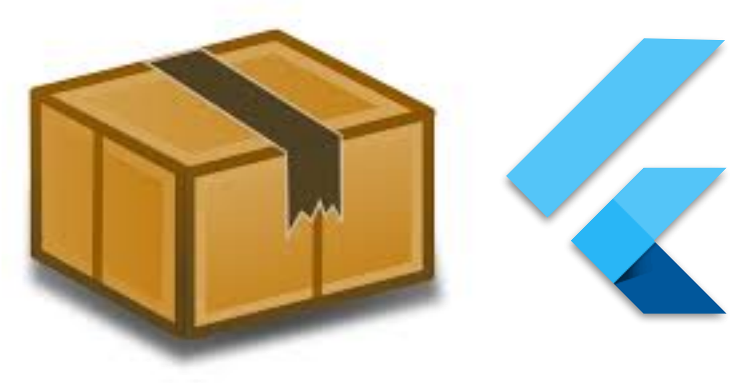
Chapter V

Third Party Flutter Packages



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1.Shared Preferences

Add plugin name in pubspec.yaml as:

shared_preferences

Usage:

```
var prefs = await SharedPreferences.getInstance();
int runTimeCount = (prefs.getInt('runtime') ?? 0);
 ++runTimeCount;
prefs.setInt('runtime', runTimeCount);
print(runTimeCount)
```

2.Cached Network Image

cached_network_image (Declaration in pubspec.yaml)

Usage:

```
CachedNetworkImage(
       imageUrl: part.image,

       fit: BoxFit.cover,

       width: double.maxFinite,

       height: size.height / 5,

     ),

   ), //As a widget


 CachedNetworkImageProvider(
       part.image,

       fit: BoxFit.cover,

       width: double.maxFinite,

       height: size.height / 5,

     ),

   ),//ImageProvider instead allows you to identify an image
```

3.Image Picker

image_picker (Declaration in pubspec.yaml)

```
List<File> imageFiles = []; //For use as array if need
File imageFile
File picture = await ImagePicker.pickImage(source:
        ImageSource.gallery);

this.setState(() {

        imageFile = picture;

});
```

Note:Add Privacy key in info.plist for iOS

```
<key>NSCameraUsageDescription</key>

<string>Camera Access Warning</string>

<key>NSMicrophoneUsageDescription</key>

<string>Microphone Access Warning</string>

<key>NSPhotoLibraryUsageDescription</key>

<string>Photo Library Access Warning</string>
```

And, in Android declared in AndroidManifest.xml

```
<activity

        android:name="com.yalantis.ucrop.UCropActivity"

        android:screenOrientation="portrait"

        android:theme="@style/Theme.AppCompat.Light.NoActionBar"/

        >
```

Full Example

```
    _openGalleryForImage(BuildContext context) async {

            var picture = await ImagePicker.pickImage(source:
                            ImageSource.gallery);
                    this.setState(() {
                    File imageFile = picture;

                    });
                    Navigator.of(context).pop();
             }

     _openCameraForImage(BuildContext context) async {
            var picture = await ImagePicker.pickImage(source:
            ImageSource.camera);
             this.setState(() {
                    File imageFile = picture;
                    imageFiles.add(imageFile);
                    });
                    Navigator.of(context).pop();
            }
Future<void> _showChoiceDialogForImage(BuildContext context) {
  return showDialog(
      context: context,
      builder: (BuildContext context) {
        return CupertinoAlertDialog(
          title: new Text("Make a choice"),
          content: new Text("You can upload image using..."),
          actions: <Widget>[
            CupertinoDialogAction(
              isDefaultAction: true,
              child: Text("Camera"),
              onPressed: () {
                _openCameraForImage(context);
              },
            ),
            CupertinoDialogAction(
              isDefaultAction: true,
              child: Text("Gallery"),
              onPressed: () {
                _openGalleryForImage(context);
              },
            )
          ],
        );
      });
}
```

4.Image Cropper

image_cropper: ^0.0.4

```
File croppedFile = await ImageCropper.cropImage(
  sourcePath: image.path,
  // ratioX: 1.0,
  // ratioY: 1.0,
  // maxWidth: 512,
  // maxHeight: 512,
);
}
```

5.Multi Image Picker

multi_image_picker:4.0.3

```
    List<UploadFileInfo> files;


    List<Asset> resultList = List<Asset>( );
resultList = await MultiImagePicker.pickImages(
  maxImages: 10,
  enableCamera: false,
);
```

