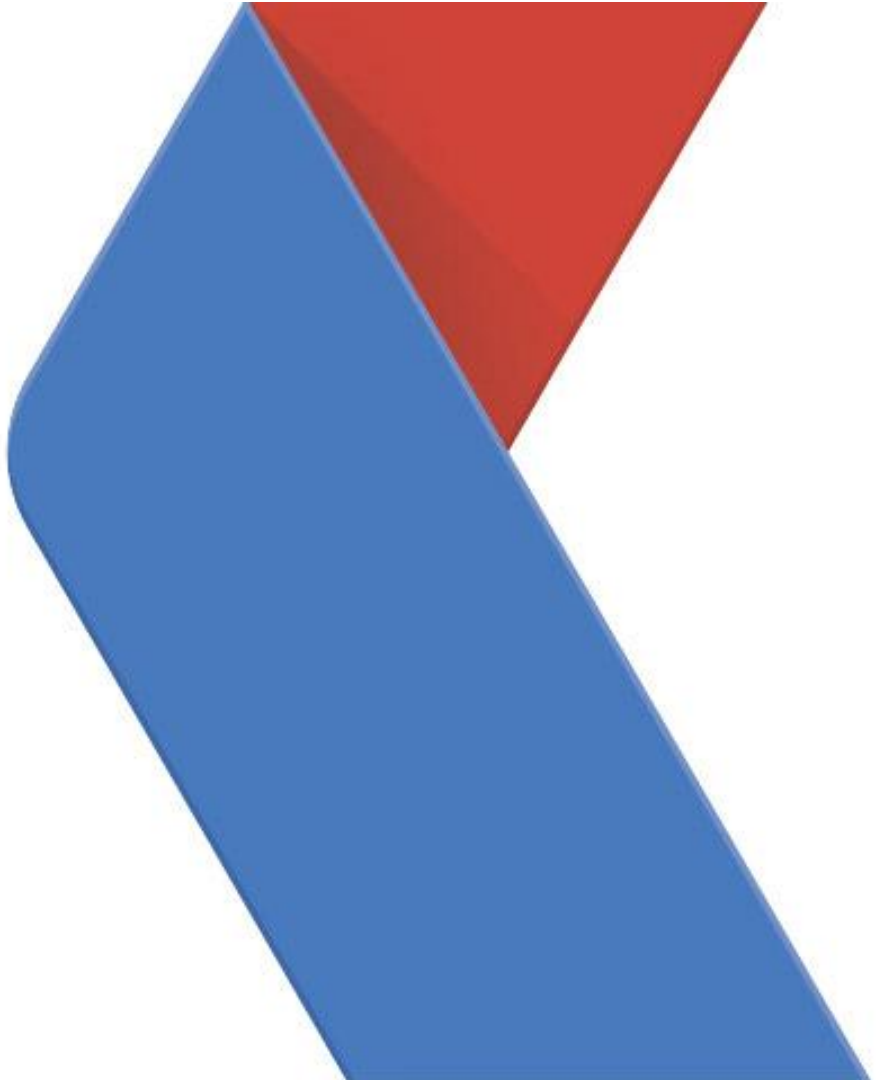
Zero to App



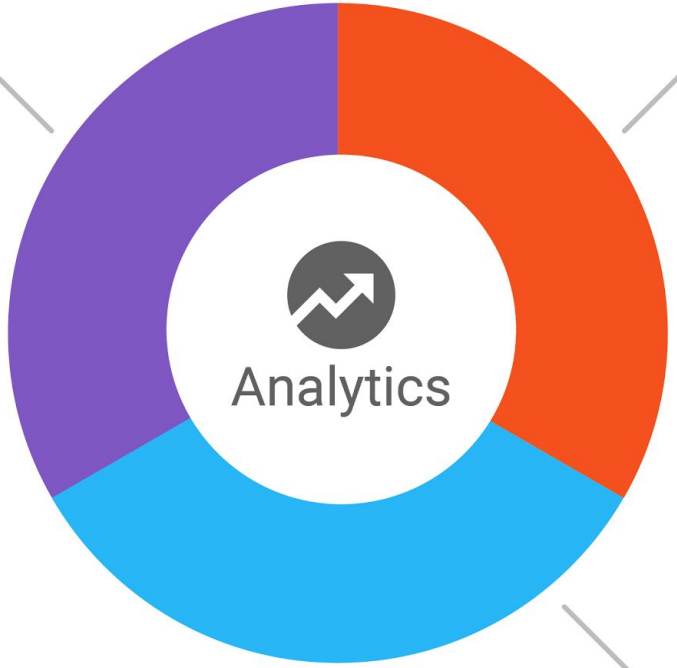
Develop

Backend Services

Realtime Database
Authentication
Hosting
Storage
Cloud Messaging
Remote Config

App Quality Services

Test Lab for Android
Crash Reporting



Grow

Acquisition

Dynamic Links
Invites
AdWords

