```
☐ FirebaseExtended / flutterfire
                                                                            Projects 1
                                                                                               Security
  <> Code
               (!) Issues 725
                                   11 Pull requests 87
                                                            Actions
                                                                                                               ✓ Insi
  ٢ master ▼
flutterfire / packages / firebase_auth / firebase_auth / example / lib / signin_page.dart
       PaulTR [Firebase_Auth] Updated auth example to use latest dynamic links buil... ... ✓
                                                                                                       ( History
  A 2 contributors
    Raw
           Blame
  782 lines (727 sloc)
                         23.2 KB
         // Copyright 2019 The Chromium Authors. All rights reserved.
         // Use of this source code is governed by a BSD-style license that can be
         // found in the LICENSE file.
         import 'dart:io';
    5
         import 'package:flutter/material.dart';
         import 'package:firebase_auth/firebase_auth.dart';
    7
         import 'package:google_sign_in/google_sign_in.dart';
    8
         import 'package:firebase_dynamic_links/firebase_dynamic_links.dart';
    9
   10
   11
         final FirebaseAuth _auth = FirebaseAuth.instance;
   12
         final GoogleSignIn googleSignIn = GoogleSignIn();
   13
   14
         class SignInPage extends StatefulWidget {
   15
           final String title = 'Registration';
   16
           @override
           State<StatefulWidget> createState() => SignInPageState();
   17
   18
         }
   19
   20
         class SignInPageState extends State<SignInPage> {
   21
           @override
           Widget build(BuildContext context) {
             return Scaffold(
   23
               appBar: AppBar(
                 title: Text(widget.title),
                 actions: <Widget>[
   26
                   Builder(builder: (BuildContext context) {
   27
                     return FlatButton(
   29
                       child: const Text('Sign out'),
   30
                       textColor: Theme.of(context).buttonColor,
                       onPressed: () async {
                         final FirebaseUser user = await _auth.currentUser();
                         if (user == null) {
                           Scaffold.of(context).showSnackBar(const SnackBar(
```

```
content: Text('No one has signed in.'),
                        ));
37
                        return;
                      }
39
                      _signOut();
                      final String uid = user.uid;
40
                      Scaffold.of(context).showSnackBar(SnackBar(
41
42
                        content: Text(uid + ' has successfully signed out.'),
43
                      ));
                    },
45
                 );
46
               })
47
             ],
48
           ),
49
           body: Builder(builder: (BuildContext context) {
             return ListView(
51
               scrollDirection: Axis.vertical,
52
               children: <Widget>[
53
                 _EmailPasswordForm(),
                  EmailLinkSignInSection(),
55
                  _AnonymouslySignInSection(),
56
                  _GoogleSignInSection(),
57
                  PhoneSignInSection(Scaffold.of(context)),
                  _OtherProvidersSignInSection(),
59
               1,
             );
           }),
         );
       }
65
       // Example code for sign out.
       void _signOut() async {
         await _auth.signOut();
       }
     }
71
     class EmailPasswordForm extends StatefulWidget {
       @override
73
       State<StatefulWidget> createState() => _EmailPasswordFormState();
74
     }
75
     class _EmailPasswordFormState extends State<_EmailPasswordForm> {
76
       final GlobalKey<FormState> _formKey = GlobalKey<FormState>();
78
       final TextEditingController _emailController = TextEditingController();
       final TextEditingController _passwordController = TextEditingController();
80
       bool _success;
       String _userEmail;
81
82
       @override
83
       Widget build(BuildContext context) {
         return Form(
85
           key: _formKey,
86
           child: Column(
             crossAxisAlignment: CrossAxisAlignment.start,
87
             children: <Widget>[
88
89
               Container(
                 child: const Text('Test sign in with email and password'),
```

```
91
                   padding: const EdgeInsets.all(16),
                   alignment: Alignment.center,
                 ),
                 TextFormField(
                   controller: _emailController,
                   decoration: const InputDecoration(labelText: 'Email'),
 96
 97
                   validator: (String value) {
                     if (value.isEmpty) {
                       return 'Please enter some text';
 99
                     }
101
                     return null;
102
                   },
                 ),
104
                 TextFormField(
105
                   controller: _passwordController,
                   decoration: const InputDecoration(labelText: 'Password'),
106
107
                   validator: (String value) {
                     if (value.isEmpty) {
109
                       return 'Please enter some text';
110
                     }
111
                     return null;
112
                   },
113
                 ),
                 Container(
115
                   padding: const EdgeInsets.symmetric(vertical: 16.0),
116
                   alignment: Alignment.center,
                   child: RaisedButton(
117
118
                     onPressed: () async {
119
                       if (_formKey.currentState.validate()) {
120
                         _signInWithEmailAndPassword();
121
                       }
122
                     },
123
                     child: const Text('Submit'),
124
                   ),
125
                 ),
126
                 Container(
127
                   alignment: Alignment.center,
128
                   padding: const EdgeInsets.symmetric(horizontal: 16),
129
                   child: Text(
130
                     success == null
                         ? ''
131
                         : (_success
132
133
                             ? 'Successfully signed in ' + _userEmail
134
                             : 'Sign in failed'),
                     style: TextStyle(color: Colors.red),
135
136
                   ),
                 )
137
138
               ],
139
            ),
          );
141
142
        @override
143
        void dispose() {
145
          _emailController.dispose();
146
           _passwordController.dispose();
```

```
147
          super.dispose();
148
        }
149
150
        // Example code of how to sign in with email and password.
