

Hello!

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➤ Collection View

- Basics of CV control
- Benefits of CV over list view
- New Updates
- Use cases of CV
- UI plugins to give Material UI to CV
- Caching techniques
- Utilizing template selector concept
- Theming
- Performance Tips

➤ Visual State Manger

- Concept of VSM
- Use case scenario of VSM
- Latest XF update for VSM

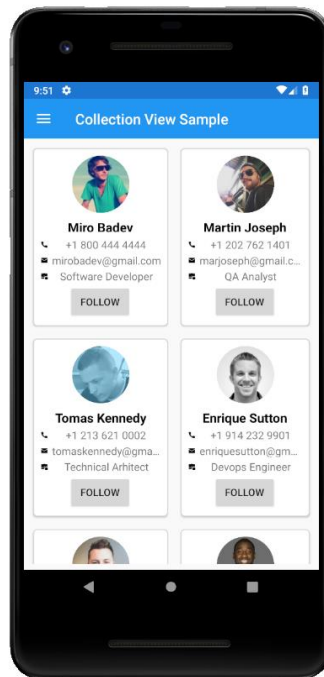
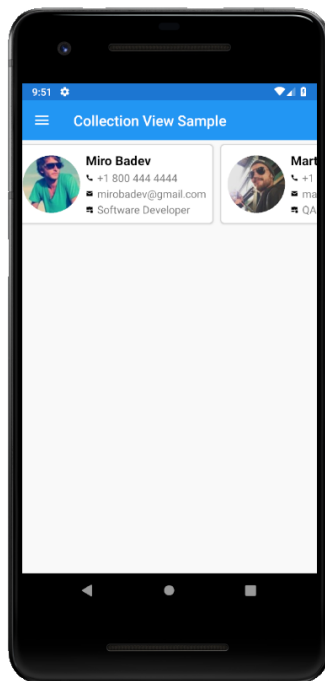
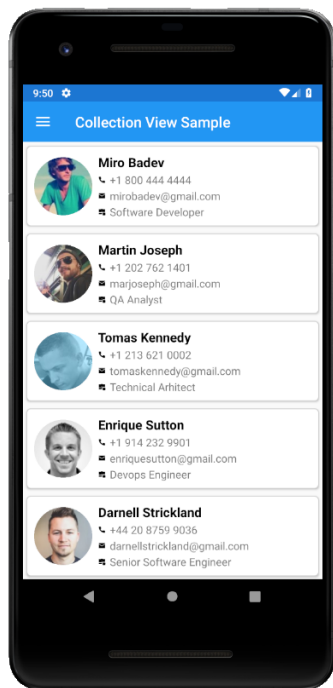


Topics going to be
covered in this
session

“

Collection view is a view for presenting lists of data using different layout specifications. It aims to provide a more flexible, and performant alternative to list view.







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Collection
View

Benefits of CV over LV



Features	Collection View	List View
Orientation Horizontal & Vertical	Both	Vertical
Multiple Selection		
View Cell concept		
Separator		

CV: Xamarin.Forms 4.3



➤ **Empty View**

- Layout to show when there is not item source for CV

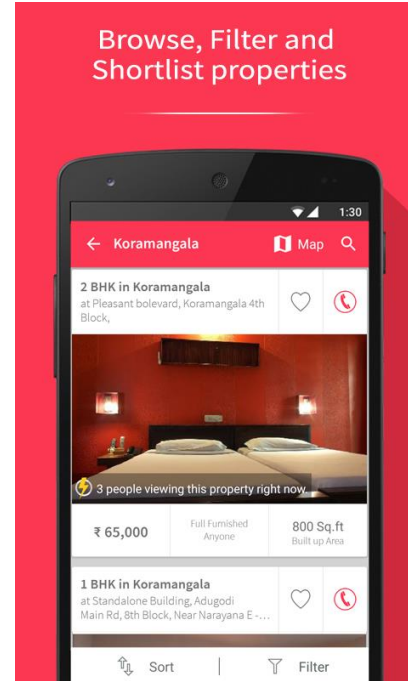
➤ **New Items layout**

- `LinearLayout`: `Orientation(Horizontal, Vertical)`, Item spacing, Item snapping
- `GridItems` layout

➤ **Lazy loading**

- `RemainingItemsThreshold`
- `RemainingItemsThresholdReachedCommand`
- `RemainingItemsThresholdReachedCommandParameter`

