



ICT Department

ធ្វើ Multiple Pages ជាមួយនឹង BottomNavigationBar

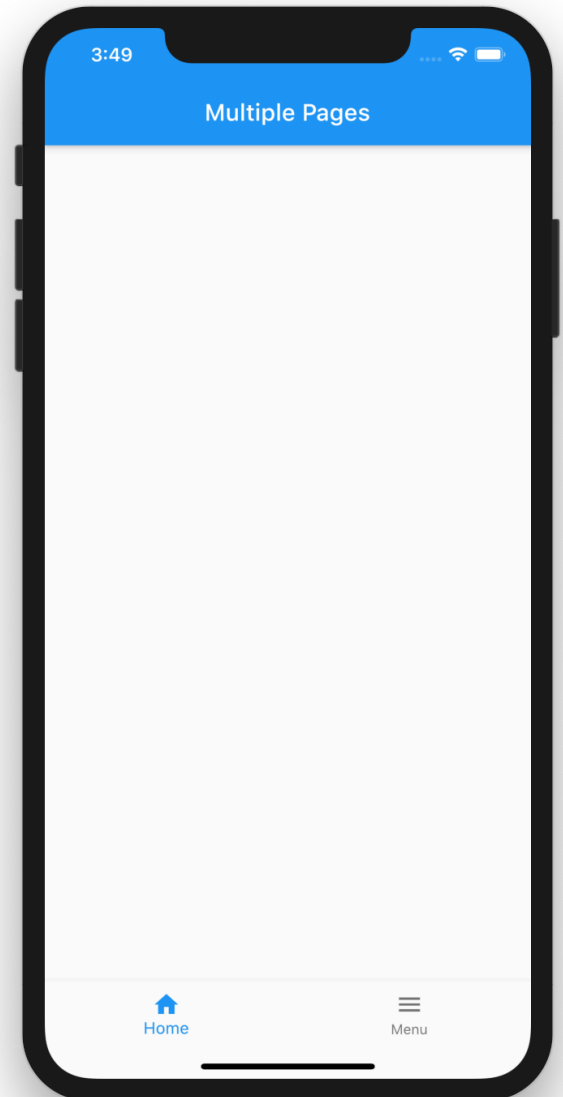
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- BottomNavigationBar គឺជា Widget កូនរបស់ Scaffold ដែលវាប្រើសំរាប់ដាក់ menu ជាទំរង់ icon នៅផ្នែកខាងក្រោយនៃ App។
- ពេលប្រើវា គឺវាទាមទារអោយមាន Option សំខាន់ៗខាងក្រោម៖
 1. items: ដែលមានប្រភេទជា List នៃ BottomNavigationBarItem
 2. ត្រូវមានយ៉ាងតិច២ items
 3. ហើយនៅក្នុង BottomNavigationBarItem គឺត្រូវមាន icon និង title

```
return BottomNavigationBar(  
  items: <BottomNavigationBarItem>[  
    BottomNavigationBarItem(  
      icon: Icon(Icons.home),  
      title: Text("Home"),  
    ),  
    BottomNavigationBarItem(  
      icon: Icon(Icons.menu),  
      title: Text("Menu"),  
    ),  
  ],  
);
```



តែងើម្បីអាចអោយចុចលើ menu និងយៗបាន យើងត្រូវ
បន្ថែម currentIndex និង onTap:

```
int _cIndex = 0;

get _buildBottom {
  return BottomNavigationBar(
    onTap: (index){
      setState(() {
        _cIndex = index;
      });
    },
    currentIndex: _cIndex,
    items: <BottomNavigationBarItem>[
      BottomNavigationBarItem(
        icon: Icon(Icons.home),
        title: Text("Home"),
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.menu),
        title: Text("Menu"),
      ),
    ],
  );
}
```



1. ដើម្បីអោយយើងអាចចុចបញ្ជា menu អោយផ្លាស់ប្តូរ Screen គឺយើងត្រូវបន្ថែម PageView មួយទៀតនៅក្នុង body
2. តែយើងត្រូវបង្កើត Screen និងមួយៗនៅក្នុង class ផ្សេងៗគ្នា ព្រោះវាជាផ្ទាំងការងារផ្សេងៗគ្នា
3. បន្ទាប់មកយើងទាញយក Screen ទាំងនោះមកដាក់ក្នុង List មួយ ដើម្បីយកទៅដាក់ចូលធ្វើការទិន្នន័យរបស់ PageView។
4. ហើយដើម្បីអោយ Screen ចាំទីតាំង Scroll ពេលចេញហើយចូលវិញ គឺនៅក្នុង class Screen និងមួយៗ យើងដាក់បន្ថែម Mixin មួយឈ្មោះថា AutomaticKeepAliveClientMixin ព្រមទាំង override getter wantKeepAlive ដាក់អោយស្មើ true។