151
        void _signInWithEmailAndPassword() async {
          final FirebaseUser user = (await _auth.signInWithEmailAndPassword(
152
153
            email: _emailController.text,
154
            password: _passwordController.text,
155
          ))
156
               .user;
157
          if (user != null) {
158
            setState(() {
159
              _success = true;
160
              _userEmail = user.email;
161
            });
          } else {
            _success = false;
164
          }
165
        }
166
      }
167
168
      class _EmailLinkSignInSection extends StatefulWidget {
169
        @override
170
        State<StatefulWidget> createState() => _EmailLinkSignInSectionState();
171
      }
172
173
      class _EmailLinkSignInSectionState extends State<_EmailLinkSignInSection>
174
          with WidgetsBindingObserver {
        final GlobalKey<FormState> _formKey = GlobalKey<FormState>();
175
176
        final TextEditingController _emailController = TextEditingController();
177
178
        bool _success;
179
        String _userEmail;
180
        String userID;
181
182
        @override
183
        void initState() {
184
          super.initState();
185
          WidgetsBinding.instance.addObserver(this);
        }
186
187
        @override
188
        void dispose() {
189
          _emailController.dispose();
          WidgetsBinding.instance.removeObserver(this);
          super.dispose();
        }
193
194
195
        @override
        void didChangeAppLifecycleState(AppLifecycleState state) async {
196
          if (state == AppLifecycleState.resumed) {
197
198
            final PendingDynamicLinkData data =
                await FirebaseDynamicLinks.instance.getInitialLink();
199
            if (data?.link != null) {
              handleLink(data?.link);
            }
```

```
203
            FirebaseDynamicLinks.instance.onLink(
                 onSuccess: (PendingDynamicLinkData dynamicLink) async {
               final Uri deepLink = dynamicLink?.link;
               handleLink(deepLink);
            }, onError: (OnLinkErrorException e) async {
210
               print('onLinkError');
211
               print(e.message);
            });
213
          }
        }
214
216
        void handleLink(Uri link) async {
217
          if (link != null) {
            final FirebaseUser user = (await _auth.signInWithEmailAndLink(
218
219
               email: userEmail,
              link: link.toString(),
            ))
222
                 .user;
224
            if (user != null) {
              _userID = user.uid;
225
               _success = true;
227
            } else {
228
              _success = false;
            }
230
          } else {
231
            _success = false;
          }
233
234
          setState(() {});
        }
236
        @override
238
        Widget build(BuildContext context) {
239
          return Form(
240
            key: _formKey,
241
            child: Column(
242
               crossAxisAlignment: CrossAxisAlignment.start,
243
               children: <Widget>[
                 Container(
245
                   child: const Text('Test sign in with email and link'),
246
                   padding: const EdgeInsets.all(16),
247
                   alignment: Alignment.center,
248
                 ),
249
                 TextFormField(
                   controller: _emailController,
250
251
                   decoration: const InputDecoration(labelText: 'Email'),
252
                   validator: (String value) {
253
                     if (value.isEmpty) {
254
                       return 'Please enter your email.';
255
                     }
                     return null;
257
                   },
258
                 ),
```

```
259
                Container(
260
                   padding: const EdgeInsets.symmetric(vertical: 16.0),
261
                   alignment: Alignment.center,
                   child: RaisedButton(
263
                     onPressed: () async {
                       if (_formKey.currentState.validate()) {
264
                         _signInWithEmailAndLink();
266
267
                     },
                     child: const Text('Submit'),
269
                   ),
270
                ),
                Container(
271
272
                   alignment: Alignment.center,
273
                   padding: const EdgeInsets.symmetric(horizontal: 16),
274
                   child: Text(
275
                     success == null
                         ? ''
277
                         : (_success
278
                             ? 'Successfully signed in, uid: ' + _userID
                             : 'Sign in failed'),
280
                     style: TextStyle(color: Colors.red),
281
                  ),
282
                )
283
              1,
284
            ),
          );
        }
287
288
        Future<void> _signInWithEmailAndLink() async {
          userEmail = emailController.text;
290
          return await _auth.sendSignInWithEmailLink(