Re-Engagement

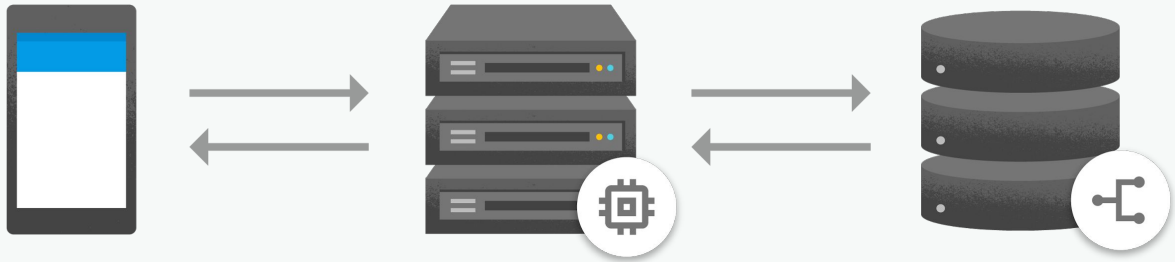
Notifications
App Indexing

Earn

In-app Ads

AdMob

Zero to App



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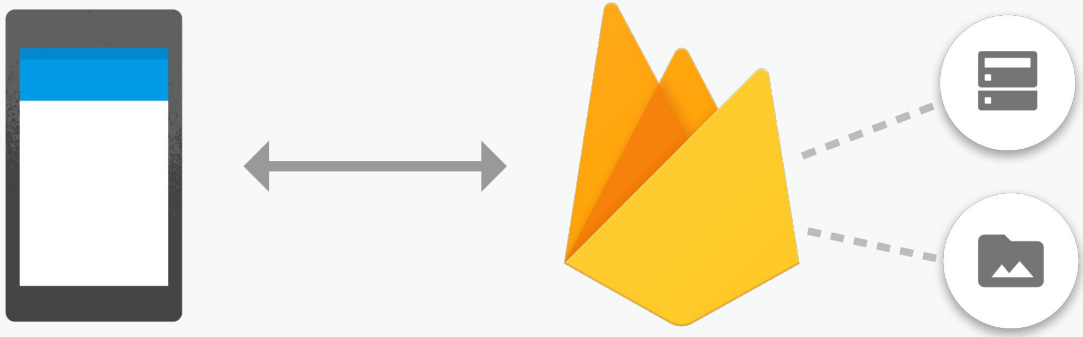

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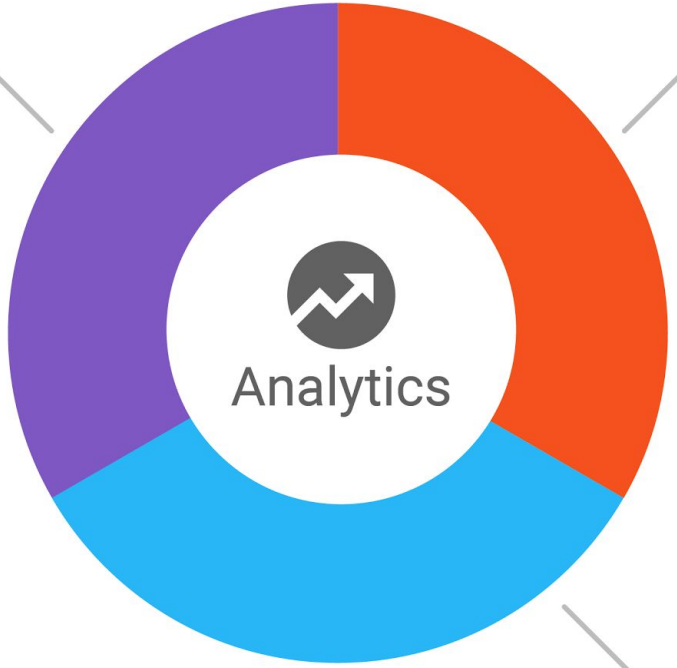

