**MVVM Design Specs 10/18/17 Model Logic**

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| **DocumentModel** |
| -fileName : string  -pages : ObservableCollection<Page> |
| <<constructor>>Document()  <<property>> +fileName : string  +Save : bool  +SaveAs(file : string) : bool  +Load(file : string) : bool  <<event>> PropertyChangedHandler()  -RaisePropertyChanged( property: string ) |

* Save(): saves to the existing fileName and returns true, returns false if fileName is empty
* SaveAs(fileName): sets filename to new fileName provided, then saves
* Load(fileName): loads document and fills text from a txt file

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| **PageModel** |
| -text : ObservableCollection<Text>  -cursor : int |
| <<constructor>>Page()  <<property>>+text : Text  <<property>>+cursor : int  +InputText()  +DelText()  +PassText(type : bool)  <<event>> PropertyChangedHandler()  -RaisePropertyChanged(property : string) |

* InputText(): takes user text input and inserts at the cursor position, advances cursor 1 position
* DelText(): removes text from cursor position, reduced cursor 1 position
* PassText(type): accessor for page’s text, type = true allows writing, type = false allows reading
  + Used in loading and saving of files

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| **TextModel** |
| -c : char  -bold : bool  -italics : bool  -underline : bool |
| <<Constructor>>Text( c : char)  <<Constructor>>Text( c : char, bold : bool, italics : bool, underline : bool )  <<property>> +ch : char  <<property>> +bold : bool  <<property>> +italics : bool  <<property>> +underline : bool  <<event>> PropertyChangedHandler()  -RaisePropertyChanged(property : string) |