292
            email: userEmail,
293
            url: '<Url with domain from your Firebase project>',
            handleCodeInApp: true,
295
            iOSBundleID: 'io.flutter.plugins.firebaseAuthExample',
            androidPackageName: 'io.flutter.plugins.firebaseauthexample',
297
            androidInstallIfNotAvailable: true,
            androidMinimumVersion: "1",
299
          );
        }
300
      }
      class _AnonymouslySignInSection extends StatefulWidget {
304
        @override
        State<StatefulWidget> createState() => _AnonymouslySignInSectionState();
307
      class _AnonymouslySignInSectionState extends State<_AnonymouslySignInSection> {
        bool _success;
310
        String _userID;
        @override
311
        Widget build(BuildContext context) {
          return Column(
            crossAxisAlignment: CrossAxisAlignment.start,
```

```
children: <Widget>[
              Container(
317
                child: const Text('Test sign in anonymously'),
                padding: const EdgeInsets.all(16),
319
                alignment: Alignment.center,
320
              ),
              Container(
                padding: const EdgeInsets.symmetric(vertical: 16.0),
                alignment: Alignment.center,
                child: RaisedButton(
                  onPressed: () async {
                    _signInAnonymously();
                  },
                  child: const Text('Sign in anonymously'),
                ),
              ),
              Container(
332
                alignment: Alignment.center,
                padding: const EdgeInsets.symmetric(horizontal: 16),
                child: Text(
                  _success == null
                       ? ''
336
                       : ( success
                           ? 'Successfully signed in, uid: ' + _userID
339
                           : 'Sign in failed'),
                  style: TextStyle(color: Colors.red),
                ),
              )
343
            ],
          );
345
        }
347
        // Example code of how to sign in anonymously.
348
        void signInAnonymously() async {
          final FirebaseUser user = (await _auth.signInAnonymously()).user;
          assert(user != null);
          assert(user.isAnonymous);
          assert(!user.isEmailVerified);
          assert(await user.getIdToken() != null);
          if (Platform.isIOS) {
            // Anonymous auth doesn't show up as a provider on iOS
            assert(user.providerData.isEmpty);
          } else if (Platform.isAndroid) {
            // Anonymous auth does show up as a provider on Android
            assert(user.providerData.length == 1);
360
            assert(user.providerData[0].providerId == 'firebase');
            assert(user.providerData[0].uid != null);
            assert(user.providerData[0].displayName == null);
            assert(user.providerData[0].photoUrl == null);
            assert(user.providerData[0].email == null);
          }
          final FirebaseUser currentUser = await _auth.currentUser();
          assert(user.uid == currentUser.uid);
369
          setState(() {
            if (user != null) {
```

```
_success = true;
372
               _userID = user.uid;
            } else {
               _success = false;
          });
377
        }
378
379
380
      class _GoogleSignInSection extends StatefulWidget {
381
        @override
        State<StatefulWidget> createState() => _GoogleSignInSectionState();
382
383
      }
384
385
      class _GoogleSignInSectionState extends State<_GoogleSignInSection> {
        bool _success;
387
        String userID;
        @override
389
        Widget build(BuildContext context) {
          return Column(
            children: <Widget>[
               Container(
                 child: const Text('Test sign in with Google'),
                 padding: const EdgeInsets.all(16),
                 alignment: Alignment.center,
               ),
               Container(
398
                 padding: const EdgeInsets.symmetric(vertical: 16.0),
                 alignment: Alignment.center,
400
                 child: RaisedButton(
401
                   onPressed: () async {
402
                     _signInWithGoogle();
403
                   },
404
                   child: const Text('Sign in with Google'),
405
                 ),
               ),
406
407
               Container(
408
                 alignment: Alignment.center,
409
                 padding: const EdgeInsets.symmetric(horizontal: 16),
                 child: Text(
410
411
                   _success == null
                       ? ''
412
                       : (_success
413
414
                           ? 'Successfully signed in, uid: ' + _userID
                           : 'Sign in failed'),
415
416
                   style: TextStyle(color: Colors.red),
417
                 ),
418
419
            ],
420
          );
421
422
        // Example code of how to sign in with google.
