

# Messaging Center

By: Mosh Hamedani

## Exercise

Refactor ContactBook app and replace standard C# events with MessagingCenter.

Read the following notes before you get started.

## Notes

Look at **AddContact** method in **ContactsPageViewModel**:

```
// First we create the view model
var viewModel = new ContactDetailViewModel(new
    ContactViewModel(), _contactStore, _pageService);

// Next we subscribe to ContactAdded event
viewModel.ContactAdded += (source, contact) =>
{ ... };

// And finally we navigate to ContactDetailPage
await _pageService.PushAsync(new ContactDetailPage(viewModel));
```

Since **ContactAdded** event is a member of the view model, here we need to explicitly create the view model in order to subscribe to **ContactAdded** event. Creating this view model is a little ugly and it requires passing 3 arguments: a new **ContactViewModel**, and a reference to **\_contactStore** and **\_pageService**.

If we were to use this **ContactDetailPage** in a few different places in our application, we had to create this view model in a few different places. What if in the future the signature of the constructor of this view model changes? We may add a new parameter, or remove

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an existing one. With this implementation, we have to update several places where we have instantiated this view model.

It would be cleaner if **ContactDetailPage** itself was responsible for creating this view model. Our **AddContact** method would look like this:

```
await _pageService.PushAsync(new ContactDetailPage());
```

With this implementation, we no longer have a reference to an instance of the publisher (**ContactDetailViewModel**). And that's when we use **MessagingCenter**!

**Remember:** You should subscribe to events sent to **MessagingCenter** once. So, the most natural place to do this is in the constructor of **ContactsPageViewModel**, not **AddContact** method, because this method can be called several times.

**Note:** In the solution ZIP file, I've only included the modified files.