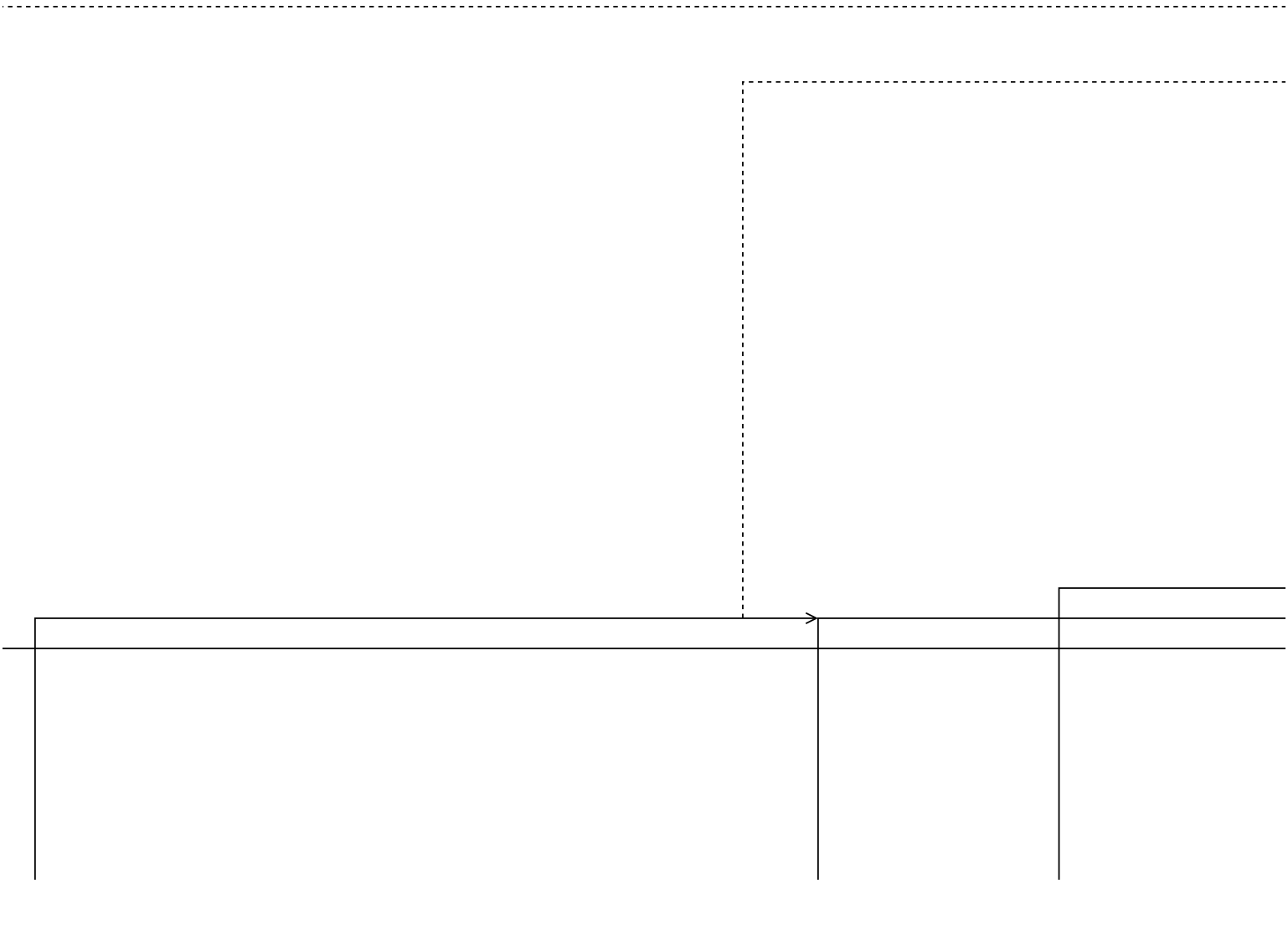
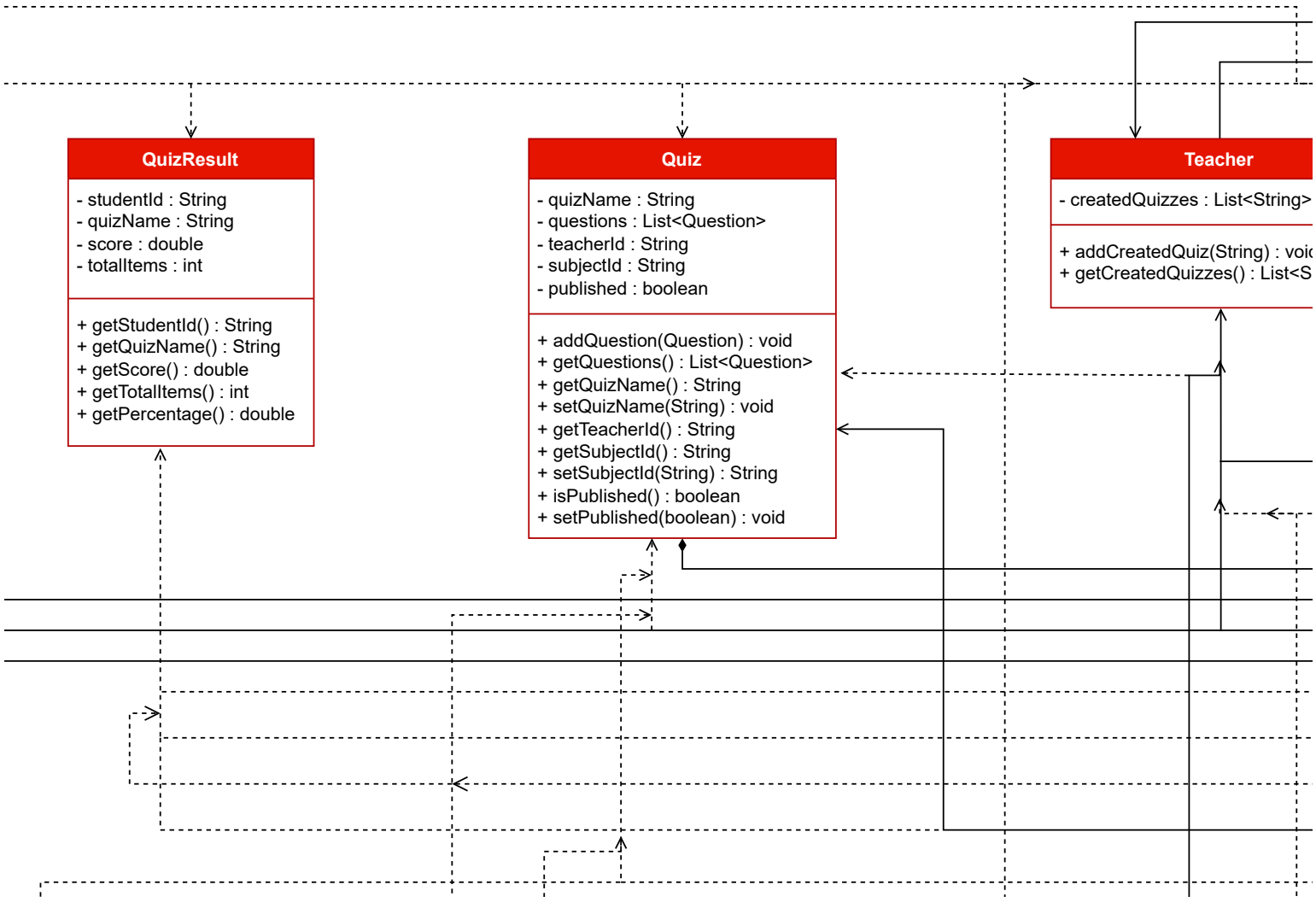
