+ initialize()   
+ login()  
+ insert()  
+ find()  
+ findAll()

**Database**

**Splash**

‹‹constructor›› \_\_init\_\_(self)  
+ header(self)  
+ image\_presentation(self)  
+ login(self)  
+ execute\_login(self)  
+ footer(self)

‹‹constructor›› \_\_init\_\_(self, parent)  
+ load\_rpm\_default\_values()  
+ compute\_shear()  
+ insert\_into\_rpm\_data\_view()  
+ create\_menu()  
+ logout()  
+ create\_tabs()  
+ Drill\_ParameterInput()  
+ drill\_optimizer()  
+ button\_visualizer()  
+ button\_predict\_best\_fit()  
+ execute\_visualizer()  
+ powerlaw()  
+ powerlaw\_computation()  
+ bingham()  
+ bingham\_model\_computation()  
+ herschley\_bulkley()  
+ herschley\_bulkley\_computation()  
+ RPM\_ParameterInput()  
+ delete\_selected\_row()|  
+ clearTreeData()  
+ saveData()  
+ exportData()  
+ RPM\_displayDataView()  
+ rheological\_parameters\_calculations()   
+ compute\_bingham\_plastic\_viscosity()   
+ compute\_inside\_drill\_pipe\_plaw\_flow\_behaviour()   
+ compute\_inside\_drill\_pipe\_plaw\_consistency\_index()   
+ compute\_annulus\_plaw\_flow\_behaviour  
+ compute\_annulus\_plaw\_consistency\_index  
+ compute\_inside\_drill\_pipe\_herschel\_bulkley\_true\_yield()  
+ compute\_inside\_drill\_pipe\_herschel\_bulkley\_flow\_behaviour()  
+ compute\_annulus\_herschel\_bulkley\_flow\_behaviour()  
+ compute\_annulus\_herschel\_bulkley\_consistency\_index()  
+ input\_params\_data()

**Drill**

+ rpm\_gobal [ ]  
+ readings\_gobal [ ]  
+ shear\_rate\_global [ ]  
+ shear\_stress\_global [ ]  
+ drilling\_fluid\_design\_rpm\_data\_global [ ]  
+ drilling\_fluid\_design\_reading\_global [ ]  
+ drilling\_fluid\_design\_bp [ ]  
+ drilling\_fluid\_design\_pl [ ]  
+ drilling\_fluid\_design\_hb [ ]  
+ counter : int

‹‹constructor›› \_\_init\_\_(self, tab1)  
+ uploadFile()  
+ browse\_file()  
+ loadData()  
+ insert\_drilling\_fluid\_design\_rheology\_data()  
+ drilling\_fluid\_design\_rheology()  
+ drilling\_fluid\_design\_models()  
+ drill\_fluid\_design\_best\_fit()  
+ drill\_fluid\_design\_compute\_bestfit()  
+ showBestFitGraph()  
+ drill\_fluid\_design\_visualization()

**Drill Fluid Design**

‹‹constructor›› \_\_init\_\_(self, tab3)  
+ SelectFile()  
+ loadFiles()  
+ loadButtons()  
+ reloadFiles()  
+ loadRecords()  
+ getFieldValues()  
+ clearRecordsTree()  
+ showRecords()

**Saved Data**

‹‹constructor›› \_\_init\_\_(self, tab5)  
+ LoadFiles

**Files**

‹‹constructor›› \_\_init\_\_(self, tab4)  
+ SelectFile()  
+ loadFiles()  
+ loadButtons()  
+ reloadFiles()  
+ loadRecords()  
+ getFieldValues()  
+ clearRecordsTree()  
+ showRecords()

**Users**