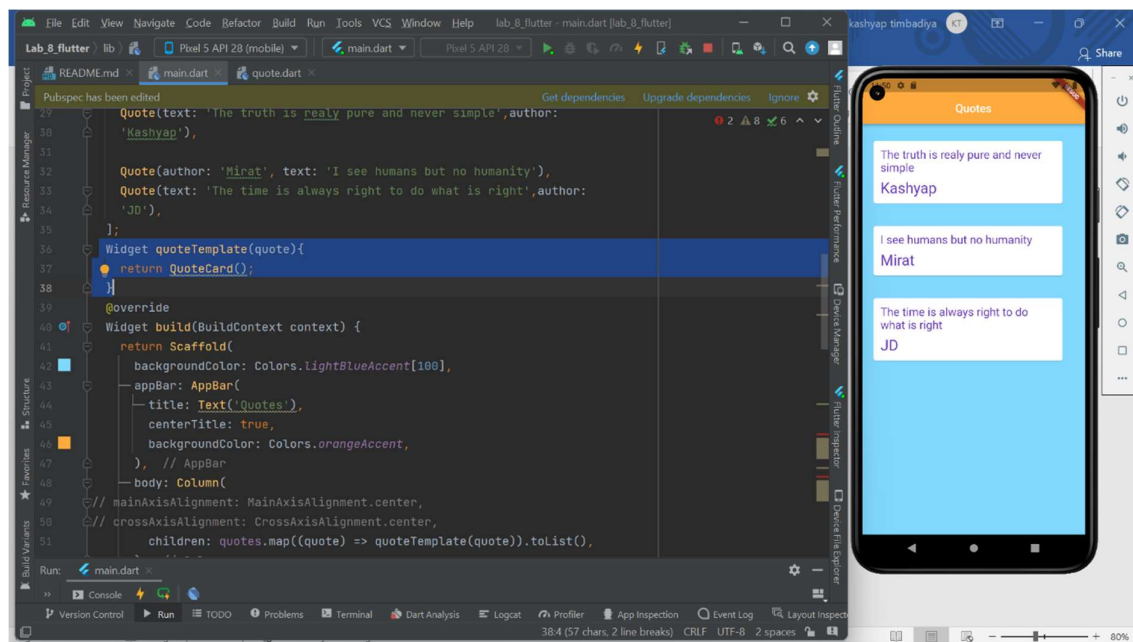
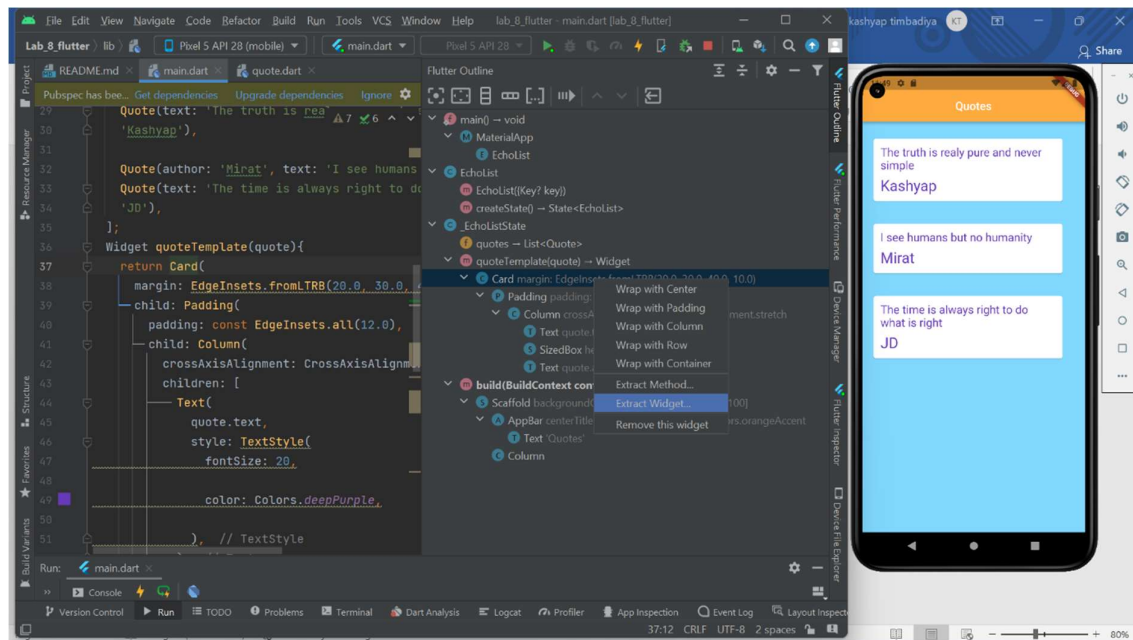
