**Othello Design Notes**

|  |  |
| --- | --- |
| CellView content define in controlTemplate in default style (so can be changed) | / |
| BoardView to hold collections of CellViews and DiscViews. |  |
| BV to store links between VMs and Vs. |  |
| BoardView controls state of Disc |  |
| BoardView to have an IsBusy prop to notify VM when it's animating. |  |
| BoardView to maintain assignment of discs to cells |  |
| How to communicate cell/disc state from VM to View?  PlaySet property |  |
|  |  |
| Move CellTappedCommand into OthelloBoardControl  Bind in BoardView to BVM |  |
| Change tapped command in OthelloBoardControl to an Action which invokes command. May need to change key of dict to be the view? |  |
|  |  |

Current state

Disc view is Disc2View. Its control template is defined in App.xaml

CellView still contains the disc view (Disc2View)

BoardView contains OthelloBoardControl, with bindings for CellItemsSource and CellTappedCommand.

OthelloBoardControl instantiates CellView directly for each DiscViewModel in CellItemsSource.

Next

Separate discs from cells:

Change CellView.xaml to CellView.cs and move template into App.xaml (like DiscView)

Should CellView have a Disc property?

BoardVM to define Discs and bind OthelloBoardControl.DiscItemsSource to it in BoardView.

Refactor Disc2View to DiscView.

Remove DiscView from inside CellView template.

OthelloBoardControl to instantiate DiscView for each item in DiscItemsSource.

Re-enable stacking of discs.

Define PlaySet so that BoardVM can inform OthelloBoardControl of moves.

PlaySet:

move disc x from stack to cell y - object MoveDisc [DiscViewModel]

move disc x from cell y to stack – object ToCell [CellViewModel]

list of cell/disc numbers to flip/change state – List<object> FlipDiscs [DiscViewModel]

**Alternate next (no item VMs)**

|  |  |
| --- | --- |
| OthelloBoardControl to use lists of CellModel and DiscModel via bindings. | / |
| CellModel to have IsPlaying and IsPending – set in engine. | / |
| **Need to bind PlaySet** |  |
| DiscModel to have IsPlaying |  |
| Engine to manage Discs and assign discs to cells. |  |
| BoardVM to instantiate discs as DiscModel and cells as CellModel |  |
| Change CellView.xaml to CellView.cs and move template into App.xaml (like DiscView) | / |
| Refactor Disc2View to DiscView. |  |
| Remove DiscView from inside CellView template. |  |
| OthelloBoardControl to instantiate DiscView for each item |  |
| Re-enable stacking of discs. |  |
| Define PlaySet so that BoardVM can inform OthelloBoardControl of moves. |  |
| Next stage: refactor to re-introduce separation using Item VMs. Maybe bind CellView and DiscView properties (e.g. State, IsPlaying etc) via a default Style. |  |

PlaySet:

Turn

Disc

Cell

list of cells to flip/change state

New design

|  |  |
| --- | --- |
| Don’t like new Refresh mechanism.  In OBC trigger on these changes instead:  Disc to cell => cell.Disc prop  Disc to stack => cell.Disc prop  Flip disc => disc.DiscColor prop  Other props should just bind through  Remove NotifyRefresh() ? |  |
|  |  |
|  |  |
|  |  |