■ Full Code:

```
1  import 'package:flutter/material.dart';
2
3  class MyBottomNavigationBarExample extends StatefulWidget {
4    @override
5    _MyBottomNavigationBarExampleState createState() =>
6      _MyBottomNavigationBarExampleState();
7  }
8
9  class _MyBottomNavigationBarExampleState
10     extends State<MyBottomNavigationBarExample> {
11    List<Widget> _pageList;
12
13    HomeScreen _homeScreen = HomeScreen();
14    ProfileScreen _profileScreen = ProfileScreen();
15    MenuScreen _menuScreen = MenuScreen();
16
17    @override
18    void initState() {
19      super.initState();
20
21      _pageList = [_homeScreen, _profileScreen, _menuScreen];
22    }
23  }
```

```
24  @override
25  Widget build(BuildContext context) {
26    return Scaffold(
27      appBar: AppBar(
28        title: Text("Multiple Pages"),
29      ),
30      body: _buildBody,
31      bottomNavigationBar: _buildBottomNavigationBar,
32    );
33  }
34
35  PageController _scroller = PageController();
36
37  get _buildBody {
38    return Container(
39      alignment: Alignment.center,
40      child: PageView(
41        controller: _scroller,
42        physics: NeverScrollableScrollPhysics(),
43        children: _pageList,
44        onPageChanged: (index) {
45          setState(() {
46            _currentIndex = index;
47          });
48        },
49      ),
50    );
51  }
52
```

```

53  int _currentIndex = 0;
54
55  get _buildBottomNavigationBar {
56    return BottomNavigationBar(
57      selectedItemColor: Colors.pink,
58      unselectedItemColor: Colors.indigo,
59      currentIndex: _currentIndex,
60      onTap: (index) {
61        setState(() {
62          _scroller.animateToPage(index,
63            duration: Duration(milliseconds: 300), curve: Curves.easeOut);
64        });
65      },
66      items: <BottomNavigationBarItem>[
67        BottomNavigationBarItem(
68          icon: Icon(Icons.home),
69          title: Text("Home"),
70        ),
71        BottomNavigationBarItem(
72          icon: Icon(Icons.person),
73          title: Text("Profile"),
74        ),
75        BottomNavigationBarItem(
76          icon: Icon(Icons.menu),
77          title: Text("Menu"),
78        ),
79      ],
80    );
81  }
82

```

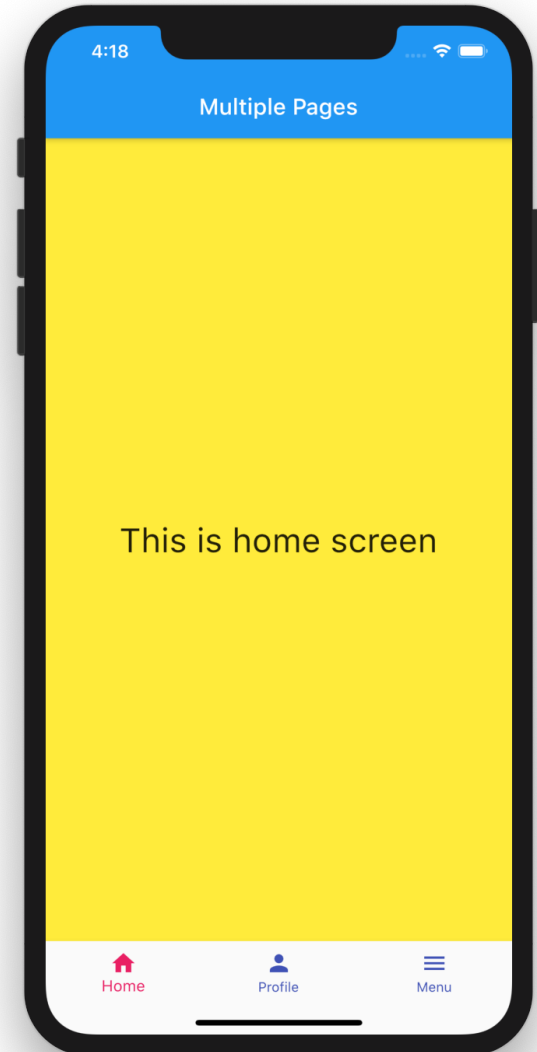


```

84 class HomeScreen extends StatefulWidget {
85   @override
86   _HomeScreenState createState() => _HomeScreenState();
87 }
88
89 class _HomeScreenState extends State<HomeScreen>
90   with AutomaticKeepAliveClientMixin {
91   @override
92   bool get wantKeepAlive => true;
93
94   @override
95   Widget build(BuildContext context) {
96     Scaffold(
97       body: Container(
98         alignment: Alignment.center,
99         color: Colors.yellow,
100         child: Text(
101           "This is home screen",
102           style: TextStyle(fontSize: 30),
103         ),
104       ),
105     );
106   }
107 }
108

