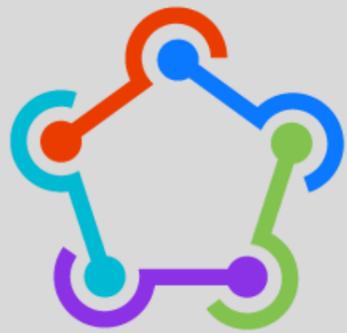
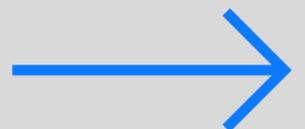




Automating Android CI/CD with Fastlane



fastlane



Getting started

1. Add ruby to your device

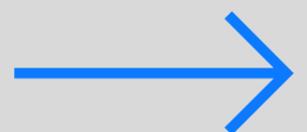
```
rbenv install 3.2.2
```

2. open the android folder in your flutter project

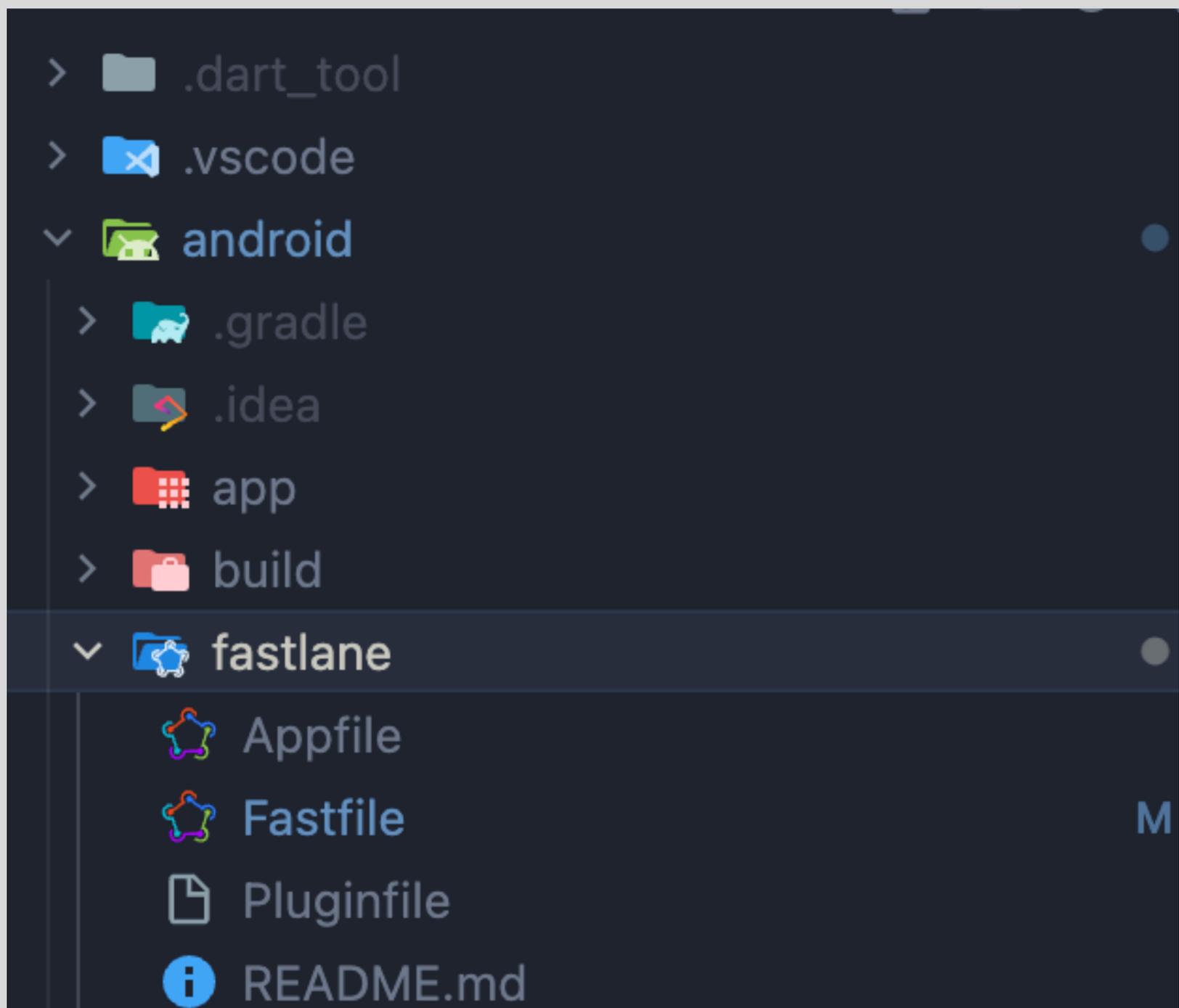
```
cd android
```

3. then install fastlane in the android folder

```
brew install fastlane
```



this is how your android should look like



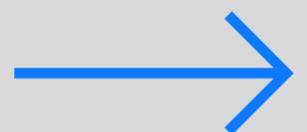
Login to your Firebase project

run this comand
firebase login:ci

Your paragraph text

after selectins which project it will show
you the firebase token

token : “ ”

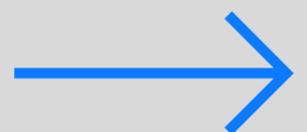


save that token as you will need to identify
your lane

add firebase plugin:

```
fastlane add_plugin firebase_app_distribution
```

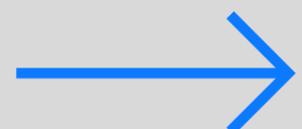
after that navigate to fast file in the
fastlane folder in your android



here is what your lane should look like after you extract everything

```
astfile M ×
roid > fastlane > Fastfile
You, 1 second ago | 1 author (You)
default_platform(:android)

platform :android do
  desc "Distribute a new version to the testers via Firebase App Distribution"
  lane :distribute do
    sh "flutter clean"
    sh "flutter build apk --release --no-tree-shake-icons"
    firebase_app_distribution(
      app: "app_id_that_you_get_from_android_folder_in_firebase",
      firebase_cli_token: "firebase_cli_token_that_you_store_from_login_to_firebase",
      android_artifact_path: "../build/app/outputs/flutter-apk/app-release.apk",
      android_artifact_type: "APK",
      testers: "youssefabdelmonem2000@gmail.com, test.qc@gmail.com",
      release_notes: "This build includes new features, bug fixes, and performance improvements."
    )
  end
end
```



integrating with Google Drive

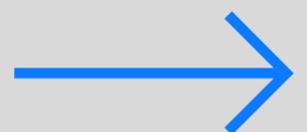
Steps:

1. Enable Google Drive API

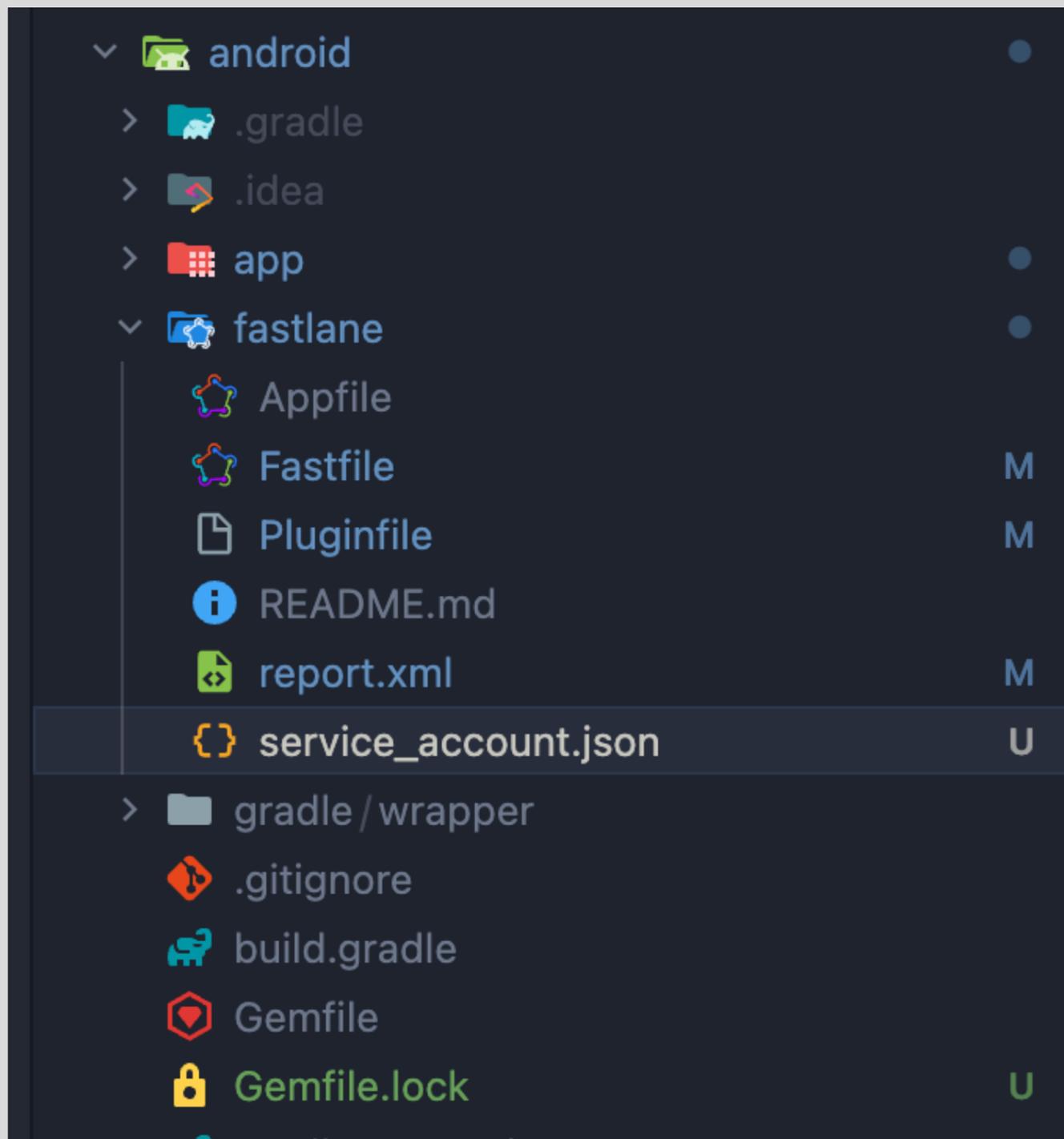
- Go to Google Cloud Console.
- Enable the Google Drive API for your project.

2. Create a Service Account:

- In IAM & Admin > Service Accounts, create a new service account.
- Assign Editor or Owner role.
- Generate a JSON key and download it.



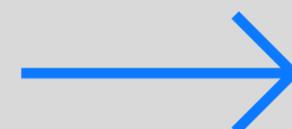
after you download the json file you can added into the Fastlane as this image says



3. Install the google_drive Fastlane Plugin:

Run this command in your Fastlane directory:

```
fastlane add_plugin google_drive
```



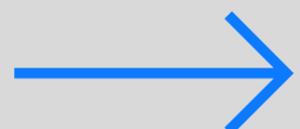
here is the final lane that collects both the Firebase app distribution and the Google drive

Fastfile M ×

android > fastlane > Fastfile

You, 1 second ago | 1 author (You)

```
1 default_platform(:android)
2
3 platform :android do
4   desc "Distribute a new version to the testers via Firebase App Distribution"
5   lane :distribute do
6     sh "flutter clean"
7     sh "flutter build apk --release --no-tree-shake-icons"
8     firebase_app_distribution(
9       app: "app_id_that_you_get_from_android_folder_in_firebase",
10      firebase_cli_token: "firebase_cli_token_that_you_store_from_login_to_firebase",
11      android_artifact_path: "../build/app/outputs/flutter-apk/app-release.apk",
12      android_artifact_type: "APK",
13      testers: "youssefabdelmonem2000@gmail.com, test.qc@gmail.com",
14      release_notes: "This build includes new features, bug fixes, and performance improvements."
15    )
16    # Google Drive Upload
17    upload_to_google_drive(
18      drive_keyfile: "path/to/your/google/drive/keyfile.json",
19      folder_id: "https://drive.google.com/drive/folders/{folder_id}",
20      upload_files: ["../build/app/outputs/flutter-apk/app-release.apk"]
21    )
22  end
23 end
24
```



Distribute Now

run this command and wait
for the magic to happen

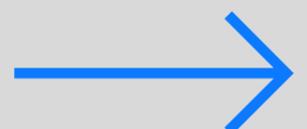
fastlane android distribute

```
Fastfile M ×
android > fastlane > Fastfile
 3 platform :android do
 6   sh "flutter clean"
 7   sh "flutter build apk --release --no-tree-shake-icons"