Full Example:

```
List<UploadFileInfo> files;


Future getImage() async {


    List<Asset> resultList = List<Asset>();
    resultList = await MultiImagePicker.pickImages(
      maxImages: 10,
      enableCamera: false,
    );

    if (resultList.length == 0) return;

    for (var asset in resultList) {
      int MAX_WIDTH = 300; //keep ratio
      int height =
          ((MAX_WIDTH * asset.originalHeight) / asset.originalWidth).round();

      ByteData byteData =
          await asset.requestThumbnail(MAX_WIDTH, 300, quality: 80);

      if (byteData != null) {
        List<int> imageData = byteData.buffer.asUint8List();
        UploadFileInfo u = UploadFileInfo.fromBytes(imageData, asset.name);

        files.add(u )
      }
    }

    setState(() {

    });
  }
```

6.Image Gallery Saver

image_gallery_saver

Usage:

```
var result = await ImageGallerySaver.saveImage(imageData);
```

Full Example

```
import 'dart:convert';
import 'dart:typed_data';
import 'dart:ui';
import 'package:image_gallery_saver/image_gallery_saver.dart';


Future<Uint8List> _capturePng() async {
    try {
      RenderRepaintBoundary boundary =
          _globalKey.currentContext.findRenderObject();
      var image = await boundary.toImage(pixelRatio: 3.0);
      ByteData byteData = await image.toByteData(format:
ImageByteFormat.png);
      var pngBytes = byteData.buffer.asUint8List();
      var bs64 = base64Encode(pngBytes);

      setState(() {});
      return pngBytes;
    } catch (e) {
      print(e);
    }


var imageData = await _capturePng();
                var result = await ImageGallerySaver.saveImage(imageData);
```

7.Carousel Pro

carousel_pro

Usage

```
Carousel(
 boxFit: BoxFit.cover,

 images: //Image here,

autoplay: true,

 // animationCurve: Curves.fastOutSlowIn,

 // animationDuration: Duration(milliseconds: 1),

 dotSize: 5.0,

 dotColor: Colors.white,

 showIndicator: true,

 indicatorBgPadding: 8.0,

 dotBgColor: Colors.transparent,

),
```

8.Permission Handler

Usage

```
PermissionHandler()
.requestPermissions(<PermissionGroup>[PermissionGroup.storage]);
```

Note

For iOS

```
<key>NSLocationAlwaysUsageDescription</key>
        <string>Always</string>
<key>NSLocationWhenInUseUsageDescription</key>
        <string>To provide location based services</string>
```

For android to access location. Add following line in AndroidManifest.xml

```
<uses-permission android:name="android.permission.INTERNET"/>
    <uses-permission
android:name="android.permission.ACCESS_COARSE_LOCATION"/>
    <uses-permission
android:name="android.permission.ACCESS_FINE_LOCATION"/>
```

9.Location

location: ^2.3.5

Usage

```
        StreamSubscription<LocationData> _locationSubscription;


         Location _locationService = new Location();
        bool _permission = false;
        String error;

        initPlatformState() async {
        await _locationService.changeSettings(
       accuracy: LocationAccuracy.HIGH, interval: 1000);

    LocationData location;

    try {
      bool serviceStatus = await _locationService.serviceEnabled();
      print("Service status: $serviceStatus");
      if (serviceStatus) {
        _permission = await _locationService.requestPermission();

        if (_permission) {
```

```
        location = await _locationService.getLocation();

        CurrentLocation = location;
      }
    } else {
      bool serviceStatusResult = await _locationService.requestService();
      print("Service status activated after request: $serviceStatusResult");
      if (serviceStatusResult) {
        initPlatformState();
      }
    }
  } on PlatformException catch (e) {
    print(e);
    if (e.code == 'PERMISSION_DENIED') {
      error = e.message;
    } else if (e.code == 'SERVICE_STATUS_ERROR') {
      error = e.message;
    }
    location = null;
  }
}
```

10.Flutter Swipper

flutter_swiper

Usage

```
Swiper.children(
autoplay: false,

index: 0,

loop: false,

pagination: SwiperPagination(

  margin: EdgeInsets.fromLTRB(0.0, 0.0, 0.0, 40.0),

  builder: DotSwiperPaginationBuilder(

      color: Colors.grey,

      activeColor: appColor,

      size: 6.5,

      activeSize: 8.0),

),
    control: SwiperControl(
      iconPrevious: null,
      iconNext: null,
    ),
    children: _getPages(context),
  ),
```

11.Url Launcher

<Refer to package link>

12.Connectivity

<Refer to package link>

13.Toast

<Refer to package link>