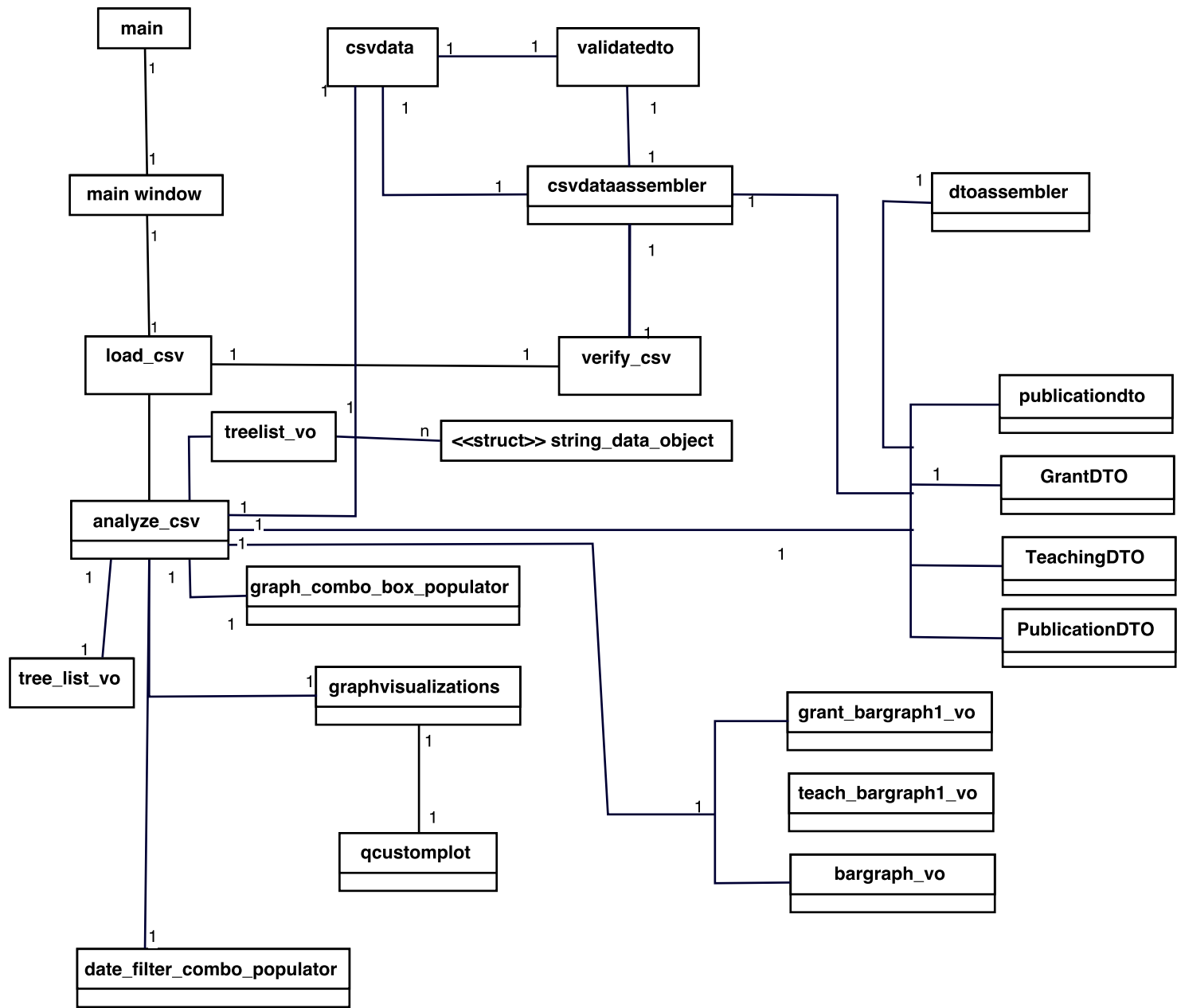
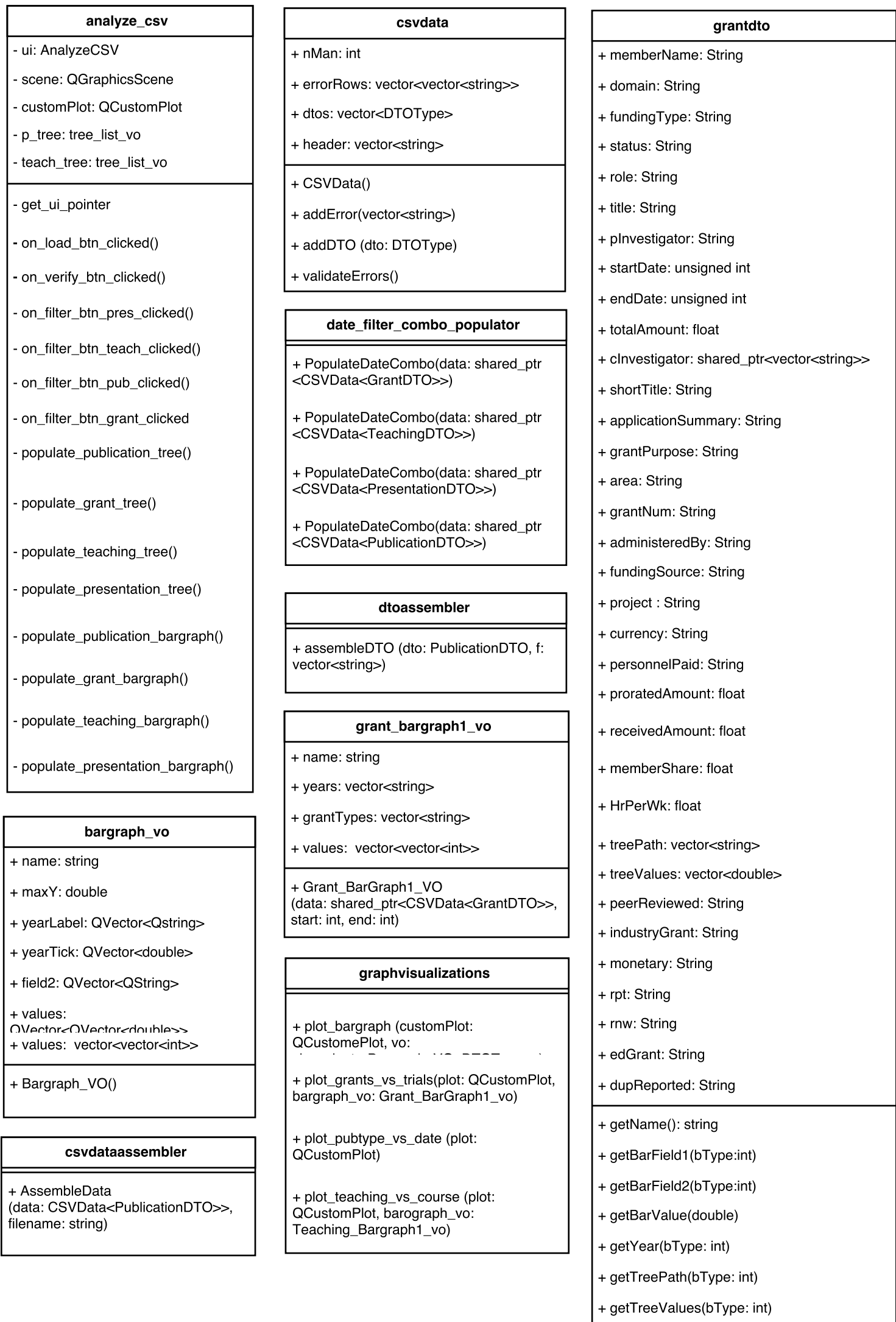


