

Simple Hello World App

```
import
'package:flutter/material.dart';
import the material component
package
void main() => runApp (My -
App()); create and run the app
class MyApp extends StatelessWidget { the main widget which
is launched
  @override
  Widget build( BuildContext
context) { overridden build
method which holds the content
    return MaterialApp(
      title: 'Welcome to
Flutter', title
      home: Scaffold(
        appBar: AppBar(
          title:
Text(' Welcome to Flutter'), set
the appBar -text
        ),
        body: Center(
          child:
Text(' Hello World'), set the
body to center and add text
        ),
      ),
    );
  }
}
```

Infinite scrolling listview

```
class RandomWordsState extends
State<RandomWords> {
  final _suggestions = <WordPair>[]; adds a suggestion
list
  final _biggestFont = const
TextStyle (fontSize: 18.0);
increases the font size
  @override
  Widget build( BuildContext
context) {
    return Scaffold(
      appBar: AppBar(
        title: Text(' -
Startup Name Generator'),
      ),
      body: _buildSuggestions -
tio ns(), sets the body to the
build suggestions method which
generates the list
    );
  }
  Widget _buildSuggestions() {
    return ListView.builder(
      padding: const
EdgeInsets.all( 16.0),
      itemBuilder:
(context, i) { creates the items
        if (i.isOdd)
          return Divider(); adds a divider
between items
        final index = i
~/ 2; calculates number of word
parings in the list without
counting dividers
        if (index >=
_suggestions.length) {
          _suggestions.addAl l(g enerat eWo -
rdP air s().take( 10)); add ten
more words when the end of the
list is reached
        }
      },
    );
  }
}
```

Infinite scrolling listview (cont)

```
> }
    return _buildRow(_suggestions[i-
ndex]); build the row using the widget below
  Widget _buildRow(WordPair pair) {
    return ListTile(
      title: Text(
        pair.asPascalCase, sets the word as
text
        style: _biggestFont, changes the fontsize
      ),
    );
  }
});
}
```

External packages

```
edit pubspec.yaml, to add
english_words
dependencies:
  flutter:
    sdk: flutter
  cupertino_icons:
^0.1.2
+ english_words: ^3.1.5
after that, run flutter pub get
to get the new dependencies
and then add the new dependency
to lib/main.dart
import 'package:english_words -
ords/english_words.dart';
```

Generate random words

```
class MyApp extends
StatelessWidget {
  @override
  Widget build(BuildContext context) {
    + final wordPair = WordPair.random();
    create a new wordpair
    return MaterialApp(
      title: 'Welcome to Flutter',
      home: Scaffold(
        @ -16,7 +18,7 @@
        title:
Text(' Welcome to Flutter'),
      ),
      body:
Center(
  - child: Text(' Hello World'),
  remove the hello world text
  + child: Text(wordPair.asPascalCase),
  show random word as text
    ),
  ),
);
```

Stateful widgets

```
class RandomWordsState extends
State<RandomWords> {
  @override
  Widget build(BuildContext context) {
    final wordPair =
WordPair.random();
    return Text(wordPair.asPascalCase);
  }
}
```

Stateful widgets (cont)

> this creates a "state" which saves the generated word and displays it as text

```
class RandomWords extends StatefulWidget {
  @override
  RandomWordsState createState() =>
RandomWordsState();
}
add the state to the statefull widget
class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    - final wordPair = WordPair.random();
    return MaterialApp(
      title: 'Welcome to Flutter',
      home: Scaffold(
        @ -18,8 +17,8 @@
        title: Text('Welcome to Flutter'),
      ),
      body: Center(
        - child: Text(wordPair.asPascalCase),
        + child: RandomWords(),
      ),
    );
  }
}
remove the previous random word generation and replace it with the stateful widget
```