

# Quiz App

## Widgets (Stateful, Stateless)

### MyApp() - Stateless

- MyHomePage() - **Stateful** => Platform.isIOS
  - **true**: CupertinoPageScaffold()
    - navigationBar: appBar
    - child: pageBody
  - **false**: Scaffold()
    - appBar: appBar
    - body: pageBody
    - floatingActionButton: Platform.isIOS
      - **True**: Container()
      - **False**: FloatingActionButton(+) => **Function** startAddNewTransaction(context)

### NewTransaction(Function addNewTransaction) - Stateful

- SingleChildScrollView()
  - Card()
    - Container()
      - Column()
        - TextField(Title) => **Function** submitData()
        - TextField(Title) => **Function** submitData()
        - Container()
          - Row()
            - Expanded()
              - Text() => selectedDate
            - AdaptiveFlatButton() => **Function** presentDatePicker
      - ElevatedButton() => **Function** submitData()

### TransactionList(transactions, Function deleteTransactions) - Stateless

- Transactions.isEmpty
  - **true**: LayoutBuilder()
    - Column()
      - Text() => "No Transactions"
      - SizedBox()
      - Container()

- Image.asset()
- **false**: ListView()
  - TransactionItem(key, transaction, **Function** deleteTransactions(id))

## Chart(recentTransaction) - Stateless

- Card()
  - Padding()
    - Row()
      - Flexible()
        - ChartBar(weekDay, spendingAmount, spendingPctOfTotal)
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        - ChartBar(weekDay, spendingAmount, spendingPctOfTotal)

## TransactionItem(key, transaction, Function deleteTransactions)

### - Stateful

- Card()
  - ListTile()
    - leading: CircleAvatar()
      - Padding()
        - FittedBox()
          - Text() => transactionAmount
      - title: Text() => Title
      - subtitle: Text() => Date
      - trailing: width > 460
        - **true**: TextButton.icon(delete) => **Function** deleteTransactions(id)
        - **false**: IconButton(delete) => **Function** deleteTransactions(id)

## ChartBar(weekDay, spendingAmount, spendingPctOfTotal) - Stateless

- LayoutBuilder()
  - Column()
    - Container()
      - FittedBox()
        - Text() => spendingAmount
      - SizedBox()
      - Container()

- Stack()
  - Container()
  - FractionallySizedBox()
    - Container()
- SizedBox()
- Container()
- FittedBox()
  - Text() => weekDay

## Widgets

### AppBar

- buildAppBar(): Platform.isIOS
  - **true:** CupertinoNavigationBar()
    - middle: Text() => Title
    - trailing: Row()
      - GestureDetector(+) => **Function** startAddNewTransaction(context)
  - **false:** AppBar()
    - title: Text() => Title
    - actions:
      - IconButton(+) => **Function** startAddNewTransaction(context)

### pageBody

- SafeArea()
  - SingleChildScrollView()
    - Column()
      - isLandscapeMode => buildLandscapeContent(mediaQuery, appBar, txListWidget)
      - isPortraitMode => buildPortraitContent(mediaQuery, appBar, txListWidget)

### txListWidget

- Container()
  - TransactionList(transactions, **Function** deleteTransactions(id))

### buildPortraitContent(mediaQuery, appBar, txListWidget)

- Container()
  - Chart(**List** recentTransaction)
- txListWidget

### buildLandscapeContent(mediaQuery, appBar, txListWidget)

- Row()
  - Text() => "Show Chart"

- Switch(**bool** showChart)
- showChart
  - **true**: Container()
    - Chart(**List** recentTransaction)
  - **false**: txListWidget

## Functions

### startAddNewTransaction(context)

- showModalBottomSheet()
  - GestureDetector()
    - NewTransaction(**Function** addNewTransaction(newTransaction))

### addNewTransaction(newTransaction)

- userTransactions.add(newTransaction)

### deleteTransactions(id)

- userTransactions.removeWhere(id)

### submitData()

- addNewTransaction(newTransaction)
- popScreen()

### presentDatePicker()

- showDatePicker()