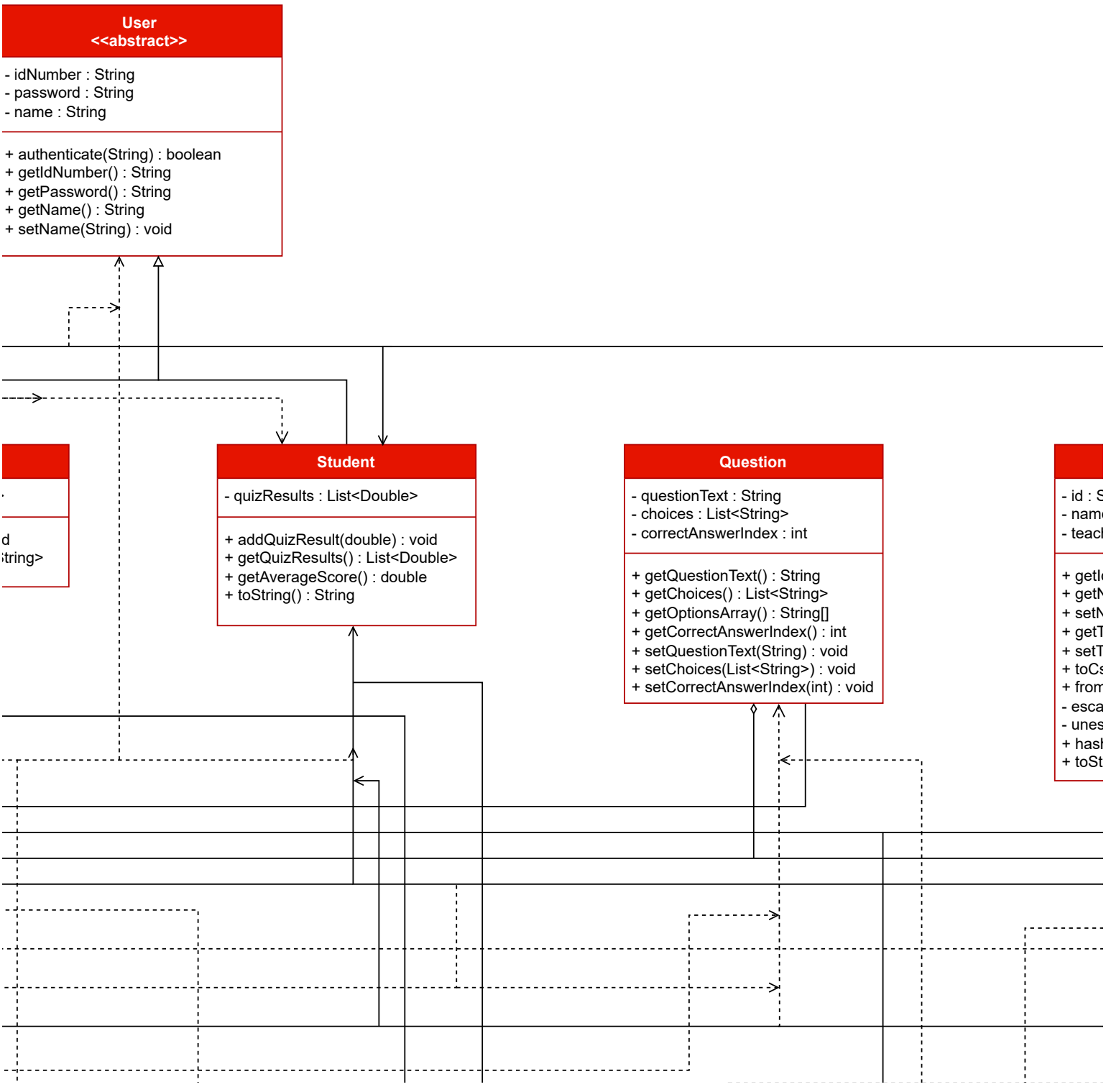
M