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Zero to App

0. Create an Idea

1. Pick your Platform(s)

2. Connect Firebase

3. Try it out

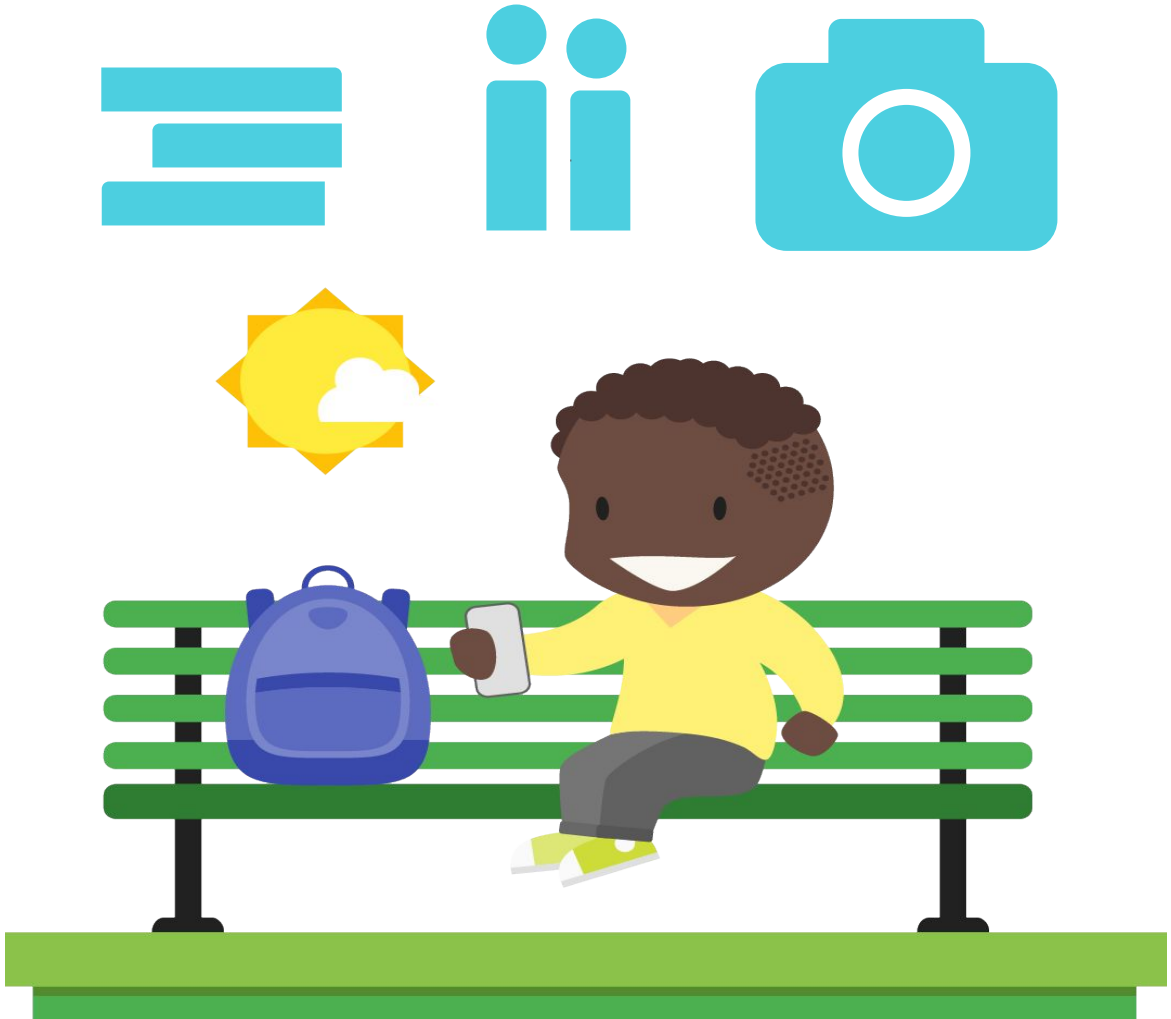
4. Ship it!

Conclusion

Google Developer Day

0. Create an Idea

dating games casual **social** geo
photo office productivity finance
books clock video radio legal
role-playing **chat** family food
health fishing todo calendar art



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Google Developer Day

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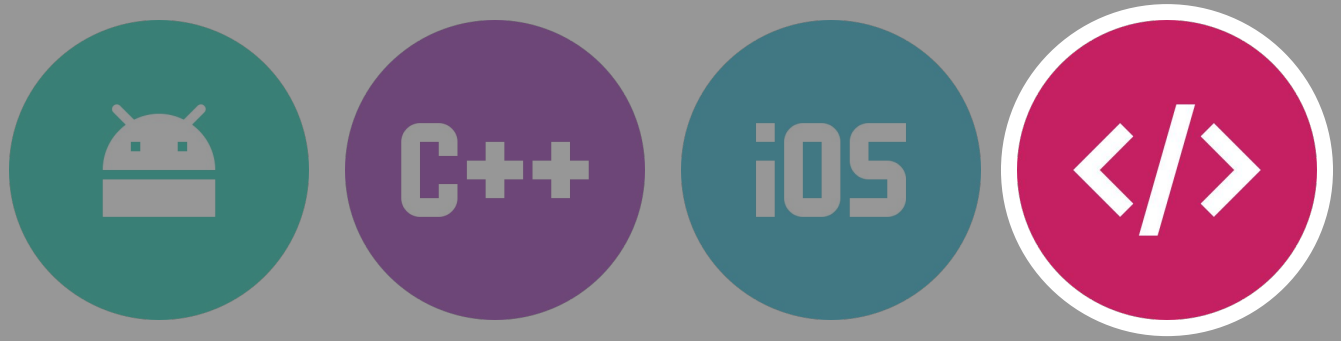

Zero to App

0. Create an Idea

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Conclusion

Google Developer Day

```
// iOS Code
pod 'Firebase/Core'
…
FIRApp.configure()

// Android Code
compile 'com.google.firebase:firebase-core:9.0.2'
…
apply plugin: 'com.google.gms.google-services'

// Web Code
<script src=".../firebase.js"></script>

<script>
var config = {...};
firebase.initializeApp(config);
</script>
```

Google Developer Day

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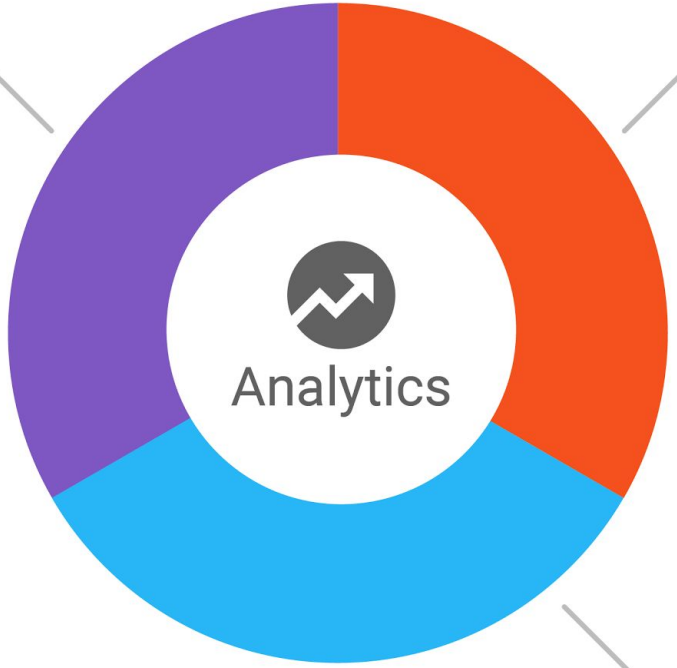