```

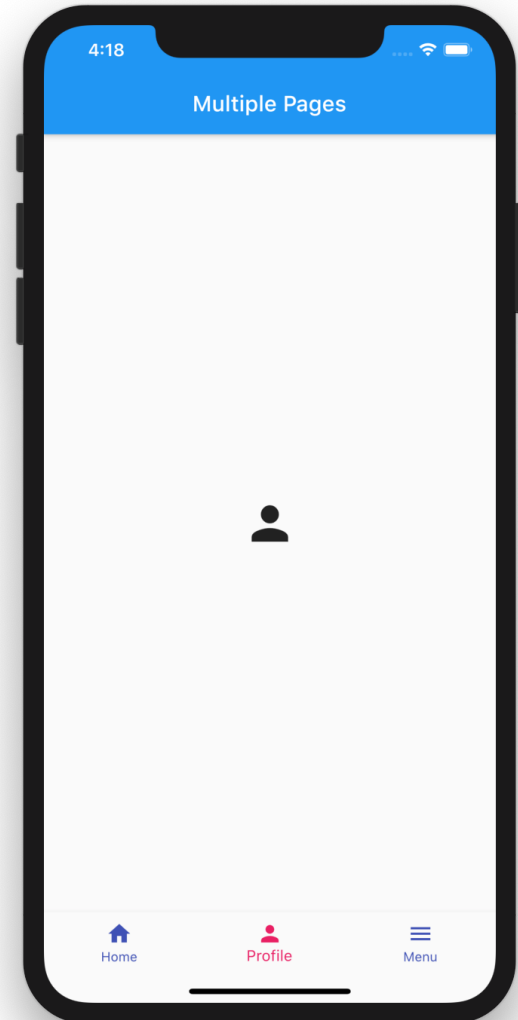
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```

109 class ProfileScreen extends StatefulWidget {
110   @override
111   _ProfileScreenState createState() => _ProfileScreenState();
112 }
113
114 class _ProfileScreenState extends State<ProfileScreen>
115   with AutomaticKeepAliveClientMixin {
116   @override
117   bool get wantKeepAlive => true;
118
119   @override
120   Widget build(BuildContext context) {
121     return Scaffold(
122       body: Center(
123         child: Icon(
124           Icons.person,
125           size: 50,
126         ),
127       ),
128     );
129   }
130 }

```

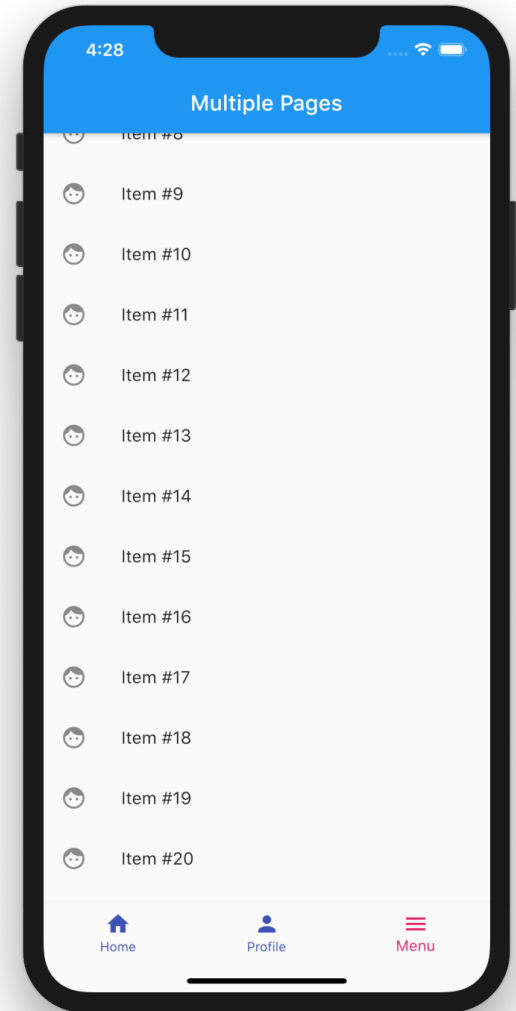


iPhone 11 Pro Max — 13.2.2

