Firebase setup with authentication

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Brief notes on Firebase setup with Google sign-in option for authentication.

Firebase setup

Start by creating a Firebase project, and defining the following settings,

- create Firebase account at - https://firebase.google.com/
- create project for app & testing auth - e.g. `egyptian-cards`
  - domain for project - e.g. `egyptian-cards.firebaseapp.com`
- setup authentication options in Firebase
  - e.g. add Google sign-in option
- setup an Android app for the hosted Firebase project
  - enter details for app
- enable *Firebase Dynamic Links*
  - enable & accept terms and conditions...
  - take note of *Dynamic Link* domain
    - e.g. https://ancientlives.page.link

Cordova setup

Then, create a Cordova based app, and modify as follows,

- create Cordova app
- add platforms - e.g. Android, Browser...
- install the following Cordova plugins

```
# Plugin for  build info (app name, ID, etc) to OAuth widget.
cordova plugin add cordova-plugin-buildinfo --save
# This Plugin is to handle Universal Links (Android app link redirects)
cordova plugin add cordova-universal-links-plugin --save
# This Plugin is to handle opening secure browser views on iOS/Android
mobile devices
cordova plugin add cordova-plugin-browsertab --save
# This one is to handle opening a browser view in older versions of iOS
and Android
cordova plugin add cordova-plugin-inappbrowser --save
# This is to handle deep linking through Custom Scheme for iOS
# Add *com.firebase.cordova* In a iOS bundle ID of your app.
cordova plugin add cordova-plugin-customurlscheme --variable \
    URL_SCHEME=com.firebase.cordova --save
```

- update `config.xml` to help work with Dynamic Links,

```
<universal-links>
  <host name="ancientlives.page.link" scheme="https" />
  <host name="egyptian-cards.firebaseapp.com" scheme="https">
    <path url="/__/auth/callback" />
  </host>
</universal-links>
```

- update `manifestWriter.js` file in the directory - `./plugins/cordova-universal-links-plugin/hooks/lib/android/`
  - change the following

from

```
var pathToManifest = path.join(cordovaContext.opts.projectRoot,
'platforms', 'android', 'cordovaLib', 'AndroidManifest.xml');
```

to

```
var pathToManifest = path.join(
    cordovaContext.opts.projectRoot,
    'platforms',
    'android',
    'app',
    'src',
    'main',
    'AndroidManifest.xml');
```

- add required JS code &c. for app
  - Firebase config and connection
  - Firebase auth listeners &c. in JS.
- build and test Cordova app...