

DataViewerControl

- dataViewerSplitContainer: SplitContainer

- dataViewAndFilterSplitContainer: SplitContainer

- dataSetDataGridView: DataGridView

- dataShowingLabel: Label

- pageNumberLabel: Label

- previousPageButton: Button

- nextPageButton: Button

- stringFilterTextBox: TextBox

- endDatePicker: DateTimePicker

- toTextBox: TextBox

- fromTextBox: TextBox

- rangeSeparatorLabel: Label

- rangeLabel: Label

- filterColumnSelector: ComboBox

- startDatePicker: DateTimePicker

- filteringCriteriaLabel: Label

- filterButton: Button

- stringFilterLabel: Label

- separatorDateRangeLabel: Label

- dateRangeLabel: Label

- label1: Label

- sortCriteriaLabel: Label

- sortCriteriaSelector: ComboBox

- sortButton: Button

- booleanComboBox: ComboBox

- resetTableButton: Button

- sortOrderSelector: ComboBox

+ dataViewerControl()

+ Initialize(DataSetManager manager): void

- nextPageButton_Click(object sender, EventArgs e): void

- previousPageButton_Click(object sender, EventArgs e): void

- UpdatePageInfoLabelsAndButtons(int page): void

- filterButton_Click(object sender, EventArgs e): void

- resetTableButton_Click(object sender, EventArgs e): void

- filterColumnSelector_SelectedValueChanged(object sender, EventArgs e): void

- ResetFilteringFields(): void

- UpdateEnable(bool isNumber, bool isString, bool isDate, bool isBool): void

- sortButton_Click(object sender, EventArgs e): void

MainWindow

- mainWindowTabs: TabControl

- dataViewTab:TabPage

- graphicsTab:TabPage

- dataViewerControl: DataViewerControl

- chartsControl1: ChartsControl

+ MainWindow()

- mainWindowTabs_DrawItem(Object sender, System.Windows.Forms.DrawItemEventArgs e): void

ChartsControl

- chartZipcodeXAverage: Chart

- chartZipcodeXPercentage: Chart

- chartYearXQuantity: Chart

- label1: Label

- chartZipcodeXAverageSqrFt; Chart

- chartZipcodeXAverageSqrFtPrice: Chart

+ ChartsControl()

+ Initialize(GraphicsProcessor manager): void

+ UpdateCharts(): void

- UpdateChartZipcodeXAverage(): void

- UpdateChartZipcodeXPercentage(): void

- UpdateChartYearXQuantity(): void

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- manager

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- graphicsManager

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- manager

GraphicsProcessor

- filteredData: DataTable

- pricesByZip: HashTable

- quantityPerYear: HashTable

+ GraphicsProcessor(DataSetManager data)

+ UpdateFilteredData(): void

+ UpdateQuantityPerYear(): void

- AddYearToHashtable(int yr_built): void

+ UpdatePricesByZip(): void

- AddPriceToHashtable(int zipcode, double price): void

+ YearXQuantity(): List<int[]>

+ ZipcodeXAveragePrice(): List<double[]>

+ ZipcodeXPercentage(): List<double[]>

+ ZipcodeXAverageSqrFt(): List<double[]>

+ ZipcodeXAverageOneSqrFt(): List<double[]>

DataSetManager

- data: DataTable

- currentPageData: DataTable

- datCount: int

- currentPage: int

- maxPage: int

- lowerLimit: int

- operLimit: int

+ DataCountPerPage: int = 250

+ Data(): DataTable

+ CurrentPageData(): DataTable

+ DataCount(): int

+ CurrentPage(): int

+ MaxPage(): int

+ LowerLimit(): int

+ OperLimit(): int

+ DataSetManager()

- loadData(): void

- RefreshData(): void

+ NextPage(): int

+ PreviousPage(): int

- UpdatePageLimits(): void

+ FilterStringData(String columnName, String subString): void

+ FilterIntegerData(String columnName, int from, int to): void

+ FilterDoubleData(String columnName, double from, double to): void

+ FilterBooleanData(String columnName, bool value): void

+ FilterDateData(String columnName, DateTime from, DateTime to): void

+ SortData(String columnName, bool ascendant): void

+ ClearSortFilters(): void

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- data