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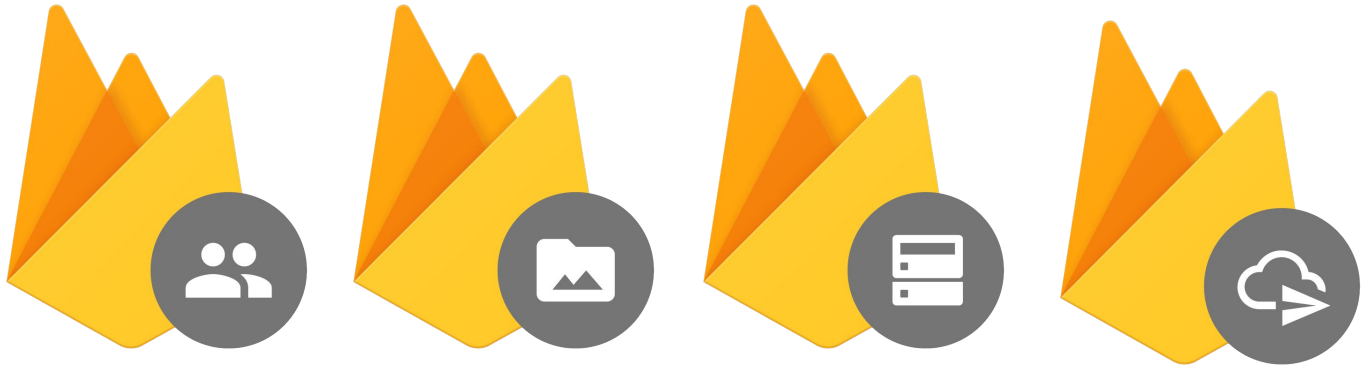
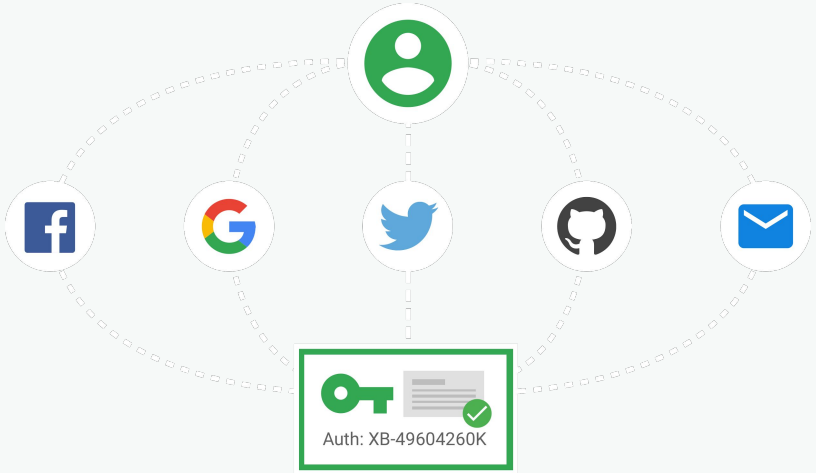


Firebase Auth

- Email / Password
- Custom Auth
- Common Western Providers - Google, Twitter, Facebook, etc.



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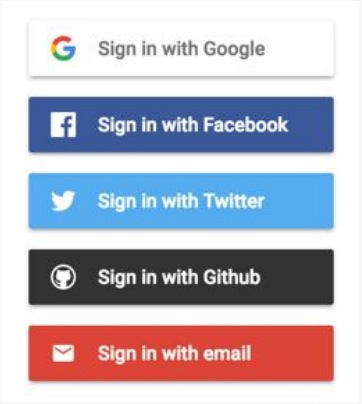
Firebase Auth

- Ready-made UI



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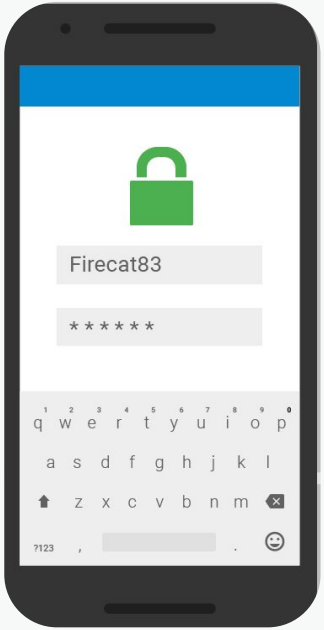
Firebase Auth

- Password resets made easy



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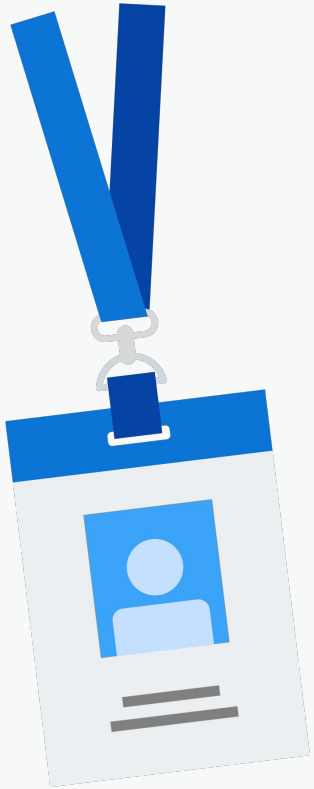
Firebase Auth