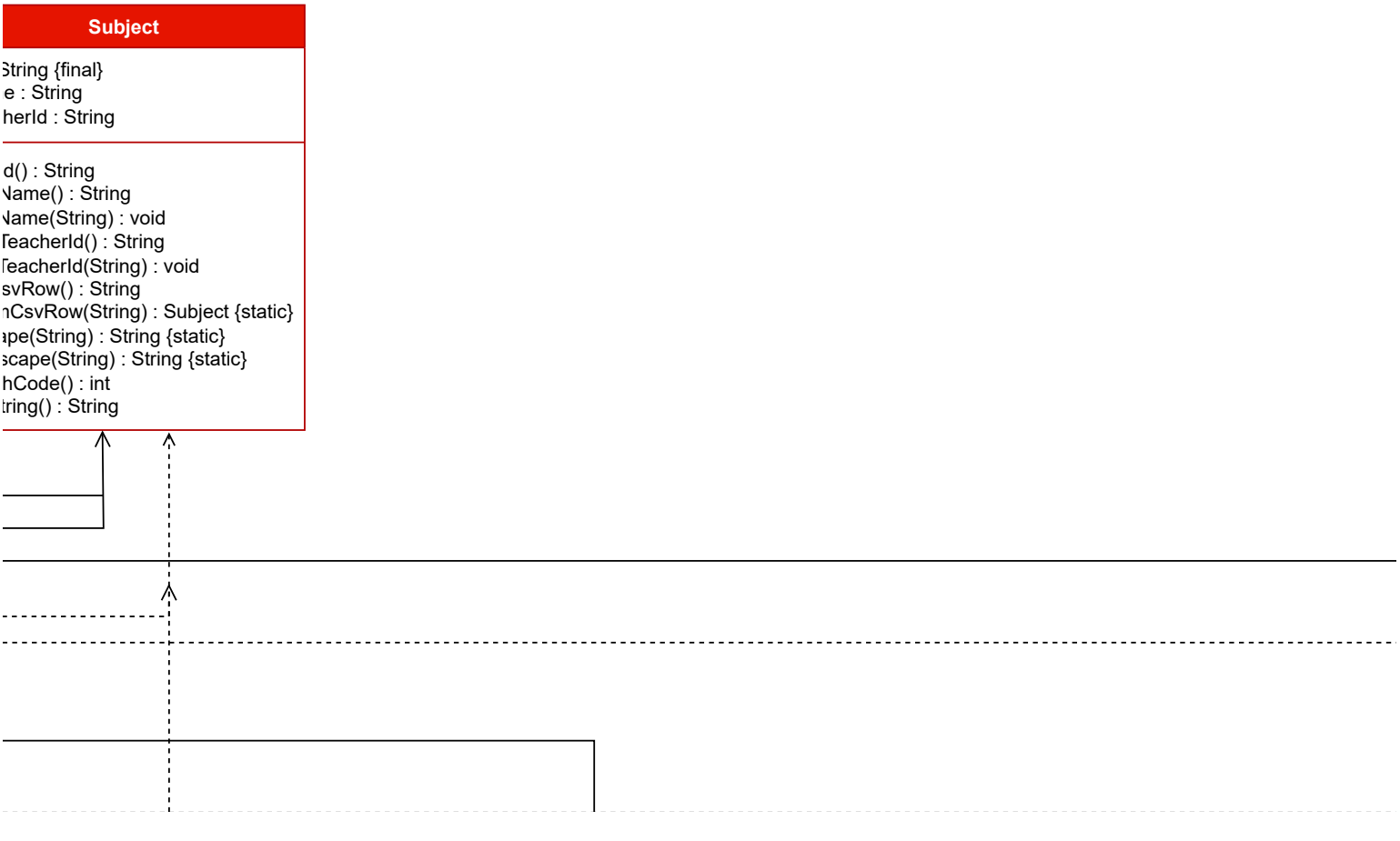
FileM

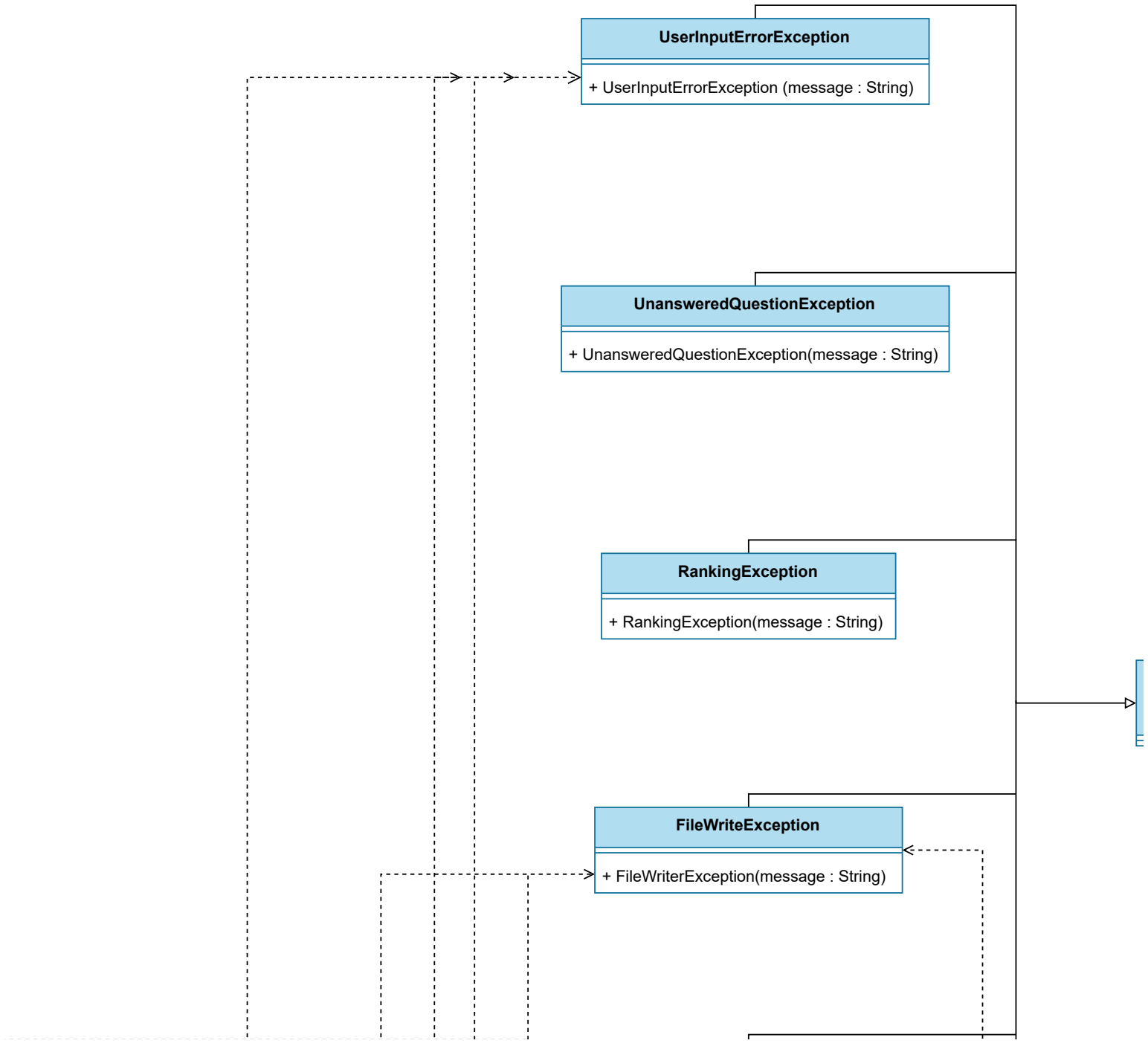
odel
Manager



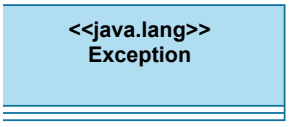

QuizResult
- studentId : String
- quizName : String
- score : double
- totalItems : int
+ getStudentId() : String
+ getQuizName() : String
+ getScore() : double
+ getTotalItems() : int
+ getPercentage() : double
Quiz
- quizName : String
- questions : List<Question>
- teacherId : String
- subjectId : String
- published : boolean
+ addQuestion(Question) : void
+ getQuestions() : List<Question>
+ getQuizName() : String
+ setQuizName(String) : void
+ getTeacherId() : String
+ getSubjectId() : String
+ setSubjectId(String) : String
+ isPublished() : boolean
+ setPublished(boolean) : void
Teacher
- createdQuizzes : List<String>
+ addCreatedQuiz(String) : voi
+ getCreatedQuizzes() : List<S


User
<<abstract>>
- idNumber : String
- password : String
- name : String
+ authenticate(String) : boolean
+ getIdNumber() : String
+ getPassword() : String
+ getName() : String
+ setName(String) : void
Student
- quizResults : List<Double>
+ addQuizResult(double) : void
+ getQuizResults() : List<Double>
+ getAverageScore() : double
+ toString() : String
Question
- questionText : String
- choices : List<String>
- correctAnswerIndex : int
+ getQuestionText() : String
+ getChoices() : List<String>
+ getOptionsArray() : String[]
+ getCorrectAnswerIndex() : int
+ setQuestionText(String) : void
+ setChoices(List<String>) : void
+ setCorrectAnswerIndex(int) : void