Use case Scenario



<https://github.com/rdelrosario/ChatUIXForms>

CV: Performance Tips



- Creating ObservableCollection Thread Safe

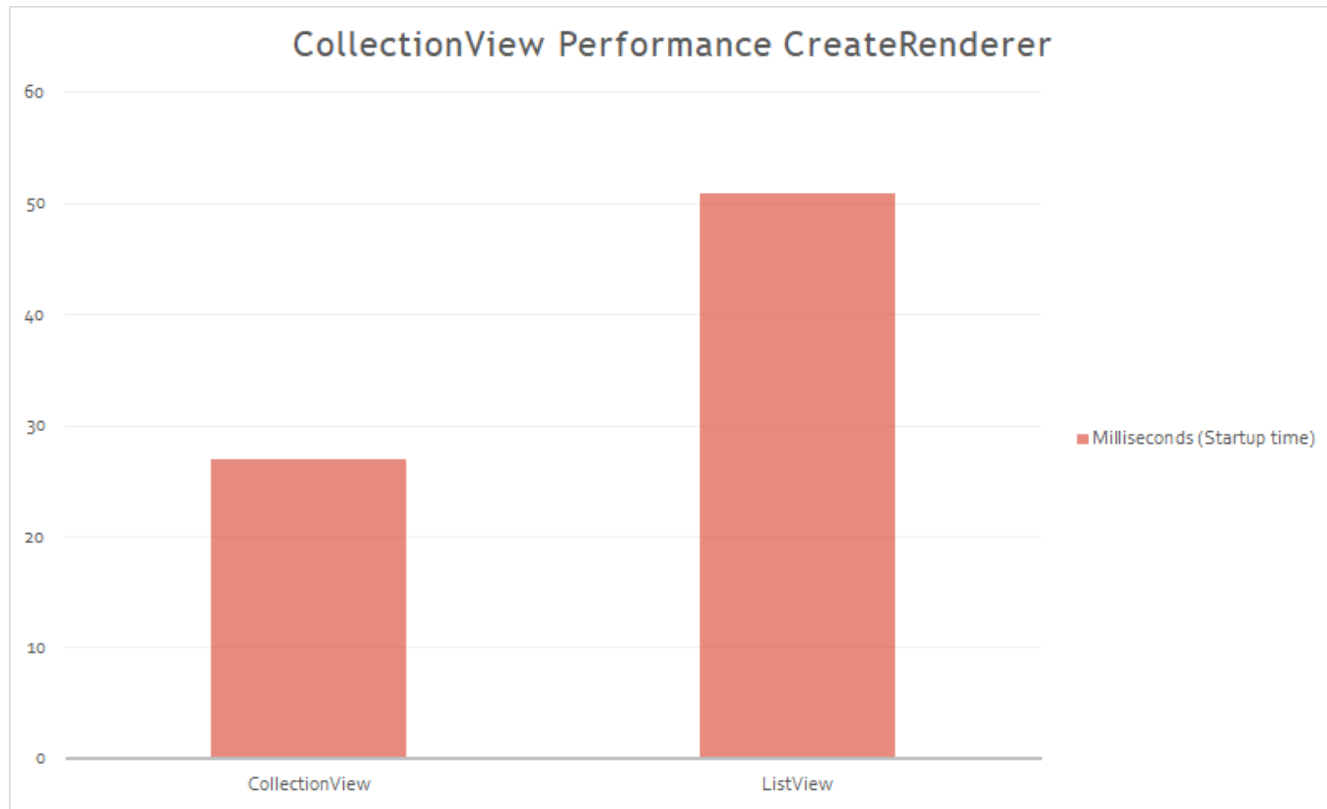
Exception



```
System.ArgumentOutOfRangeException: Specified  
argument was out of the range of valid values.  
Parameter name: index
```

```
ListProxy.get_Item (System.Int32 index)  
D:\a\1\s\Xamarin.Forms.Core\Proxy.cs:129  
IList.get_Item (System.Int32 index)
```

CV: Performance Chart



“

The Visual State Manager (VSM) provides a structured way to make visual changes to the control from code based on any specific condition.

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The Xamarin. Forms Visual State Manager defines one visual state group named "Common States" with the following visual states:

- "Normal"
- "Disabled"
- "Focused"
- "Selected"

This visual state group is supported for all classes that derive from [VisualElement](#), which is the base class for View and Page.



Visual
State
Manager

VSM: Xamarin.Forms 4.5



➤ **TargetName**

- Adding Target to setters provides flexibility to change properties on any control within the visual tree; not just the control the VisualStateManager is attached to.

Use case Scenario

➤ Adaptive Layout





THANKS!

Any questions?