423
424
        void _signInWithGoogle() async {
          final GoogleSignInAccount googleUser = await _googleSignIn.signIn();
425
426
          final GoogleSignInAuthentication googleAuth =
```

```
427
               await googleUser.authentication;
428
          final AuthCredential credential = GoogleAuthProvider.getCredential(
429
            accessToken: googleAuth.accessToken,
430
            idToken: googleAuth.idToken,
431
          );
          final FirebaseUser user =
432
433
               (await _auth.signInWithCredential(credential)).user;
434
          assert(user.email != null);
435
          assert(user.displayName != null);
436
          assert(!user.isAnonymous);
437
          assert(await user.getIdToken() != null);
438
439
          final FirebaseUser currentUser = await _auth.currentUser();
440
          assert(user.uid == currentUser.uid);
441
          setState(() {
            if (user != null) {
442
443
              _success = true;
444
               _userID = user.uid;
445
            } else {
446
               _success = false;
447
            }
448
          });
449
        }
      }
450
451
452
      class PhoneSignInSection extends StatefulWidget {
        _PhoneSignInSection(this._scaffold);
453
454
455
        final ScaffoldState _scaffold;
456
        @override
457
        State<StatefulWidget> createState() => PhoneSignInSectionState();
458
      }
459
460
      class PhoneSignInSectionState extends State< PhoneSignInSection> {
461
        final TextEditingController _phoneNumberController = TextEditingController();
462
        final TextEditingController _smsController = TextEditingController();
463
464
        String _message = '';
        String _verificationId;
465
466
467
        @override
        Widget build(BuildContext context) {
468
          return Column(
469
470
            crossAxisAlignment: CrossAxisAlignment.start,
            children: <Widget>[
471
472
               Container(
                 child: const Text('Test sign in with phone number'),
473
474
                 padding: const EdgeInsets.all(16),
475
                 alignment: Alignment.center,
476
               ),
477
               TextFormField(
478
                 controller: _phoneNumberController,
                 decoration: const InputDecoration(
479
480
                     labelText: 'Phone number (+x xxx-xxx-xxxx)'),
                 validator: (String value) {
481
                   if (value.isEmpty) {
482
```

```
483
                     return 'Phone number (+x xxx-xxx-xxxx)';
484
                   }
485
                   return null;
486
                 },
487
               ),
               Container(
488
489
                 padding: const EdgeInsets.symmetric(vertical: 16.0),
490
                 alignment: Alignment.center,
                 child: RaisedButton(
491
492
                   onPressed: () async {
493
                     _verifyPhoneNumber();
494
                   },
495
                   child: const Text('Verify phone number'),
496
                 ),
497
               ),
               TextField(
498
499
                 controller: smsController,
                 decoration: const InputDecoration(labelText: 'Verification code'),
501
               ),
               Container(
                 padding: const EdgeInsets.symmetric(vertical: 16.0),
504
                 alignment: Alignment.center,
                 child: RaisedButton(
                   onPressed: () async {
507
                     signInWithPhoneNumber();
                   },
                   child: const Text('Sign in with phone number'),
510
                 ),
               ),
512
               Container(
513
                 alignment: Alignment.center,
514
                 padding: const EdgeInsets.symmetric(horizontal: 16),
515
                 child: Text(
516
                   message,
                   style: TextStyle(color: Colors.red),
518
519
               )
            ],
521
          );
        }
523
524
        // Example code of how to verify phone number
        void _verifyPhoneNumber() async {
526
          setState(() {
             _message = '';
528
          });
          final PhoneVerificationCompleted verificationCompleted =
529
530
               (AuthCredential phoneAuthCredential) {
531
             _auth.signInWithCredential(phoneAuthCredential);
532
            setState(() {
               _message = 'Received phone auth credential: $phoneAuthCredential';
534
            });
          };
536
          final PhoneVerificationFailed verificationFailed =
               (AuthException authException) {
```

```
setState(() {
              _message =
541