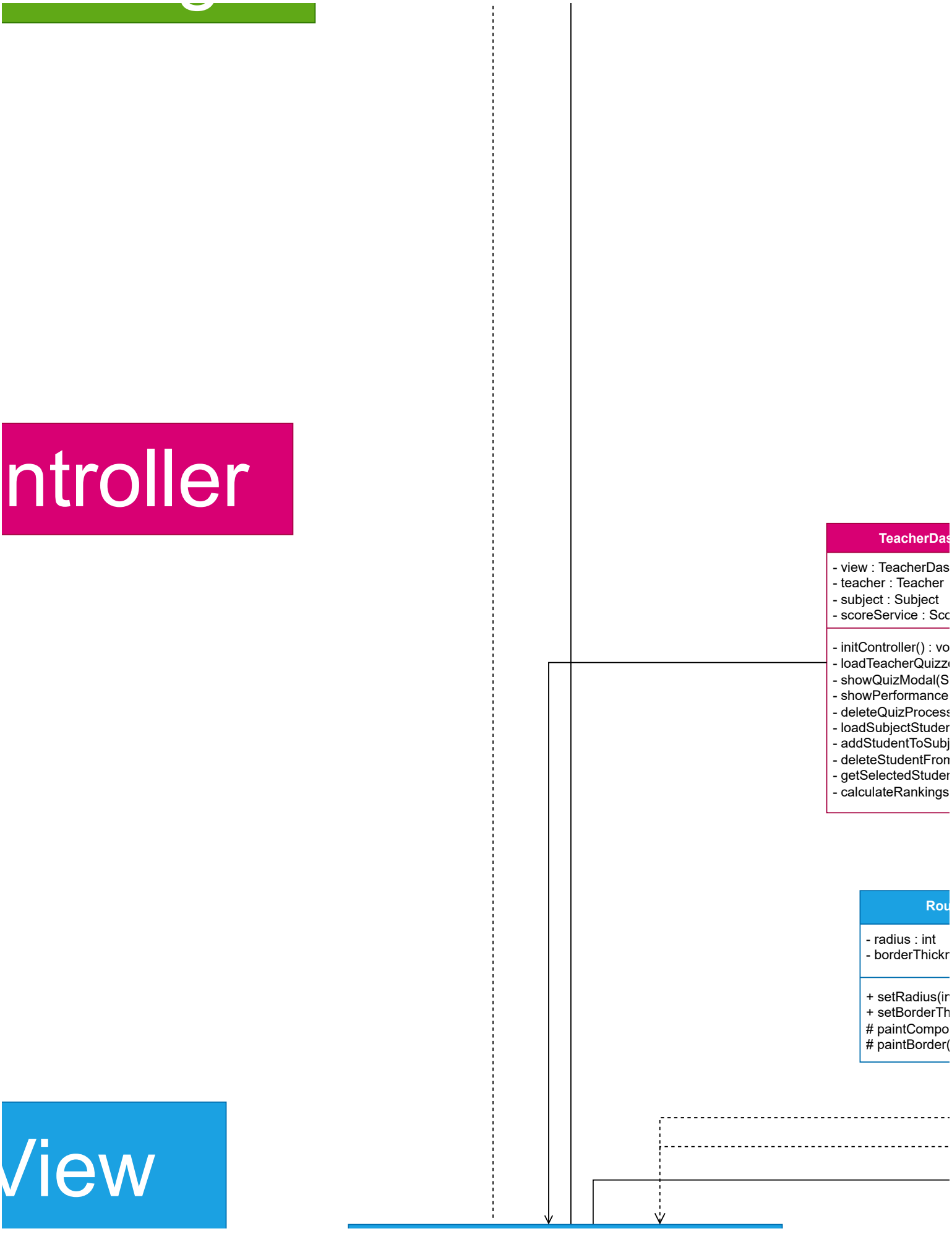

Subject
String {final}
e : String
herId : String
d() : String
Name() : String
Name(String) : void
TeacherId() : String
TeacherId(String) : void
svRow() : String
nCsvRow(String) : Subject {static}
ape(String) : String {static}
scape(String) : String {static}
hCode() : int
tring() : String

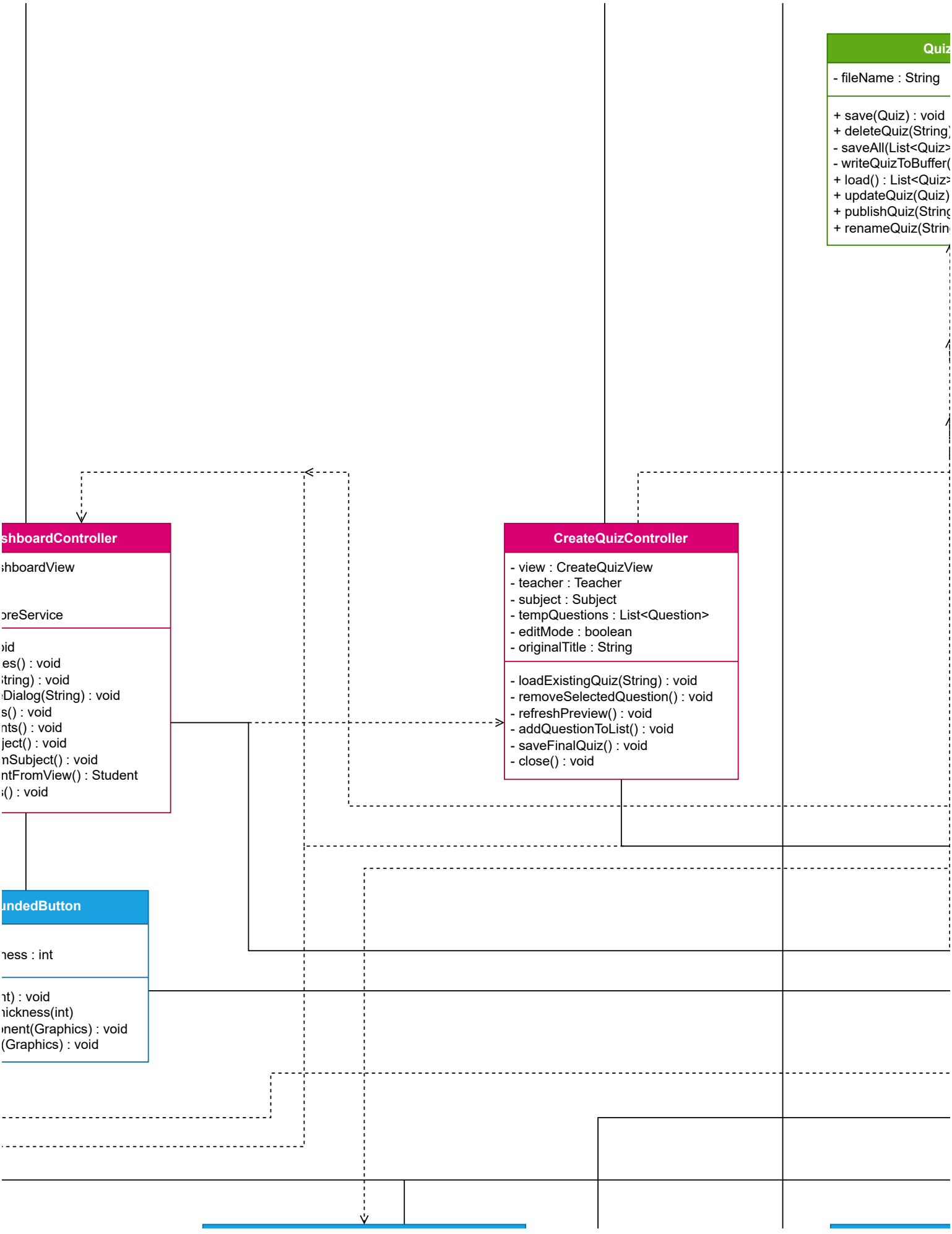

UserInputErrorException
+ UserInputErrorException (message : String)
UnansweredQuestionException
+ UnansweredQuestionException(message : String)
RankingException
+ RankingException(message : String)
FileWriteException
+ FileWriterException(message : String)