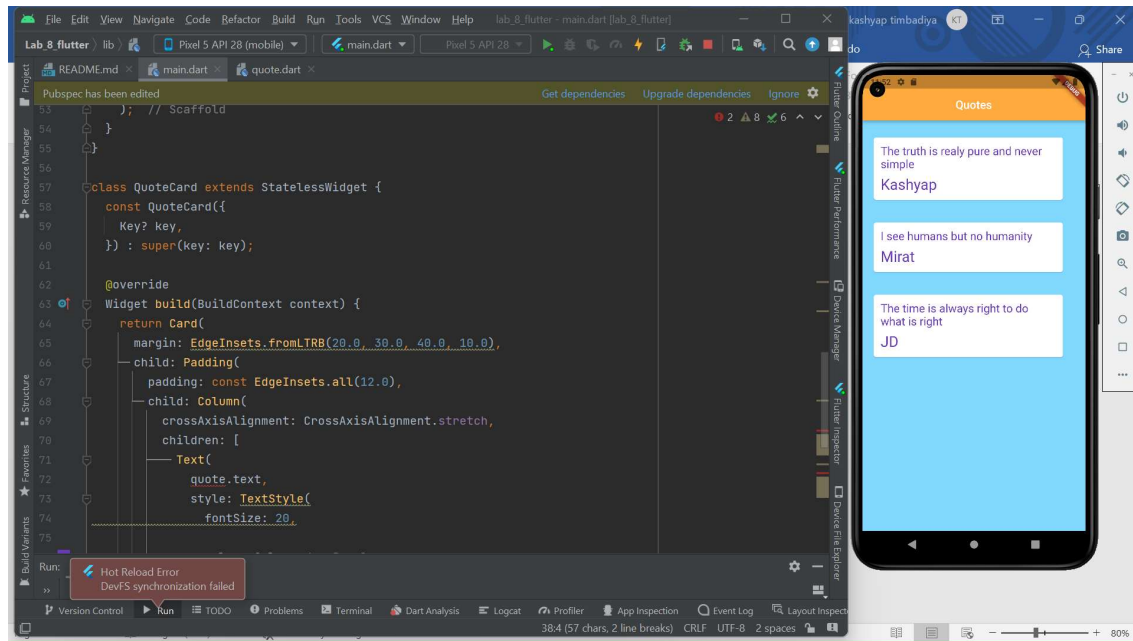