CLASS DIAGRAM





graph_combo_box_populator
+ PopulateGraphComboName(tdata: shared_ptr <CSVData<PublicationDTO>>)
+ PopulateGraphComboType(tdata: shared_ptr <CSVData<PublicationDTO>>)
+ PopulateGraphComboName(tdata: shared_ptr <CSVData<PresentationDTO>>)
+ PopulateGraphComboType(tdata: shared_ptr <CSVData<PresentationDTO>>)
+ PopulateGraphComboName(tdata: shared_ptr <CSVData<GrantDTO>>)
+ PopulateGraphComboFunding(tdata: shared_ptr <CSVData<GrantDTO>>)
+ PopulateGraphComboProgram(tdata: shared_ptr <CSVData<TeachingDTO>>)

load_csv
- ui: LoadCSV
- verify_csv_page: VerifyCSV
- analyze_csv_page: AnalyzeCSV
- filename: QString
- recentFilesList: QStringList
- recentFilesModel: QStringListModel
- csvType: int
- on_verify_btn_clicked()
- on_analyze_btn_clicked()
- on_publication_btn_clicked()
- on_grant_btn_clicked()
- on_presentation_btn_clicked()
- on_teaching_btn_clicked()
addRecentFile(file: QString)
+ LoadCSV(parent: QWidget)

main
+ main: int

main window
- ui: MainWindow
- load_cv_page: LoadCSV
+ MainWindow (parent: QWidget)
- on_open_program_clicked()

