# Gui

## Program
# Main() : void

`<<use>>`

## `<<MetroForm>>` Window
+ Window()
+ ImportButtonClick(object, EventArgs) : void
+ OnMouseHoverImportButton(object, EventArgs) : void
+ OnMouseLeaveImportButton(object, EventArgs) : void

- tableTab    1
- chartTab    1
- infoTab     1

## `<<UserControl>>` TableTab
+ TableTab()
+ InitializeTableTab(Manager) : void
- InitializeAttributeComboBox() : void
- GenerateTable() : void
- AttributeComboBoxSelectedIndexChanged(object, EventArgs) : void
- OnMouseHoverFilterbutton(object, EventArgs) : void
- OnMouseLeaveFilterButton(object, EventArgs) : void
- FilterButton_Click(object, EventArgs) : void

## `<<UserControl>>` ChartTab
+ ChartTab()
+ InitializeChartTab(Manager) : void
- GenerateTypeChart() : void
- GenerateOdorChart() : void
- GenerateRingNumberChart() : void
- GenerateBruisesChart() : void
- GenerateCapColorChart() : void

## `<<UserControl>>` InfoTab
+ INFO_PATH : string = "../../Data/info.html"

+ InfoTab()
+ GenerateInfo() : void

# Model

## Manager
+ Manager(string)
+ GenerateEmptyTable() : DataTable
+ GenerateDataTable() : DataTable
+ GenerateFilteredDataTable(string, string) : DataTable
+ GenerateTypeChart() : DataTable
+ GenerateOdorChart() : DataTable
+ GenerateRingNumberChart() : DataTable
+ GenerateBruisesChart() : DataTable
+ GenerateCapColorChart() : DataTable
+ Load(string) : void

- manager    0..1

- dataSet    0..*

## Mushroom
+ CAP_SHAPE : char[] = {'b', 'c', 'x', 'f', 'k', 's'}
+ CAP_SURFACE: char[] = {'f', 'g', 'y', 's'}
+ CAP_COLOR: char[] = {'n', 'b', 'c', 'g', 'r', 'p', 'u', 'e', 'w', 'y' }
+ BRUISES[]: char[] = {'t', 'f'}
+ ODOR[]: char[] = {'a', 'l', 'c', 'y', 'f', 'm', 'n', 'p', 's'}
+ GILL_ATTACHMENT: char[] = {'a', 'd', 'f', 'n'}
+ GILL_SPACING: char[] = {'c', 'w', 'd'}
+ GILL_SIZE: char[] = {'b', 'n'}
+ GILL_COLOR: char[] = {'k', 'n', 'b', 'h', 'g', 'r', 'o', 'p', 'u', 'e', 'w', 'y'}
+ STALK_SHAPE: char[] = {'e', 't'}
+ STALK_ROOT: char[] = {'b', 'c', 'u', 'e', 'z', 'r', '?'}
+ STALK_SURFACE_ABOVE_RING: char[] = {'f', 'y', 'k', 's'}
+ STALK_SURFACE_BELOW_RING: char[] = {'f' , 'y', 'k', 's'}
+ STALK_COLOR_ABOVE_RING: char[] = {'n', 'b', 'c', 'g', 'o', 'p', 'e', 'w', 'y'}
+ STALK_COLOR_BELOW_RING: char[] = {'n', 'b', 'c', 'g', 'o', 'p', 'e', 'w', 'y'}
+ VEIL_TYPE: char[] = {'p', 'u'}
+ VEIL_COLOR: char[] = {'n', 'o', 'w' , 'y'}
+ RING_NUMBER: char[] = {'n', 'o', 't'}
+ RING_TYPE: char[] = {'c', 'e', 'f', 'l', 'n', 'p', 's', 'z'}
+ SPORE_PRINT_COLOR = {'k', 'n', 'b', 'h', 'r', 'o', 'u', 'w', 'y'}
+ POPULATION: char[] = {'a', 'c', 'n', 's', 'v', 'y'}
+ HABITAT: char[] = {'g', 'l', 'm', 'p', 'u', 'w', 'd'}

- type: MushroomType
- capShape:char
- capSurface:char
- capColor:char
- bruises:char
- odor:char
- gillAttachment:char
- gillSpacing:char
- gillSize: char
- gillColor: char
- stalkShape: char
- stalkRoot: char
- stalkSurfaceAboveRing: char
- stalkSurfaceBelowRing: char
- stalkColorAboveRing: char
- stalkColorBelowRing: char
- veilType: char
- veilColor: char
- ringNumber: char
- ringType: char
- sporePrintColor: char
- population: char
- habitat: char
`<<Property>>` +Type: MushroomType
`<<Property>>` +CapShape: char
`<<Property>>` +CapSurface: char
`<<Property>>` +CapColor: char
`<<Property>>` +Bruises: char
`<<Property>>` +Odor: char
`<<Property>>` +GillAttachment:char
`<<Property>>` +GillSpacing:char
`<<Property>>` +GillSize:char
`<<Property>>` +GillColor: char
`<<Property>>` +StalkShape: char
`<<Property>>` +StalkRoot: char
`<<Property>>` +StalkSurfaceAboveRing: char
`<<Property>>` +StalkSurfaceBelowRing: char
`<<Property>>` +StalkColorAboveRing: char
`<<Property>>` +StalkColorBelowRing: char
`<<Property>>` +VeilType: char
`<<Property>>` +VeilColor: char
`<<Property>>` +RingNumber: char
`<<Property>>` +RingType: char
`<<Property>>` +SporePrintColor: char
`<<Property>>` +Population: char
`<<Property>>` +Habitat: char

+Mushroom(MushroomType,char,char,char,char,char,char,char,char,char,char, char,char,char,char,char,char,char,char,char,char,char,char)