- Anonymous Accounts



Firebase Auth

Google Developer Day

```
// Email Sign-in

firebase.auth()
    .signInWithEmailAndPassword(email, password)
    .then(function(result) {
        var user = result.user;
    }).catch(function(error) {
        // Handle Errors here.
        var errorCode = error.code;
        var errorMessage = error.message;
    });
```

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```

Firebase Auth

```
// Google Sign-in

var provider =
    new firebase.auth.GoogleAuthProvider();

// Open a pop-up OAuth Prompt
firebase.auth().signInWithPopup(provider)
    .then(function(result) {
        var user = result.user;
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Google Developer Day

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Google Developer Day

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Google Developer Day

Firebase Auth

```
// Custom Sign-in

firebase.auth().signInWithCustomToken(token)
    .then(function(result) {
        var user = result.user;
    }).catch(function(error) {
        // Handle Errors here.
        var errorCode = error.code;
        var errorMessage = error.message;
    });
```

Google Developer Day

Firebase Storage

Google Developer Day

```
<!-- HTML -->
<input type="file" id="file"/>
<button id="submit">Upload!</button>

// JavaScript
var ipt_File = document.querySelector('#file');
var btn_Submit = document.querySelector('#submit');

btn_Submit.addEventListener('click', function () {
    // Gets file from input
    var file = ipt_File.files[0];

    var ref = firebase.storage().ref('upload.jpg');

    // Upload to Firebase
    ref.put(file)
        .then(function(snapshot) {
            console.log('Uploaded!');
            var image_url = snapshot.downloadURL;
        });
});
```

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Google Developer Day

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```

Firebase Database

- JSON based
- Key/Value Store
- Realtime Sync
- Offline Support

Firebase Database

```
{
    “chats”: {
        “CHAT_ID”: {
            “-23432dsadsa”: {
                “uid”: “1442”,
                “text”: “First Message”
            },
            “-2fsadfdsadsa”: {
                “uid”: “2131”,
                “text”: “Second Message”,
                “image_url”: “https://…”
            }
            ...
        },
        …
    }
}
```

Google Developer Day

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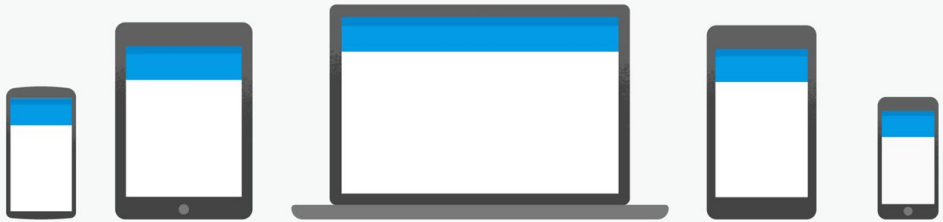
Firebase Database



Firebase Database

```
var database = firebase.database();
var chatRef = database.ref('chats/' + chatId);

function sendChatMessage(message) {
    chatRef.push({
        uid: uid,
        message: message
    });
}


chatRef.on('child_added', function (snapshot) {
    displayChatMessage(snapshot.val());
});
```

Google Developer Day

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Google Developer Day

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Google Developer Day

Firebase Cloud Messaging

```
var messaging = firebase.messaging();

// Get a FCM Token
messaging.getToken()
    .then(function(currentToken) {
        if(currentToken) {
            sendTokenToServer(currentToken);
        } else {
            // No token, request permission
            requestPermission();
        }
    });

// Receive incoming Push Notification
messaging.onMessage(function(payload) {
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Google Developer Day

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Google Developer Day

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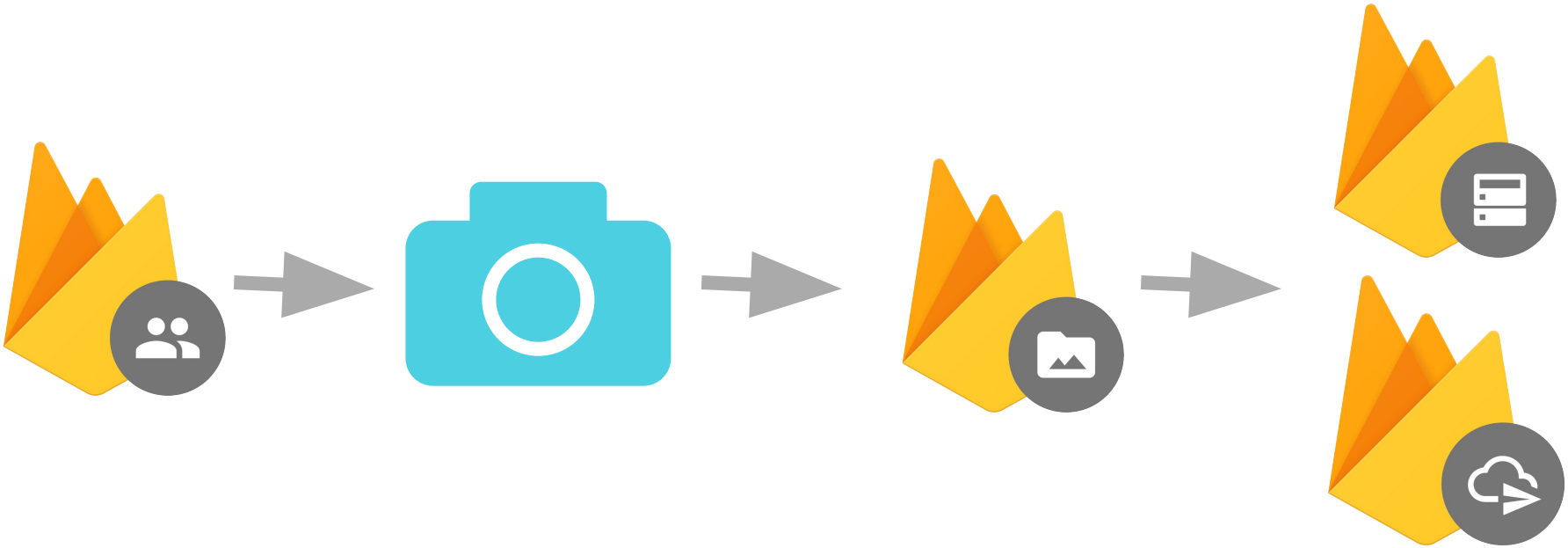