```

PROBLEMS 7 OUTPUT DEBUG CONSOLE TEST RESULTS TERMINAL PORTS GITLENS SPE

```
[14:04:51]: ▶ 102 packages have newer versions incompatible with dependency constraints.
[14:04:51]: ▶ Try `flutter pub outdated` for more information.
[14:06:25]: ▶ Running Gradle task 'assembleRelease'... 90.4s
[14:06:25]: ▶ ✓ Built build/app/outputs/flutter-apk/app-release.apk (43.8MB)
[14:06:26]: -----
[14:06:26]: --- Step: firebase_app_distribution ---
[14:06:26]: -----
[14:06:26]: 🗝 Authenticating with --firebase_cli_token parameter
[14:06:26]: 📶 Uploading the APK.
[14:07:01]: 🐛 Validating upload...
[14:07:07]: ✅ Uploaded APK successfully and created release 1.0.0 (4).
[14:07:07]: 📄 Setting release notes.
[14:07:08]: 📦 Distributing release.
[14:07:08]: 🚀 App Distribution upload finished successfully. Setting Actions.lane_context
```



android > fastlane > Fastfile

You, 2 minutes ago | 1 author (You)

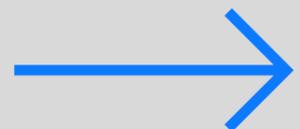
```
1 default_platform(:android)
2
3 platform :android do
4   desc "Distribute a new version to the testers via Firebase App Distribution"
5   lane :distribute do
6     sh "flutter clean"
7     sh "flutter build apk --release --no-tree-shake-icons"
```

PROBLEMS 7 OUTPUT DEBUG CONSOLE TEST RESULTS TERMINAL PORTS GITLENS SPELL CHECKER 4 COMMENTS >

```
[14:13:49]: ▶ Got dependencies!
[14:13:50]: ▶ Dependencies are affected by security advisories:
[14:13:50]: ▶ [^0]: https://github.com/advisories/GHSA-3hpf-ff72-j67p
[14:13:50]: ▶ 102 packages have newer versions incompatible with dependency constraints.
[14:13:50]: ▶ Try `flutter pub outdated` for more information.
[14:15:17]: ▶ Running Gradle task 'assembleRelease'... 83.5s
[14:15:17]: ▶ ✓ Built build/app/outputs/flutter-apk/app-release.apk (43.8MB)
[14:15:18]: -----
[14:15:18]: --- Step: upload_to_google_drive ---
[14:15:18]: -----
[14:15:18]: Using credential file: /Users/passwordis1234/Documents/GitHub/venus/android/fastlane/service_account.json
[14:15:19]: -----
[14:15:19]: Uploading ../build/app/outputs/flutter-apk/app-release.apk
[14:16:45]: Success
[14:16:45]: -----
```

| fastlane summary | | |
|------------------|--|-------------|
| Step | Action | Time (in s) |
| 1 | default_platform | 0 |
| 2 | flutter clean | 5 |
| 3 | flutter build apk --release --no-tree-shake-icons | 91 |
| 4 | upload_to_google_drive | 87 |

```
[14:16:45]: fastlane.tools finished successfully 🎉
```



final result

App Distribution

(android)

Releases Invite links Testers and Groups

Drag and drop an APK or AAB to create a new release. AAB files require linking. [Learn more](#) [Browse](#)

Releases (4)

Search versions and notes

| | | | | |
|--|---------------------|----------------------|------------------------|----------------------|
| 1.0.0 (4) 16 February 2025 at 14:07:03 UTC+2 This build includes new features, bug fixes, and perfor... | Invited 2 | Accepted 1 | Downloaded 0 | Feedback 0 |
| 1.0.0 (3) 13 February 2025 at 13:57:41 UTC+2 This build includes new features, bug fixes, and perfor... | Invited 2 | Accepted 1 | Downloaded 0 | Feedback 0 |
| 1.0.0 (2) 13 February 2025 at 11:22:25 UTC+2 This build includes new features, bug fixes, and perfor... | Invited 2 | Accepted 1 | Downloaded 0 | Feedback 0 |

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| Name | Owner | Last modified | File size | |
|-----------------|-------|-------------------------------|-----------|--|
| app-release.apk | | 10:40 google-drive-service... | 41.8 MB | |