. Yahan pe yeh command chala:
firebase init
3. Yeh tujhse kuch sawaal poochega. Dhyan se jawaab de:
 - **Which Firebase features do you want to set up?**
 - Arrow keys se Hosting: Configure files for Firebase Hosting and (optionally) set up GitHub Action deploys ko select kar aur spacebar daba kar choose kar, fir Enter.
 - **Please select an option:**
 - Use an existing project select kar.
 - **Select a default Firebase project for this directory:**
 - List mein se woh project select kar jo tune Step 2 mein banaya tha.
 - **What do you want to use as your public directory?**
 - Yeh sabse important hai. Yahan build/web likh aur Enter daba.
 - **Configure as a single-page app (rewrite all urls to /index.html)?**
 - y likh kar Yes kar de. Flutter web apps single-page apps hi hoti hain.
 - **Set up automatic builds and deploys with GitHub?**
 - Abhi ke liye n (No) kar de. Isko baad mein set up kar sakte hain.

Yeh process kuch files (.firebase, firebase.json) tere project mein bana dega.

Step 5: Deploy Kar de!

Sab set hai. Ab bas final command chalani hai.

firebase deploy

Yeh command tere build/web folder ka saara content Firebase ke server par upload kar degi.

Process poora hone ke baad, terminal tujhe ek **Hosting URL** dega. Woh URL kuch aisa dikhega: <https://<your-project-id>.web.app>

Mubarak ho! Tera Flutter web app ab live hai! Us URL ko kisi bhi browser mein khol ke dekh.

App Update Karna Ho Toh?

Jab bhi tu apne app mein kuch changes kare, bas yeh 2 commands chala de:

1. flutter build web --web-renderer canvaskit (Naya build banane ke liye)
2. firebase deploy (Naya build ko live karne ke liye)

Bas ho gaya kaam!