Zero to App

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Conclusion

Google Developer Day

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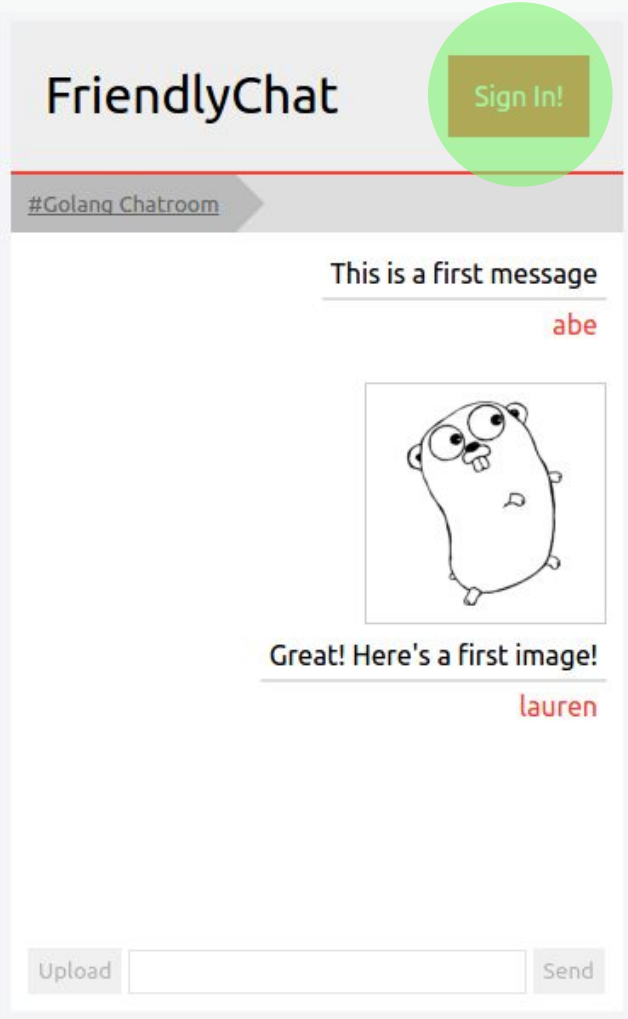
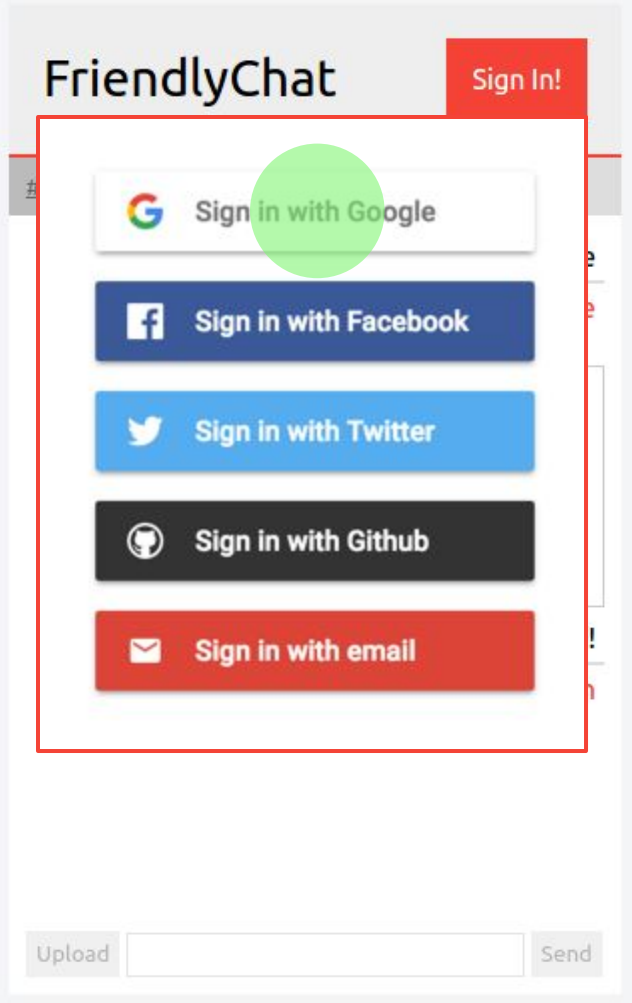

