MVVM pdf

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1 Introduction

1.1 What is MVVM design model?

It is Model-View-viewModel design model. Here is a blog link that author explains the MVVM model with one example.

2 The Application Introduction

2.1 Functions

This application be programmed by C# and it allows users to edit events and view them.

2.2 Architecture

Data:simulate database to control data.

Model:target objects be designed as bean class.

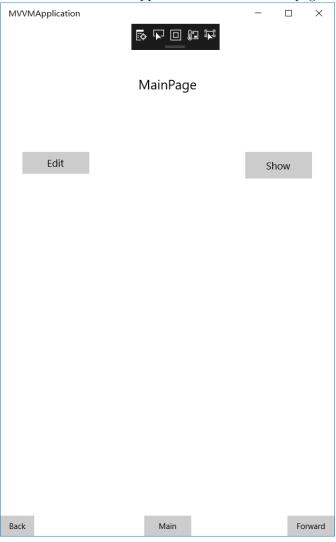
View:All visible control pages.

ViewModel:Encapsulate code that application will need.

2.3 Excepted Result

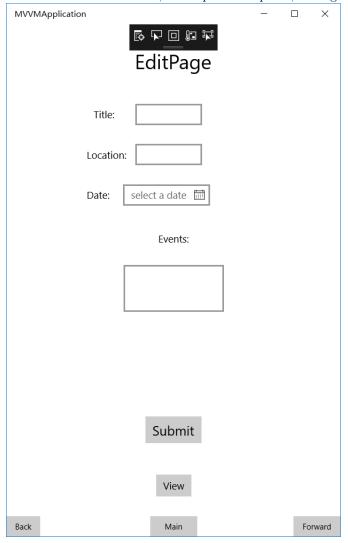
2.3.1 Initial Page

All of buttons can be tapped and turn over a new page with their command.

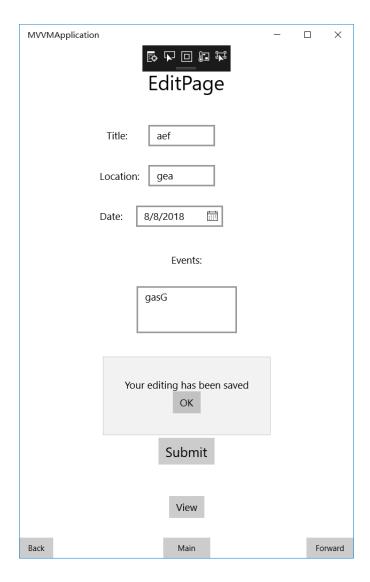


2.3.2 Edit Page

There are several textboxs, a datapicker UI panel, a image control and buttons.

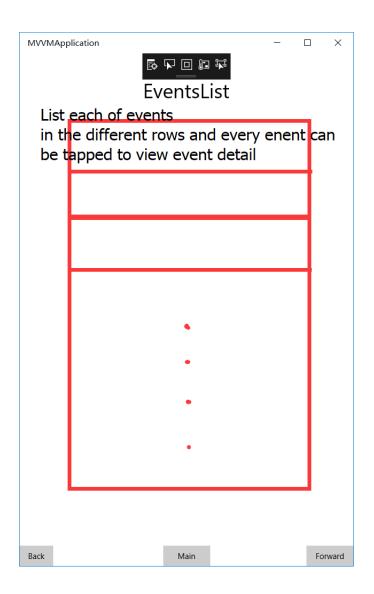


All information will be saved after click "Submit" button.



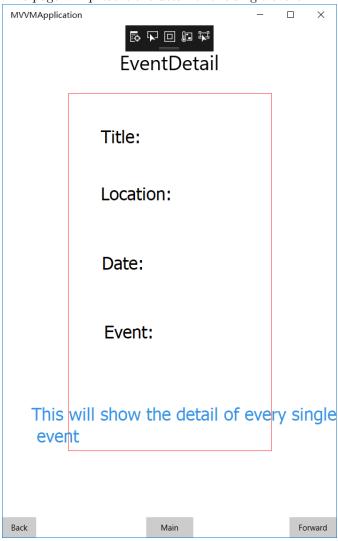
2.3.3 Show Page

This page will display all of events that be saved in the simulated database and each single item can open a new page that display details.



2.3.4 Detail Page

This page will present the detail of one single event.



3 Conclusion

The excepted result is this application should be work successful with MVVM design model but there are some issues that make application can not pass values into items and load them that be saved in the simulated database when open the show page.

```
MVVMApplication (Debugging) - Microsoft Visual Studio
     <u>E</u>dit <u>V</u>iew <u>P</u>roject <u>B</u>uild <u>D</u>ebug Tea<u>m</u> <u>F</u>ormat Layout <u>T</u>ools Te<u>s</u>t A<u>n</u>alyze <u>W</u>indow
 ▶ <u>C</u>ontinue - | 5 = 1 | ■ 5 | 6 | → * ? ↑ | 2 = 1 | ■ 2 | ■
 ▼ ▼ ズ Stack Frame: MVVMApplication.View
                      FakeService.cs @
                                          Organization.cs @

☑ MVVMApplication

                                                       ▼ 1 MVVMApplication.ViewModels.OrganizationViewModel
                                                                                                            ▼ ② OrganizationViewMod
        11
              namespace MVVMApplication.ViewModels
Tree
        12
               {
                    public class OrganizationViewModel : NotificationBase
        13
        14
                       Organization organization;
        15
        17
        18
                       public OrganizationViewModel()
        19
        20
                           organization = new Organization();
        21
        22
                            SelectedIndex = -1;
                            // Load the database
        23
                           foreach (var item in organization.Item)
        24
        25
        26
                               var np = new ItemViewModel(item);
                                                                     Exception User-Unhandled
        27
                               np.PropertyChanged += Item_OnNotifyP
                                                                     System.NullReferenceException: 'Object reference not set to an
        28
                                _Item.Add(np);
                                                                     instance of an object.'
        29
        30
        31
        32
                                                                     View Details | Copy Details
        33
                       ObservableCollection<ItemViewModel> _Item =
                                                                     ▶ Exception Settings
        34
        35
                       public ObservableCollection<ItemViewModel> Item
        36
        37
                           get { return _Item; }
        38
                            set { SetProperty(ref _Item, value); }
        39
        40
        41
        42
                       public String Name
        43
        44
                           get { return organization.Name; }
        45
        46
```

It obviously has some problems between edit and show pages when they binding data and exchanging them.