                   'Phone number verification failed. Code: ${authException.code}. Message: ${authException.messa
542
            });
543
          };
544
          final PhoneCodeSent codeSent =
546
              (String verificationId, [int forceResendingToken]) async {
547
            widget._scaffold.showSnackBar(const SnackBar(
              content: Text('Please check your phone for the verification code.'),
549
            _verificationId = verificationId;
550
          };
553
          final PhoneCodeAutoRetrievalTimeout codeAutoRetrievalTimeout =
              (String verificationId) {
            verificationId = verificationId;
556
          };
557
558
          await auth.verifyPhoneNumber(
559
              phoneNumber: _phoneNumberController.text,
560
              timeout: const Duration(seconds: 5),
              verificationCompleted: verificationCompleted,
              verificationFailed: verificationFailed,
563
              codeSent: codeSent,
              codeAutoRetrievalTimeout: codeAutoRetrievalTimeout);
        }
        // Example code of how to sign in with phone.
568
        void _signInWithPhoneNumber() async {
          final AuthCredential credential = PhoneAuthProvider.getCredential(
            verificationId: _verificationId,
571
            smsCode: _smsController.text,
          );
          final FirebaseUser user =
574
              (await auth.signInWithCredential(credential)).user;
          final FirebaseUser currentUser = await _auth.currentUser();
576
          assert(user.uid == currentUser.uid);
          setState(() {
            if (user != null) {
579
              _message = 'Successfully signed in, uid: ' + user.uid;
            } else {
              _message = 'Sign in failed';
581
582
583
          });
584
        }
585
      }
587
      class _OtherProvidersSignInSection extends StatefulWidget {
        _OtherProvidersSignInSection();
589
590
        @override
        State<StatefulWidget> createState() => _OtherProvidersSignInSectionState();
592
      }
      class _OtherProvidersSignInSectionState
```

```
extends State<_OtherProvidersSignInSection> {
        final TextEditingController _tokenController = TextEditingController();
597
        final TextEditingController _tokenSecretController = TextEditingController();
598
599
        String _message = '';
        int _selection = 0;
600
        bool _showAuthSecretTextField = false;
        @override
603
        Widget build(BuildContext context) {
          return Column(
             crossAxisAlignment: CrossAxisAlignment.start,
             children: <Widget>[
               Container(
                 child: const Text(
                     'Test other providers authentication. (We do not provide an API to obtain the token for belo
610
611
                 padding: const EdgeInsets.all(16),
612
                 alignment: Alignment.center,
613
               ),
614
               Container(
615
                 padding: const EdgeInsets.symmetric(vertical: 16.0),
616
                 alignment: Alignment.center,
617
                 child: Row(
                   mainAxisAlignment: MainAxisAlignment.center,
618
619
                   children: <Widget>[
620
                     Radio<int>(
621
                       value: ∅,
622
                       groupValue: selection,
                       onChanged: _handleRadioButtonSelected,
623
624
                     ),
625
                     const Text(
626
                       'Github',
627
                       style: TextStyle(fontSize: 16.0),
628
                     ),
629
                     Radio<int>(
630
                       value: 1,
631
                       groupValue: selection,
632
                       onChanged: _handleRadioButtonSelected,
633
                     ),
634
                     const Text(
635
                       'Facebook',
                       style: TextStyle(
636
                         fontSize: 16.0,
637
638
                       ),
639
                     ),
                     Radio<int>(
641
                       value: 2,
                       groupValue: _selection,
642
643
                       onChanged: _handleRadioButtonSelected,
644
                     ),
645
                     const Text(
646
                       'Twitter',
                       style: TextStyle(fontSize: 16.0),
647
648
                     ),
                   ],
649
650
                 ),
```

```
651
               ),
               TextField(
                 controller: _tokenController,
653
654
                 decoration:
                     const InputDecoration(labelText: 'Enter provider\'s token'),
656
               ),
               Container(
657