Extracting Widgets form code:

Code Test 1:





Main.Dart Code

```
import 'package:flutter/material.dart';
//import 'package:lab8_2/quote.dart';
import 'quote.dart'; // due to same directory file no need path

void main() => runApp(MaterialApp(
  home: EchoList(),
));

class EchoList extends StatefulWidget {
  const EchoList({Key? key}) : super(key: key);
  @override
  State<EchoList> createState() => _EchoListState();
}

class _EchoListState extends State<EchoList> {
  /*
  List<String> quotes = [
    'The truth is really pure and never simple',
    'I see humans but no humanity',
    'The time is always right to do what is right'
  ];
  // List<String> author = [];
  */
  /* this will create error..because list is now not of string....
  List<String> quotes = [
    Quote(text: 'The truth is really pure and never simple',author:
    'Kashyap'),
  ];
  */
  List<Quote> quotes = [
    Quote(text: 'The truth is really pure and never simple',author:
    'Kashyap'),

    Quote(author: 'Mirat', text: 'I see humans but no humanity'),
    Quote(text: 'The time is always right to do what is right',author:
```

```

        'JD'),
    ];
    Widget quoteTemplate(quote) {
        return QuoteCard(quote: quote,);
    }
    @override
    Widget build(BuildContext context) {
        return Scaffold(
            backgroundColor: Colors.lightBlueAccent[100],
            appBar: AppBar(
                title: Text('Quotes'),
                centerTitle: true,
                backgroundColor: Colors.orangeAccent,
            ),
            body: Column(
                // mainAxisAlignment: MainAxisAlignment.center,
                // crossAxisAlignment: CrossAxisAlignment.center,
                //children: quotes.map((quote) => quoteTemplate(quote)).toList(),
                children: quotes.map((quote) => QuoteCard(quote: quote)).toList(),
            ),
        );
    }
}

class QuoteCard extends StatelessWidget {
    final Quote quote;
    QuoteCard({required this.quote});

    @override
    Widget build(BuildContext context) {
        return Card(
            margin: EdgeInsets.fromLTRB(20.0, 30.0, 40.0, 10.0),
            child: Padding(
                padding: const EdgeInsets.all(12.0),
                child: Column(
                    crossAxisAlignment: CrossAxisAlignment.stretch,
                    children: [
                        Text(
                            quote.text,
                            style: TextStyle(
                                fontSize: 20,

                                color: Colors.deepPurple,

                            ),
                        ),
                        SizedBox(height: 10),
                        Text(
                            quote.author,
                            style: TextStyle(
                                fontSize: 26,

                                color: Colors.deepPurple,

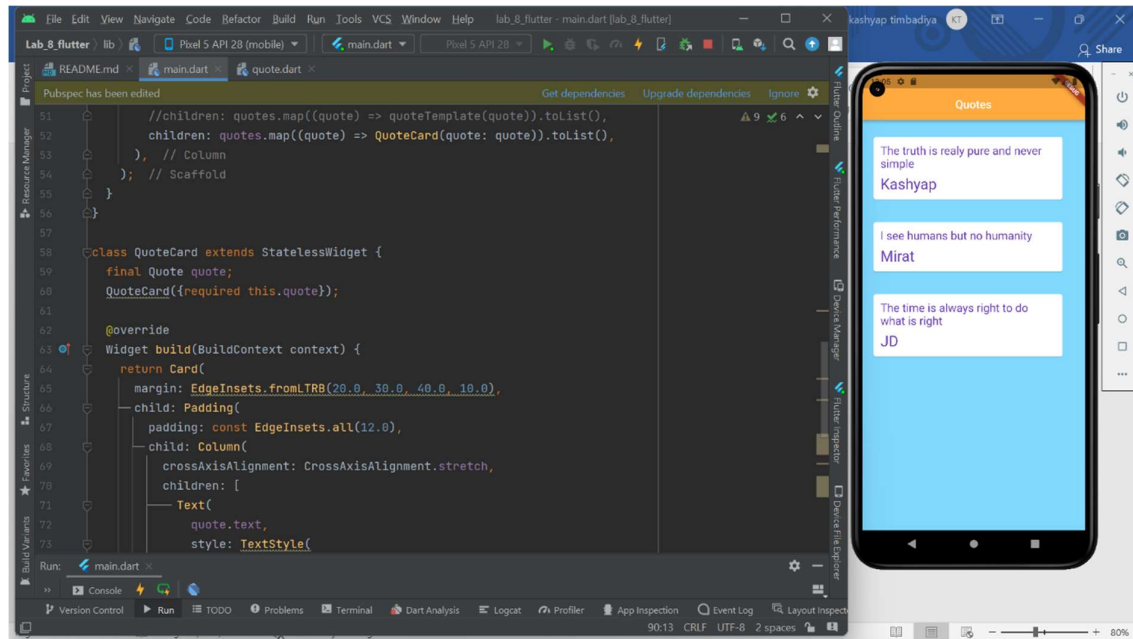
                            ),
                        ),
                    ],
                ),
            ),
        );
    }
}

```

```

}
}

```



Main.Dart Code:

```

import 'package:flutter/material.dart';
import 'package:lab_8_flutter/quote.dart';
import 'quote_card.dart';
//import 'package:lab8_2/quote.dart';
import 'quote.dart'; // due to same directory file no need path

void main() => runApp(MaterialApp(
  home: EchoList(),
));

class EchoList extends StatefulWidget {
  const EchoList({Key? key}) : super(key: key);
  @override
  State<EchoList> createState() => _EchoListState();
}

class _EchoListState extends State<EchoList> {
  /*
  List<String> quotes = [
    'The truth is really pure and never simple',
    'I see humans but no humanity',
    'The time is always right to do what is right'
  ];
  // List<String> author = [];
  */
  /* this will create error..because list is now not of string....
  List<String> quotes = [
    Quote(text: 'The truth is really pure and never simple',author:
    'Kashyap'),
  ];
  */
  List<Quote> quotes = [

```

```

    Quote(text: 'The truth is really pure and never simple',author:
      'Kashyap'),

    Quote(author: 'Mirat', text: 'I see humans but no humanity'),
    Quote(text: 'The time is always right to do what is right',author:
      'JD'),
  ];
  Widget quoteTemplate(quote){
    return QuoteCard(quote: quote,);
  }
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.lightBlueAccent[100],
      appBar: AppBar(
        title: Text('Quotes'),
        centerTitle: true,
        backgroundColor: Colors.orangeAccent,
      ),
      body: Column(
// mainAxisAlignment: MainAxisAlignment.center,
// crossAxisAlignment: CrossAxisAlignment.center,
        //children: quotes.map((quote) => quoteTemplate(quote)).toList(),
        children: quotes.map((quote) => QuoteCard(quote: quote)).toList(),
      ),
    );
  }
}