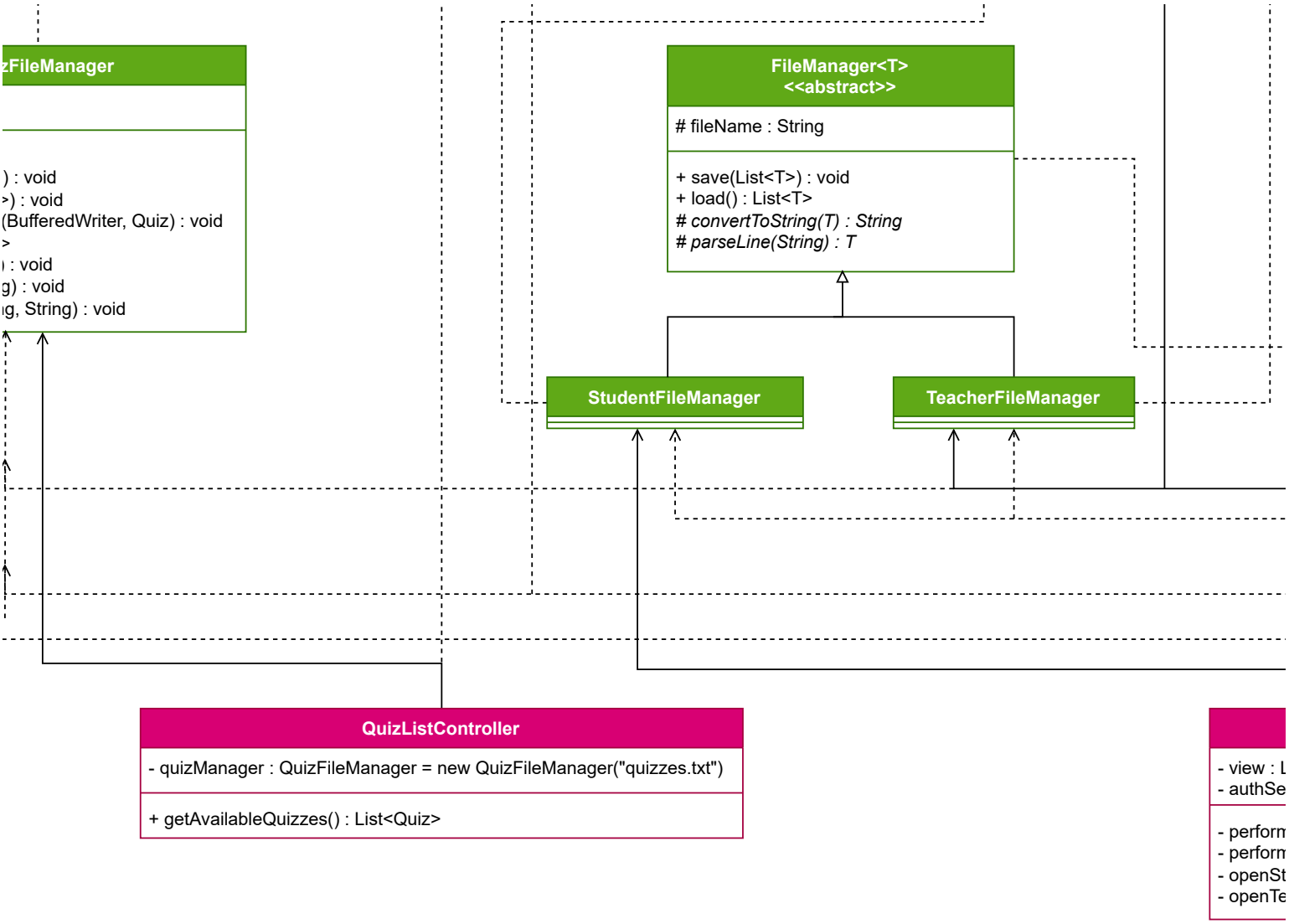
Exception

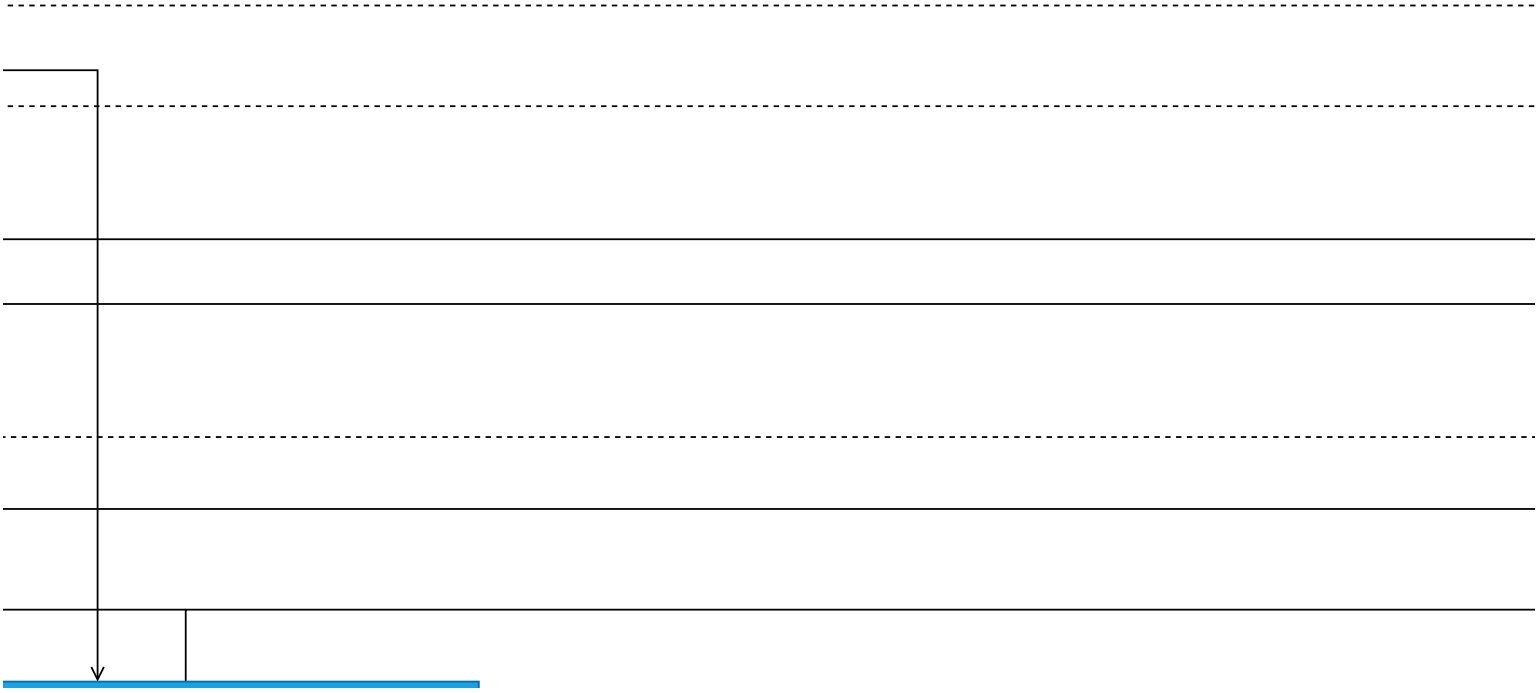


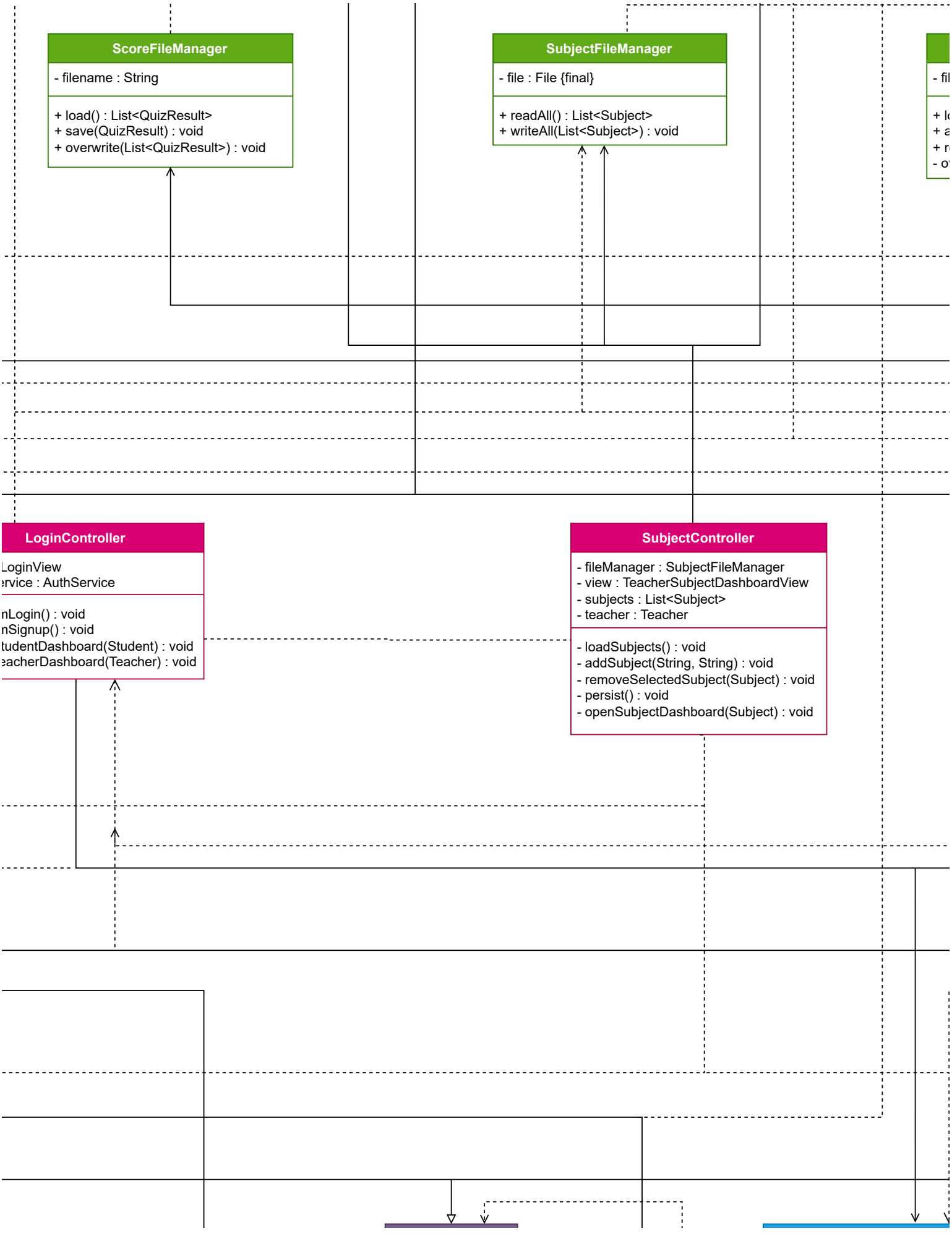
Co

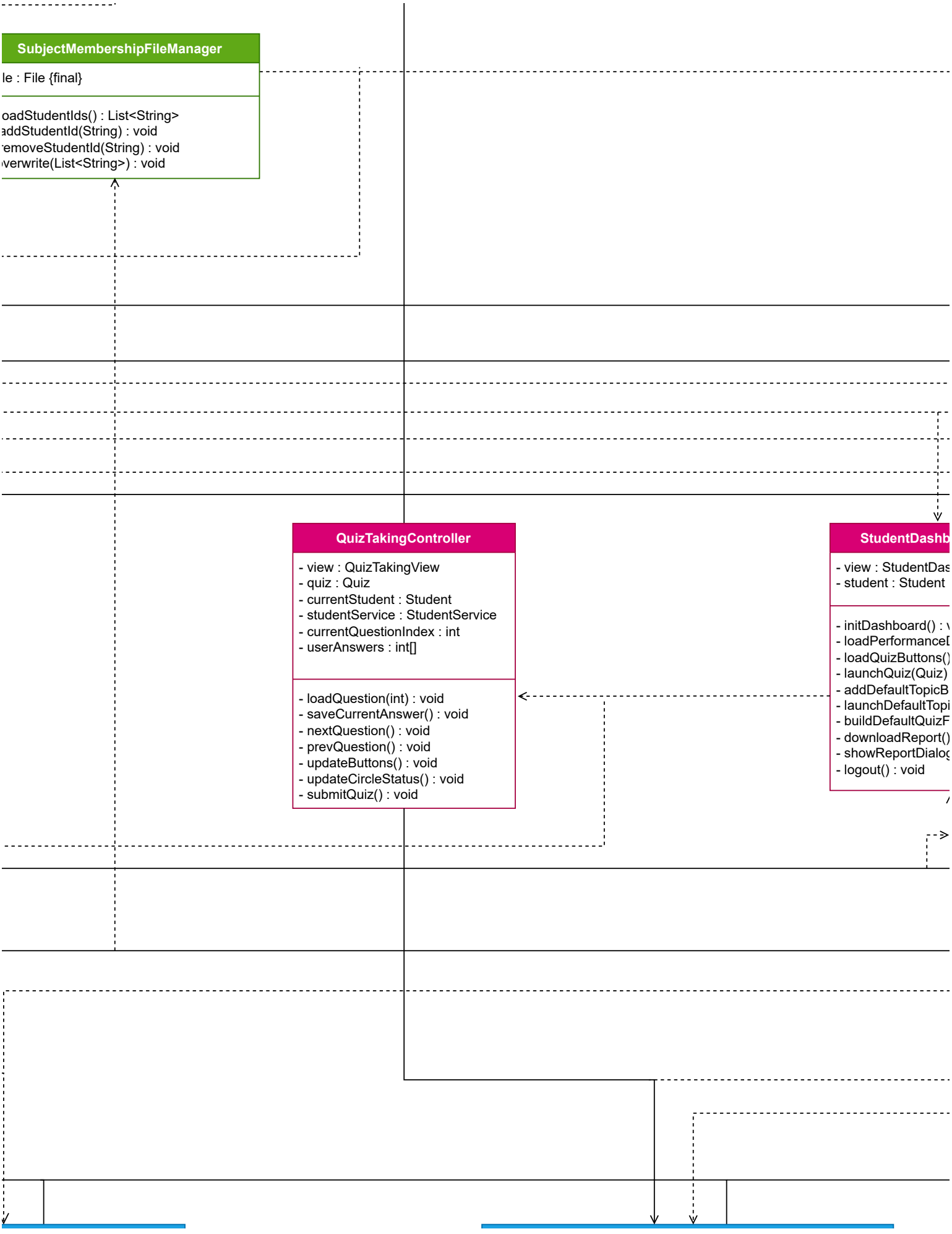

ntroller
TeacherDas
- view : TeacherDas
- teacher : Teacher
- subject : Subject
- scoreService : Scc
- initController() : vo
- loadTeacherQuizz
- showQuizModal(S
- showPerformance
- deleteQuizProcess
- loadSubjectStuder
- addStudentToSubj
- deleteStudentFron
- getSelectedStuder
- calculateRankings
Rou
- radius : int
- borderThickr
+ setRadius(ir
+ setBorderTh
# paintCompo
# paintBorder(
View