                 child: _showAuthSecretTextField
                     ? TextField(
659
                         controller: _tokenSecretController,
                         decoration: const InputDecoration(
                             labelText: 'Enter provider\'s authTokenSecret'),
662
663
                       )
                     : null,
665
               ),
               Container(
666
667
                 padding: const EdgeInsets.symmetric(vertical: 16.0),
                 alignment: Alignment.center,
669
                 child: RaisedButton(
670
                   onPressed: () async {
                     _signInWithOtherProvider();
671
672
                   },
                   child: const Text('Sign in'),
673
                 ),
674
675
               ),
676
               Container(
                 alignment: Alignment.center,
677
678
                 padding: const EdgeInsets.symmetric(horizontal: 16),
679
                 child: Text(
680
                   _message,
                   style: TextStyle(color: Colors.red),
                 ),
683
               )
             ],
          );
686
        }
687
        void _handleRadioButtonSelected(int value) {
          setState(() {
690
             _selection = value;
691
             if (_selection == 2) {
               _showAuthSecretTextField = true;
             } else {
693
694
               _showAuthSecretTextField = false;
             }
696
          });
        }
697
698
699
        void _signInWithOtherProvider() {
          switch (_selection) {
             case 0:
               _signInWithGithub();
               break;
             case 1:
               _signInWithFacebook();
               break;
```

```
case 2:
708
              _signInWithTwitter();
709
              break;
            default:
711
          }
712
        }
713
714
        // Example code of how to sign in with Github.
715
        void _signInWithGithub() async {
          final AuthCredential credential = GithubAuthProvider.getCredential(
717
            token: _tokenController.text,
718
          );
          final FirebaseUser user =
720
              (await _auth.signInWithCredential(credential)).user;
721
          assert(user.email != null);
          assert(user.displayName != null);
723
          assert(!user.isAnonymous);
724
          assert(await user.getIdToken() != null);
725
726
          final FirebaseUser currentUser = await auth.currentUser();
727
          assert(user.uid == currentUser.uid);
728
          setState(() {
729
            if (user != null) {
730
              _message = 'Successfully signed in with Github. ' + user.uid;
731
            } else {
732
              _message = 'Failed to sign in with Github. ';
733
            }
734
          });
735
        }
736
737
        // Example code of how to sign in with Facebook.
738
        void _signInWithFacebook() async {
739
          final AuthCredential credential = FacebookAuthProvider.getCredential(
740
            accessToken: tokenController.text,
741
          );
742
          final FirebaseUser user =
              (await auth.signInWithCredential(credential)).user;
743
744
          assert(user.email != null);
745
          assert(user.displayName != null);
          assert(!user.isAnonymous);
747
          assert(await user.getIdToken() != null);
          final FirebaseUser currentUser = await _auth.currentUser();
749
          assert(user.uid == currentUser.uid);
          setState(() {
752
            if (user != null) {
              _message = 'Successfully signed in with Facebook. ' + user.uid;
755
              _message = 'Failed to sign in with Facebook. ';
            }
          });
758
        }
759
        // Example code of how to sign in with Twitter.
        void _signInWithTwitter() async {
          final AuthCredential credential = TwitterAuthProvider.getCredential(
```

```
authToken: _tokenController.text,
763
              authTokenSecret: _tokenSecretController.text);
764
765
          final FirebaseUser user =
              (await _auth.signInWithCredential(credential)).user;
766
          assert(user.email != null);
768
          assert(user.displayName != null);
          assert(!user.isAnonymous);
769
          assert(await user.getIdToken() != null);
770
771
          final FirebaseUser currentUser = await _auth.currentUser();
772
773
          assert(user.uid == currentUser.uid);
774
          setState(() {
            if (user != null) {
775
              _message = 'Successfully signed in with Twitter. ' + user.uid;
776
777
            } else {
778
              _message = 'Failed to sign in with Twitter. ';
779
780
          });
781
        }
782
      }
```