presentationDTO
+ name: String
+ domain: String
+ type: String
+ role: String
+ title: String
+ date: unsigned int
+ activityType: String
+ geoScope: String
+ host: String
+ country: String
+ province: String
+ city: String
+ attendeeNum: String
+ hours: String
+ teachScore : String
+ presentation: String
+ remarks: String
+ citation: String
+ personalRenumeration: String
+ authorship: shared_pt<vector<string>>
+ presentationDTO()
+ getName(): string
+ getBarField1(bType:int)
+ getBarField2(bType:int)
+ getBarValue(bType:int)

teach_bargraph1_vo
+ name: string
+ years: vector<string>
+ teachTypes: vector<string>
+ values: vector<vector<int>>
+ Teach_BarGraph1_VO (data: shared_ptr<CSVData<TeachDTO>>, start: int, end: int)

publicationdto
+ name: String
+ domain: String
+ journalName: String
+ title: String
+ ISBN: String
+ status: String
+ type: String
+ role: String
+ date: unsigned int
+ id: unsigned int
+ authors: shared_ptr<vector<string>>
+ volume: String
+ issue: String
+ pageRange: String
+ DOI : String
+ website: String
+ publisher: String
+ personalRenumeration: String
+ traineeDetails: String
+ mostSignificantDetails: String
+ pubmedID: String
+ authorNumber: String
+ impactFactor: String
+ peerReviewed: String
+ international: String
+ presentation: String
+ mostSignificant: String
+ education: String
+ treePath: vector<string>
+ treeValue: vector<double>
+ publicationDTO()
+ getName(): string
+ getBarField1(bType:int)
+ getBarField2(bType:int)
+ getBarValue(bType:int)
+ getYear(bType: int)
+ getTreePath(bType: int)
+ getTreeValues(bType: int)

teachingdto
+ name: String + domain: String + program: String + type: String + scope: String + hourSession: float + numberSession: float + totalHours: float + startDate: unsigned int + endDate: unsigned int + institution: String + faculty: String + department: String + division : String + location: String + facultyComments: String + students: String + lecture: String + development: String + stipend : String + comment: String
+ teachingDTO() + getName(): string + getBarField1(bType:int) + getBarField2(bType:int) + getBarValue(bType:int)

treelist_vo
+ treelist_vo(data: shared_ptr <CSVData <DTOType>>, start:int, end:int, type:int) + addbranch (node: TreeList_Node, dto: DTOType, depth: size_t) + makeQTreeNode (parent: QType, node: TreeList_Node) + makeQTree (tree: QTreeWidget)

<<struct>> TreeList_Node
+ label: string + children: vector<TreeList_Node> + value: double

tree_list_vo
+ num_pub_types: int + num_grant_types: int + num_funding_types: int + num_teach_types: int + parent_set: vector<string_data_object> + child_set: vector<vector<string_data_object>>
+ tree_list_vo() + populate_for_publications (_data: shared_ptr<CSVData<PublicationDTO>>) + populate_for_grants (_data: shared_ptr<CSVData<GrantDTO>>) + populate_for_teaching (_data: shared_ptr<CSVData<TeachingDTO>>) + populate_for_presentations :(_data: shared_ptr<CSVData<PresentationDTO>>) + get_parent_set() + get_child_set() - find_label_index(label: string, set: vector<string_data_object>)

validatedto
+ trimLeft (s: string) + trimRight(s: string) + trimString(s: string) + validateString(s: string) + isLeapYear(y: int) + makeDate(s: string) + validateDate(s: string) + validateAuthorName(s: string) + makeAuthors(s: string) + makeMoney(s: string) + validateMoney(s: string) + validateAuthors(s: string) + validatePublications (fields: vector<string>) + validateGrant (fields: vector<string>) + validatePresentation (fields: vector<string>) + validateTeaching (fields: vector<string>)

<<struct>> string_data_object
+ label: string + num: double + num2: double + value: double

verify_csv
- ui: VerifyCSV - analyze_csv_page: AnalyzeCSV - data_pub: shared_ptr <CSVData <PublicationDTO>> - data_grant: shared_ptr <CSVData <GrantDTO>> - data_teach: shared_ptr <CSVData <TeachingDTO>> - data_pres: shared_ptr <CSVData <PresentationDTO>> - dtoType: int - assembled: bool
+ verifyVSC (filename: QString, csvType: int, parent: QWidget) - on_load_btn_clicked() - on_analyze_btn_clicked() - on_ignoreall_btn_clicked() - on_ignore_btn_clicked() - onDataChanged(topLeft: QModelIndex, bottomRight: QModelIndex) -PublicationTableModel() -PublicationTableModel() - on_confirm_btn_clicked() - enableConfirmChanges()