FriendlyChat
Sign In!
#Golang Chatroom
This is a first message
abe
Great! Here's a first image!
lauren
Upload
Send

Zero to App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Google Developer Day

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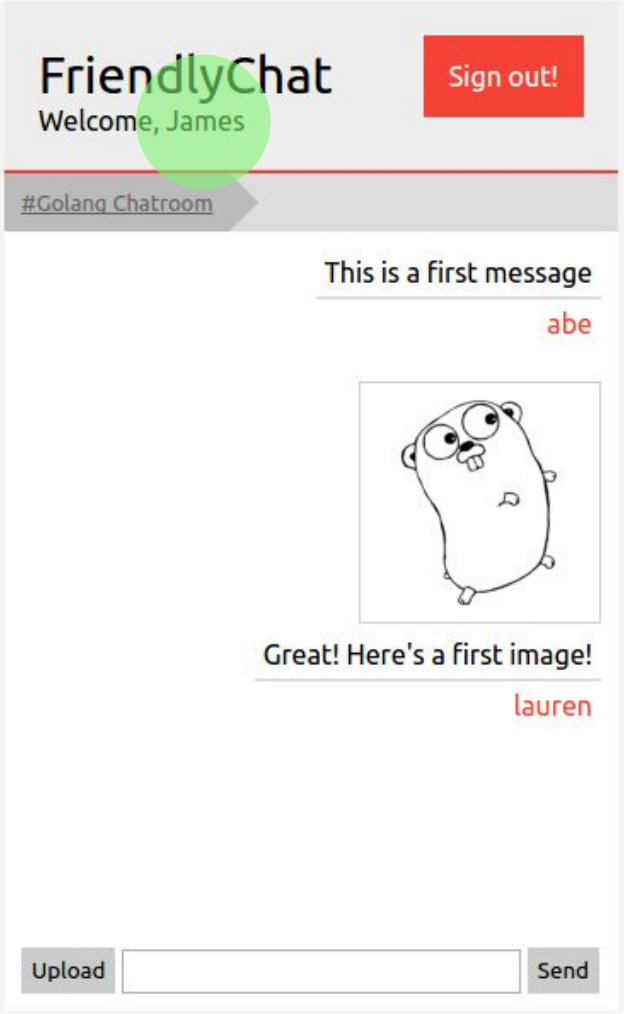
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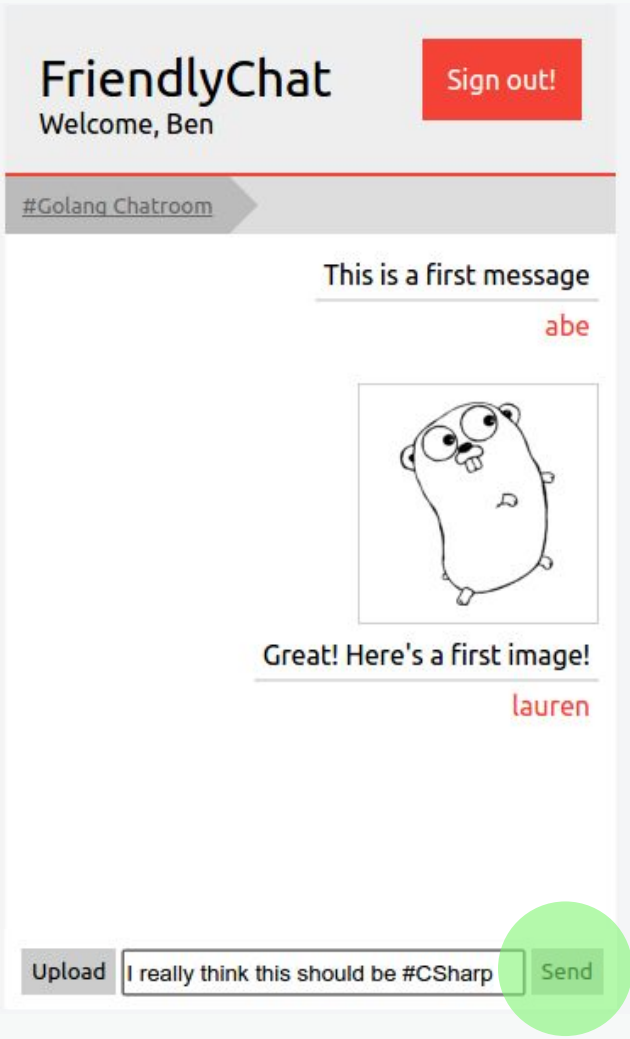
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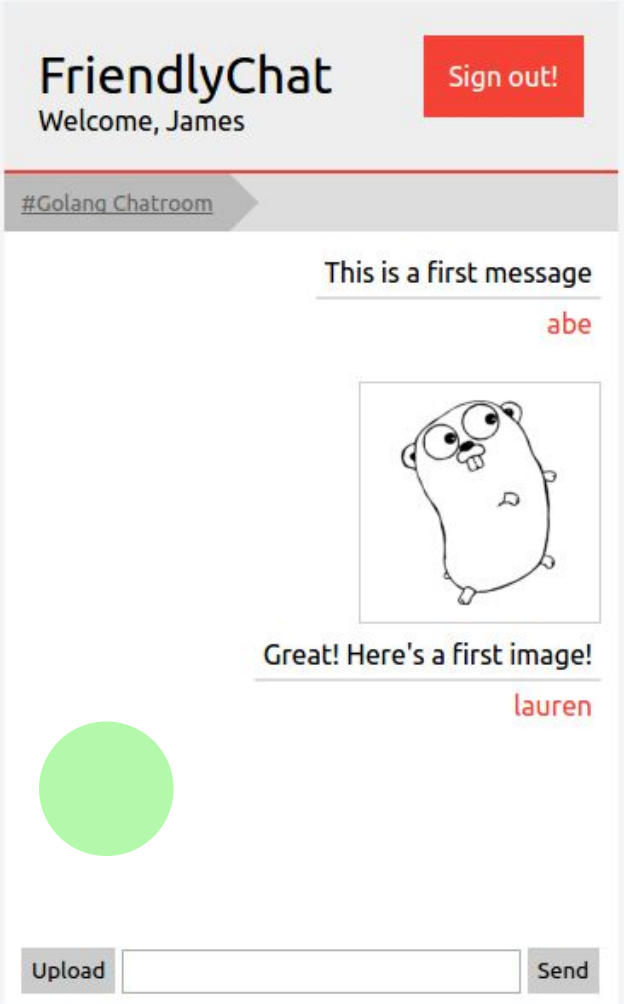
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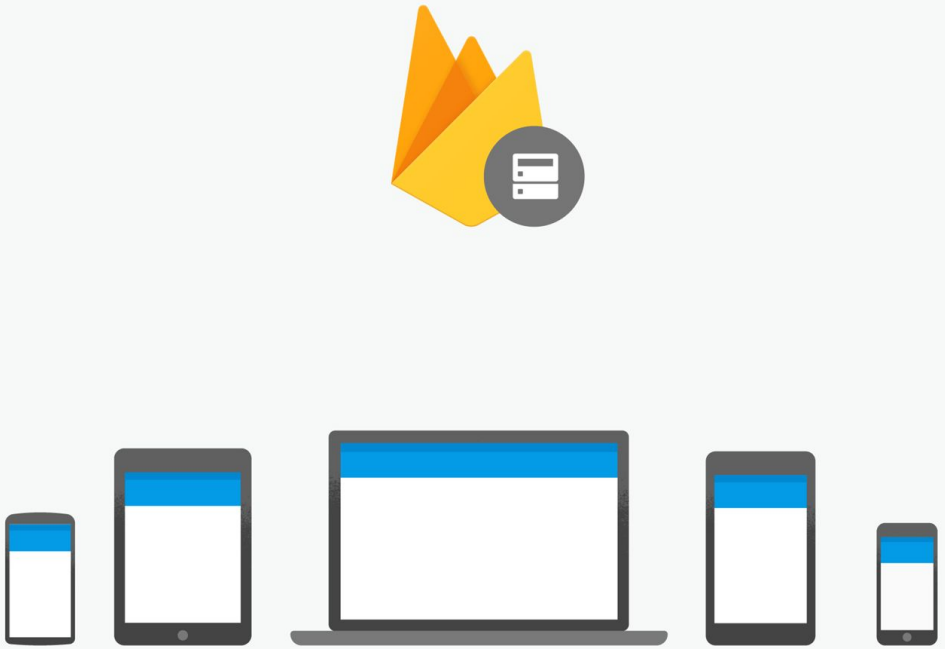