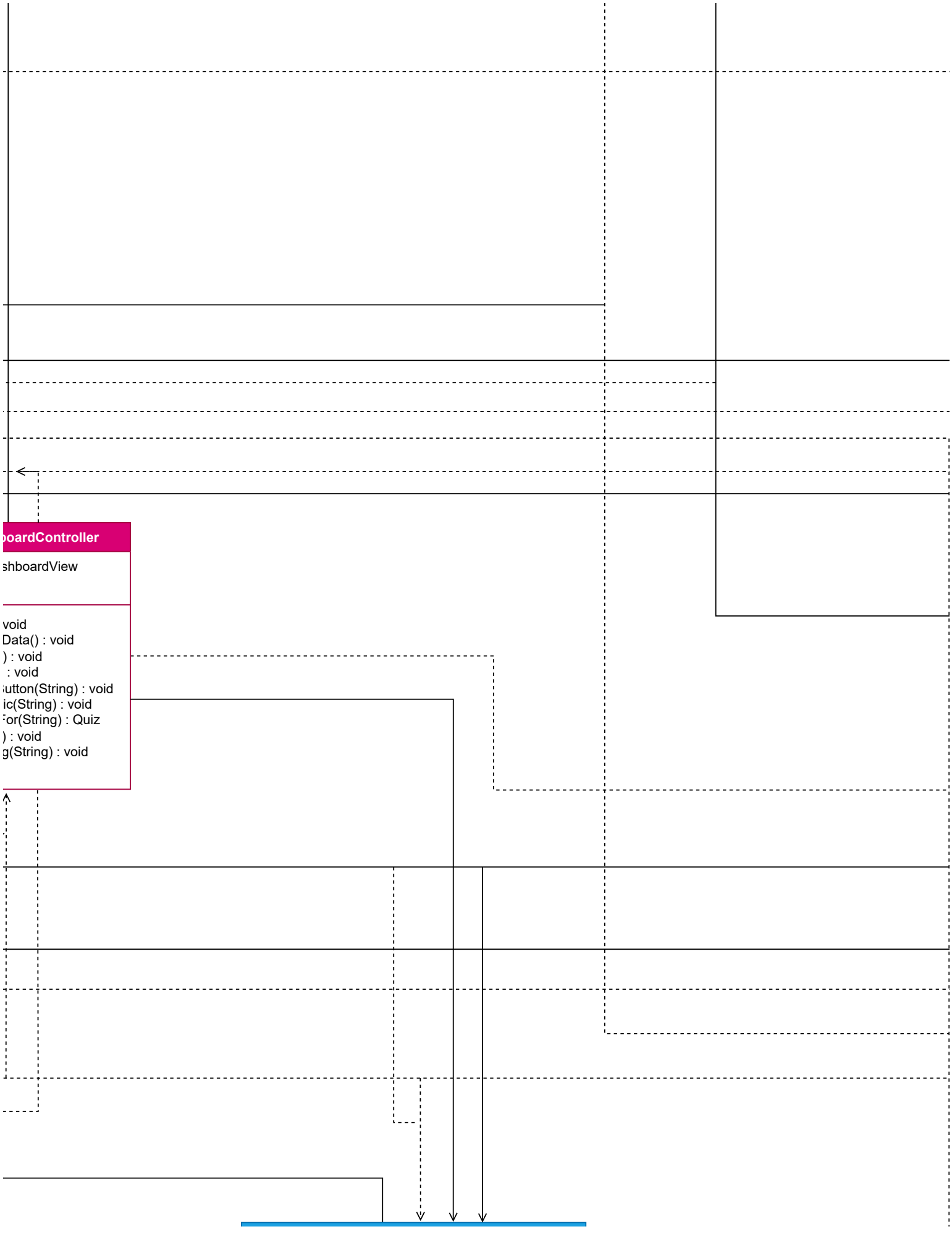

Quiz
- fileName : String
+ save(Quiz) : void
+ deleteQuiz(String)
- saveAll(List<Quiz>
- writeQuizToBuffer(
+ load() : List<Quiz>
+ updateQuiz(Quiz)
+ publishQuiz(String
+ renameQuiz(Strin
shboardController
shboardView
oreService
oid
es() : void
tring) : void
Dialog(String) : void
s() : void
nts() : void
ject() : void
nSubject() : void
ntFromView() : Student
() : void
CreateQuizController
- view : CreateQuizView
- teacher : Teacher
- subject : Subject
- tempQuestions : List<Question>
- editMode : boolean
- originalTitle : String
- loadExistingQuiz(String) : void
- removeSelectedQuestion() : void
- refreshPreview() : void
- addQuestionToList() : void
- saveFinalQuiz() : void
- close() : void
undedButton
ness : int
nt) : void
nickness(int)
nent(Graphics) : void
(Graphics) : void

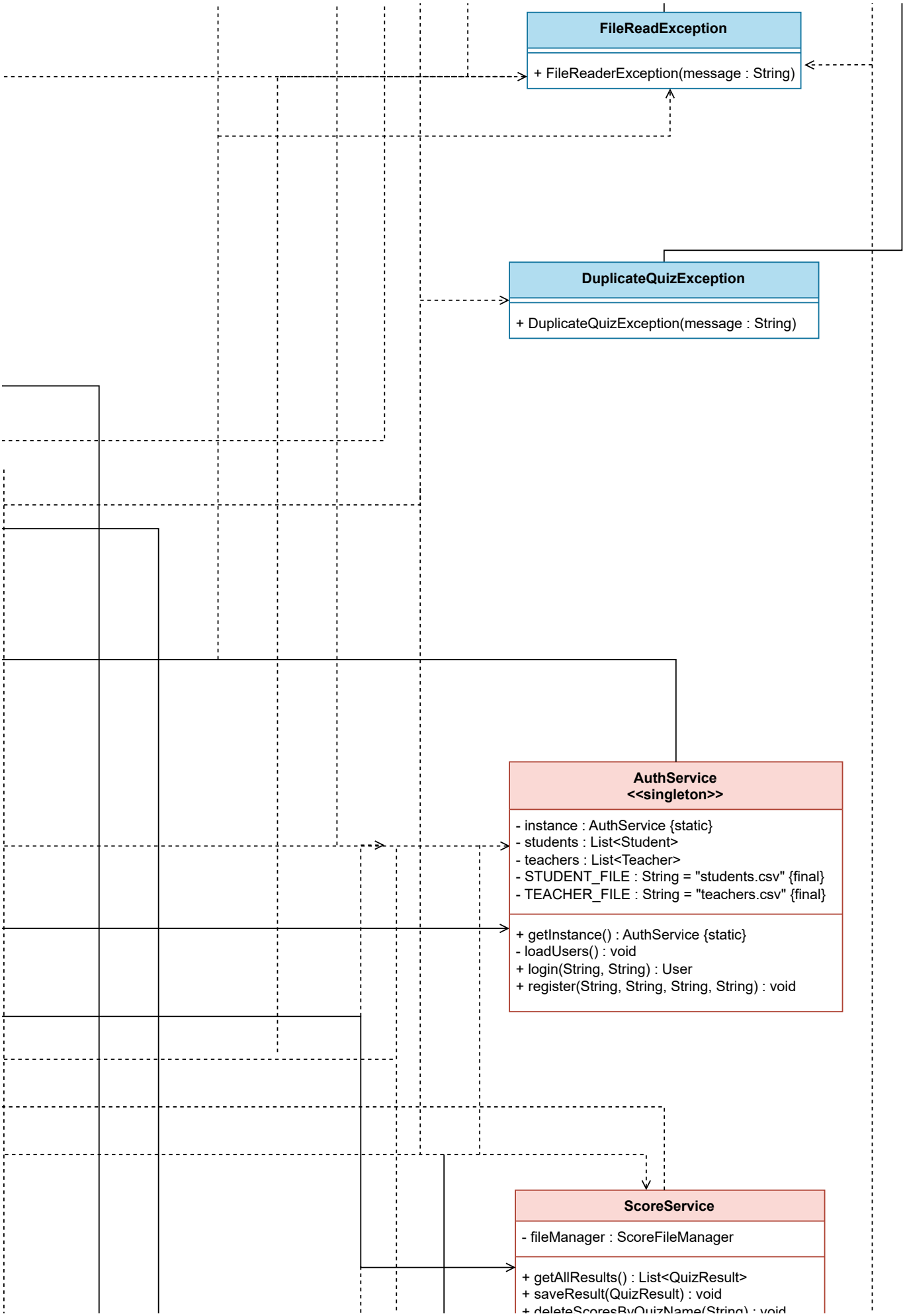

zFileManager
) : void
>) : void
(BufferedWriter, Quiz) : void
>
) : void
g) : void
g, String) : void
FileManager<T>
<<abstract>>
fileName : String
+ save(List<T>) : void
+ load() : List<T>
# convertToString(T) : String
# parseLine(String) : T
StudentFileManager
TeacherFileManager
QuizListController
- quizManager : QuizFileManager = new QuizFileManager("quizzes.txt")
+ getAvailableQuizzes() : List<Quiz>
- view : L
- authSe
- perform
- perform
- openSt
- openTe