```

132 class MenuScreen extends StatefulWidget {
133   @override
134   _MenuScreenState createState() => _MenuScreenState();
135 }
136
137 class _MenuScreenState extends State<MenuScreen>
138   with AutomaticKeepAliveClientMixin {
139   @override
140   bool get wantKeepAlive => true;
141
142   @override
143   Widget build(BuildContext context) {
144     return Scaffold(
145       body: ListView.builder(
146         itemCount: 100,
147         itemBuilder: (context, index) {
148           return ListTile(
149             leading: Icon(Icons.face),
150             title: Text("Item #${index}"),
151           );
152         },
153       ));
154   }
155 }
156

```



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របៀបហៅចេញពី main page ទៅកាន់ method ពីក្នុង Screen

- នៅក្នុង Screen នីមួយៗ យើងត្រូវប្រកាស global variable មួយ ប្រភេទជា GlobalKey។ ហើយនៅក្នុង Screen យើងត្រូវ assign តំលៃ global variable ទៅអោយ variable ពិសេសរបស់វាឈ្មោះថា key
- ចំណែកក្នុង main page វិញ គឺយើងអាចហៅ method ណាមួយនៅក្នុង screen មកប្រើបាន តាមរយៈ global variable នោះ
- បញ្ជាក់ method ក្នុង Screen ត្រូវតែប្រកាសជា public។

■ ដាក់ key ក្នុង Screen:

```

140 var menuScreenKey = GlobalKey<_MenuScreenState>();
141
142 class MenuScreen extends StatefulWidget {
143
144   final Key key = menuScreenKey;
145
146   @override
147   _MenuScreenState createState() => _MenuScreenState();
148 }
149
150 class _MenuScreenState extends State<MenuScreen>
151   with AutomaticKeepAliveClientMixin {
152   @override
153   bool get wantKeepAlive => true;
154
155   ScrollController _scroller = ScrollController();
156
157   gotoTop() {
158     _scroller.animateTo(
159       0,
160       duration: Duration(milliseconds: 300),
161       curve: Curves.easeOut,
162     );
163   }

```

```
165 @override
166 Widget build(BuildContext context) {
167   return Scaffold(
168     body: ListView.builder(
169       controller: _scroller,
170       itemCount: 100,
171       itemBuilder: (context, index) {
172         return ListTile(
173           leading: Icon(Icons.face),
174           title: Text("Item #$index"),
175         );
176       },
177     ));
178 }
179 }
180
```

- នៅក្នុង main page យើងអាចប្រើ method របស់ Screen បាន៖

```

9  class _MyBottomNavigationBarExampleState
10     extends State<MyBottomNavigationBarExample> {
11         List<Widget> _pageList;
12
13         HomeScreen _homeScreen = HomeScreen();
14         ProfileScreen _profileScreen = ProfileScreen();
15         MenuScreen _menuScreen = MenuScreen();
16
17         @override
18         void initState() {
19             super.initState();
20
21             _pageList = [_homeScreen, _profileScreen, _menuScreen];
22         }
23
24         @override
25         Widget build(BuildContext context) {
26             return Scaffold(
27                 appBar: AppBar(
28                     title: Text("Multiple Pages"),
29                     actions: <Widget>[
30                         IconButton(
31                             icon: Icon(Icons.keyboard_arrow_up),
32                             onPressed: () {
33                                 menuScreenKey.currentState.goToTop();
34                             },
35                         ),
36                     ],
37                 ),

```