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Zero to App

Google Developer Day

No servers. Just Firebase.

Zero to App

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Conclusion

Google Developer Day

4. Ship it!

Firebase Hosting

Firebase Hosting

Google Developer Day

Firebase Hosting

```
// Initialize the Firebase Project
$ firebase init

// Serve the app locally
$ firebase serve

// Deploy to YOUR_APP.firebaseapp.com
$ firebase deploy
```

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Google Developer Day

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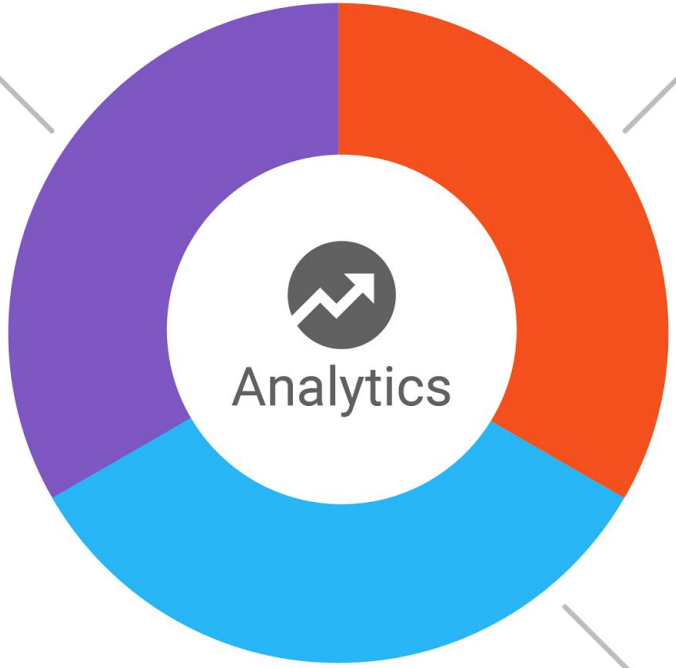

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AdMob

- **Firebase Website**
  https://firebase.google.com