```

quote_card.dart:

```

import 'package:flutter/material.dart';
import 'package:lab_8_flutter/quote.dart';
class QuoteCard extends StatelessWidget {
  final Quote quote;
  QuoteCard({required this.quote});

  @override
  Widget build(BuildContext context) {
    return Card(
      margin: EdgeInsets.fromLTRB(20.0, 30.0, 40.0, 10.0),
      child: Padding(
        padding: const EdgeInsets.all(12.0),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.stretch,
          children: [
            Text(
              quote.text,
              style: TextStyle(
                fontSize: 20,

                color: Colors.deepPurple,

              ),
            ),
            SizedBox(height: 10),
            Text(
              quote.author,
              style: TextStyle(

```

```

        fontSize: 26,

        color: Colors.deepPurple,
      ),
    ),
  ],
),
),
);
}
}

```

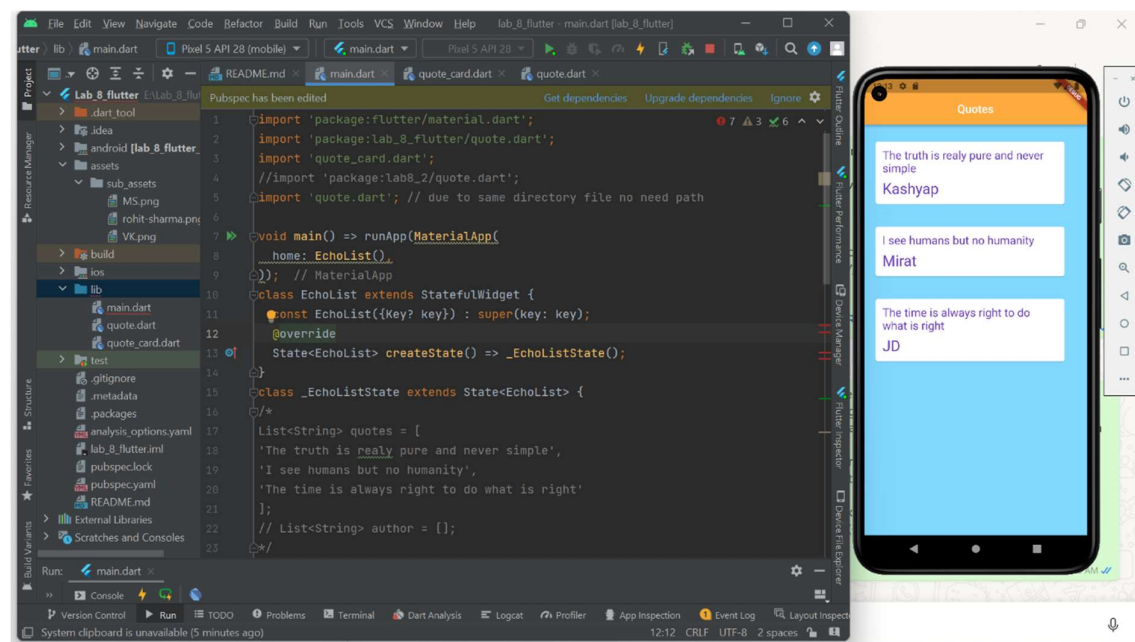
quote.dart Code:

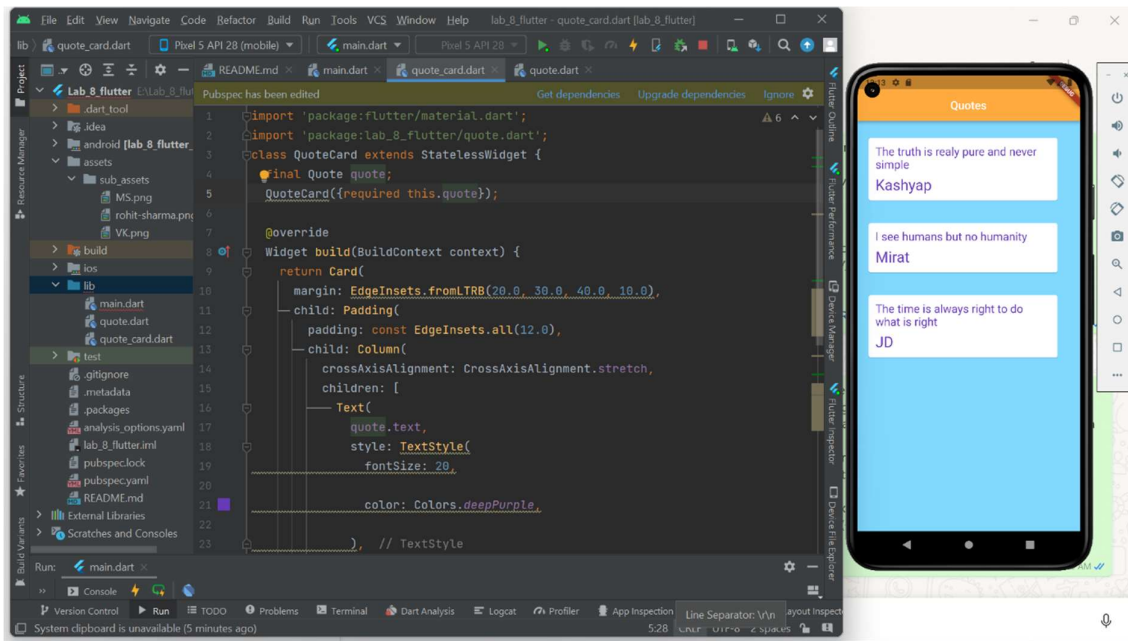
```

class Quote{
  String text;
  String author;

  Quote({this.text = ' ',this.author = ' '});
}

```





Code Test 2 : Function as arguments and real use of “Stateful widget”.. “delete” operation...

```

Main.dart
import 'package:flutter/material.dart';
import 'quote_card.dart'; // Absolute path
import 'quote.dart'; // due to same directory file relative path will work
//import 'quote_card.dart'; // Relative path

void main() => runApp(MaterialApp(
  home: EchoList(),
));

class EchoList extends StatefulWidget {
  @override
  State<EchoList> createState() => _EchoListState();
}

class _EchoListState extends State<EchoList> {
  /*
  List<String> quotes = [
    'The truth is really pure and never simple',
    'I see humans but no humanity',
    'The time is always right to do what is right'
  ];
  // List<String> author = [];
  */
  /* this will create error..because list is now not of string....
  List<String> quotes = [
    Quote(text: 'The truth is really pure and never simple',author:
    'Kashyap'),
  ];
  */

  List<Quote> quotes = [
    Quote(text: 'The truth is really pure and never simple',author:
    'Kashyap'),
    Quote(author: 'Mirat', text: 'I see humans but no humanity'),
    Quote(text: 'The time is always right to do what is right',author:

```

```

        'JD'),
    ];
  /*
  Widget quoteTemplate(quote){
  return QuoteCard(quote: quote,);
  }
  */
  @override

  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.lightBlueAccent[100],
      appBar: AppBar(
        title: Text('Quotes'),
        centerTitle: true,
        backgroundColor: Colors.orangeAccent,
      ),
      body: Column(
        // mainAxisAlignment: MainAxisAlignment.center,
        // crossAxisAlignment: CrossAxisAlignment.center,
        // children: quotes.map((quote) => quoteTemplate(quote)).toList(),
        children: quotes.map((quote) => QuoteCard(
          quote: quote,
          delete: () {
            setState(() {
              quotes.remove(quote);
            });
          },
        )).toList(),
      ),
    );
  }
}

```

quote_card.dart

```

import 'package:flutter/material.dart';
import 'quote.dart'; // Absolute path
class QuoteCard extends StatelessWidget {
  // Quote quote; // in StatelessWidget can't allowed variable ..
  final Quote quote;
  // final void Function() delete; // or you can use following code also
  final VoidCallback delete;
  QuoteCard({required this.quote, required this.delete});
  @override
  Widget build(BuildContext context) {
    return Card(
      margin: EdgeInsets.fromLTRB(20.0, 30.0, 40.0, 10.0),
      child: Padding(
        padding: const EdgeInsets.all(12.0),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.stretch,
          children: [
            Text(
              quote.text,
              style: TextStyle(
                fontSize: 20,
                color: Colors.deepPurple,
              ),
            ),

```



```

    ),
    SizedBox(height: 10),
    Text(
      quote.author,
      style: TextStyle(

        fontSize: 26,
        color: Colors.deepPurple,
      ),
    ),
    SizedBox(height: 8.0,),
    TextButton.icon(
/*
our data doesn't exist inside this stateless widget class..
data are in 'main.dart' file. ..
*/

      onPressed: delete,
      icon: Icon(Icons.delete),
      label: Text('Delete Quote'),
    ),
  ],
),
),
);
}
}

```