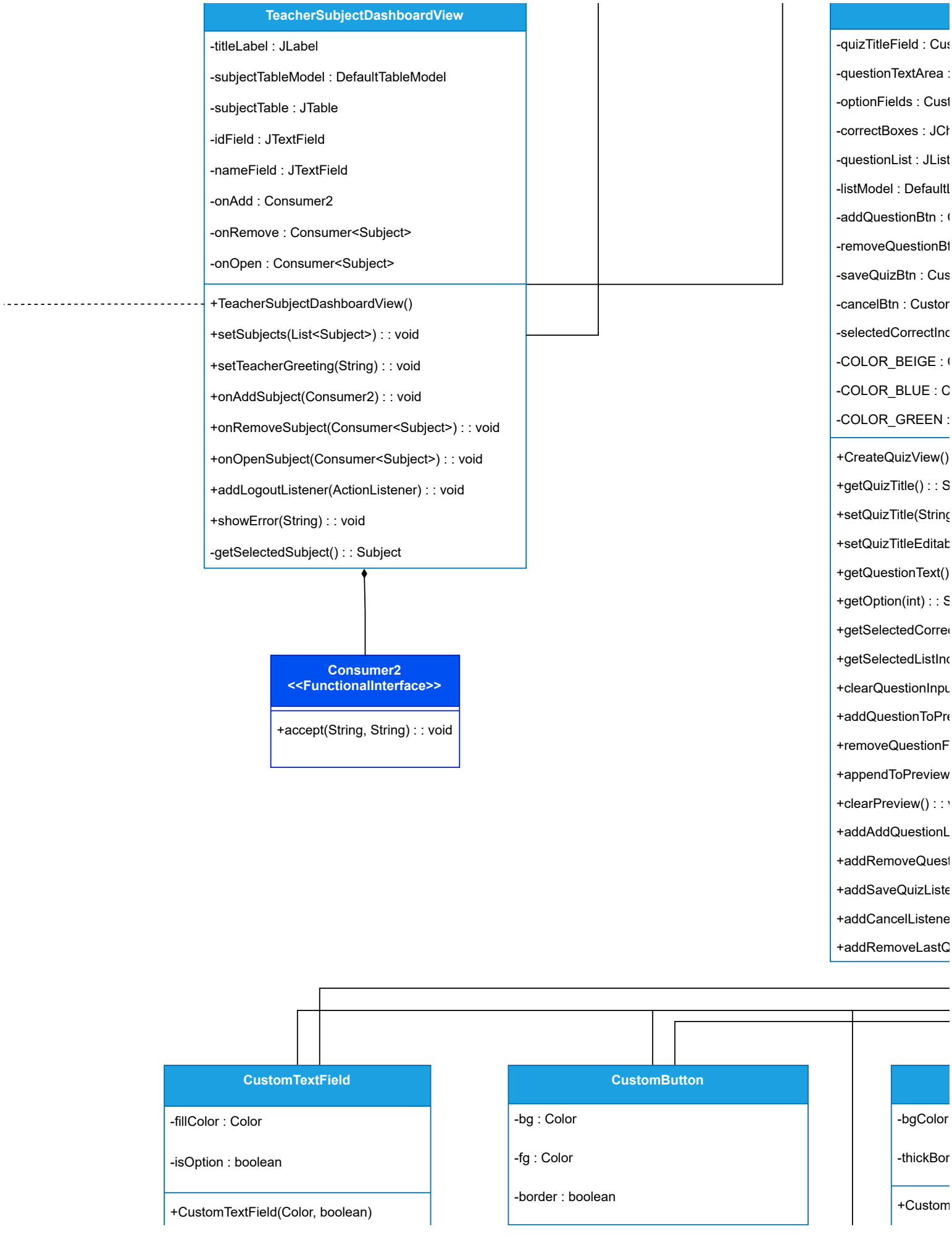

ScoreFileManager
- filename : String
+ load() : List<QuizResult>
+ save(QuizResult) : void
+ overwrite(List<QuizResult>) : void
SubjectFileManager
- file : File {final}
+ readAll() : List<Subject>
+ writeAll(List<Subject>) : void
LoginController
LoginView
ervice : AuthService
nLogin() : void
nSignup() : void
tudentDashboard(Student) : void
eacherDashboard(Teacher) : void
SubjectController
- fileManager : SubjectFileManager
- view : TeacherSubjectDashboardView
- subjects : List<Subject>
- teacher : Teacher
- loadSubjects() : void
- addSubject(String, String) : void
- removeSelectedSubject(Subject) : void
- persist() : void
- openSubjectDashboard(Subject) : void

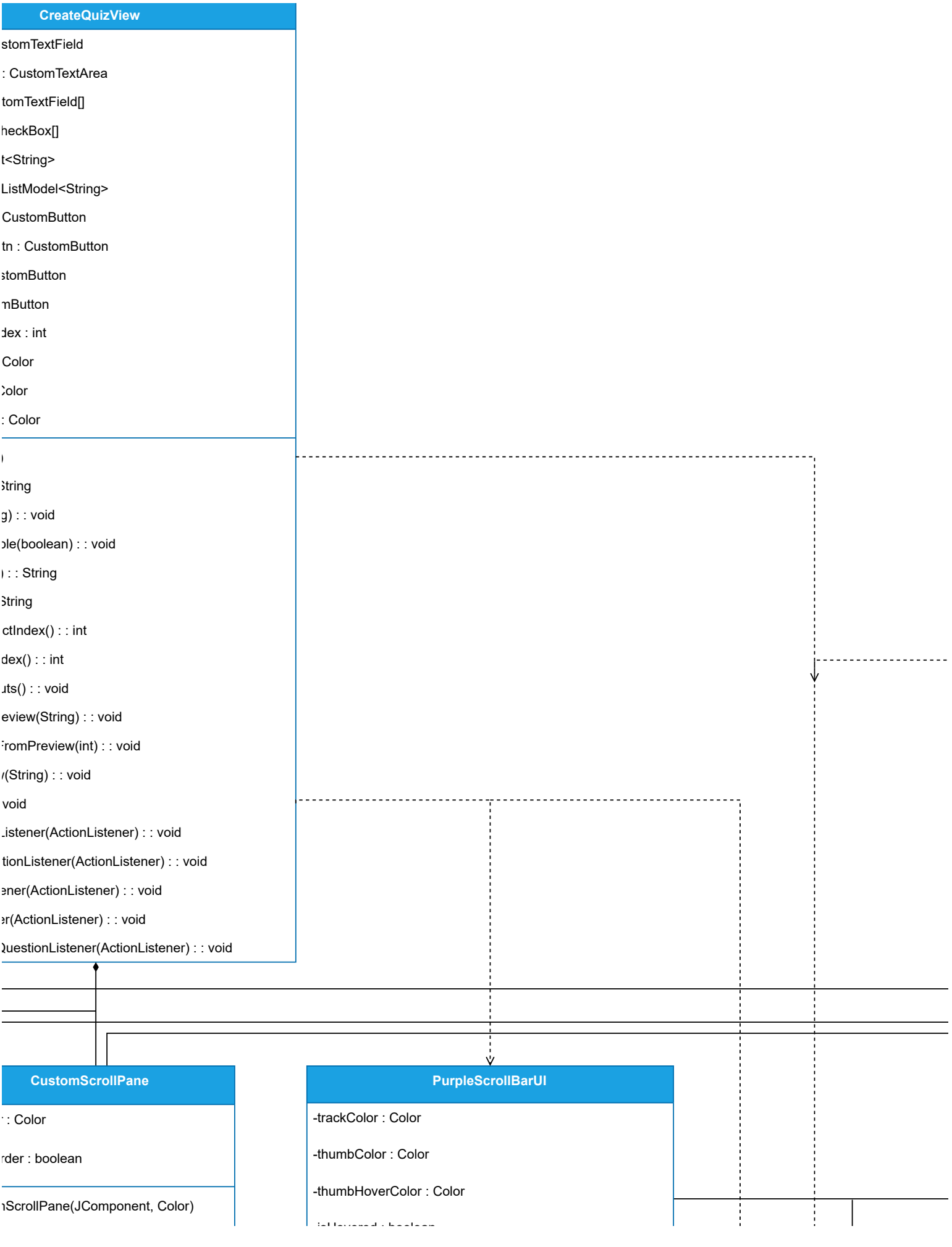

SubjectMembershipFileManager
le : File {final}
oadStudentIds() : List<String>
ddStudentId(String) : void
emoveStudentId(String) : void
verwrite(List<String>) : void
QuizTakingController
- view : QuizTakingView
- quiz : Quiz
- currentStudent : Student
- studentService : StudentService
- currentQuestionIndex : int
- userAnswers : int[]
- loadQuestion(int) : void
- saveCurrentAnswer() : void
- nextQuestion() : void
- prevQuestion() : void
- updateButtons() : void
- updateCircleStatus() : void
- submitQuiz() : void
StudentDashb
- view : StudentDas
- student : Student
- initDashboard() :
- loadPerformance
- loadQuizButtons(
- launchQuiz(Quiz)
- addDefaultTopicB
- launchDefaultTopi
- buildDefaultQuizF
- downloadReport()
- showReportDialo
- logout() : void

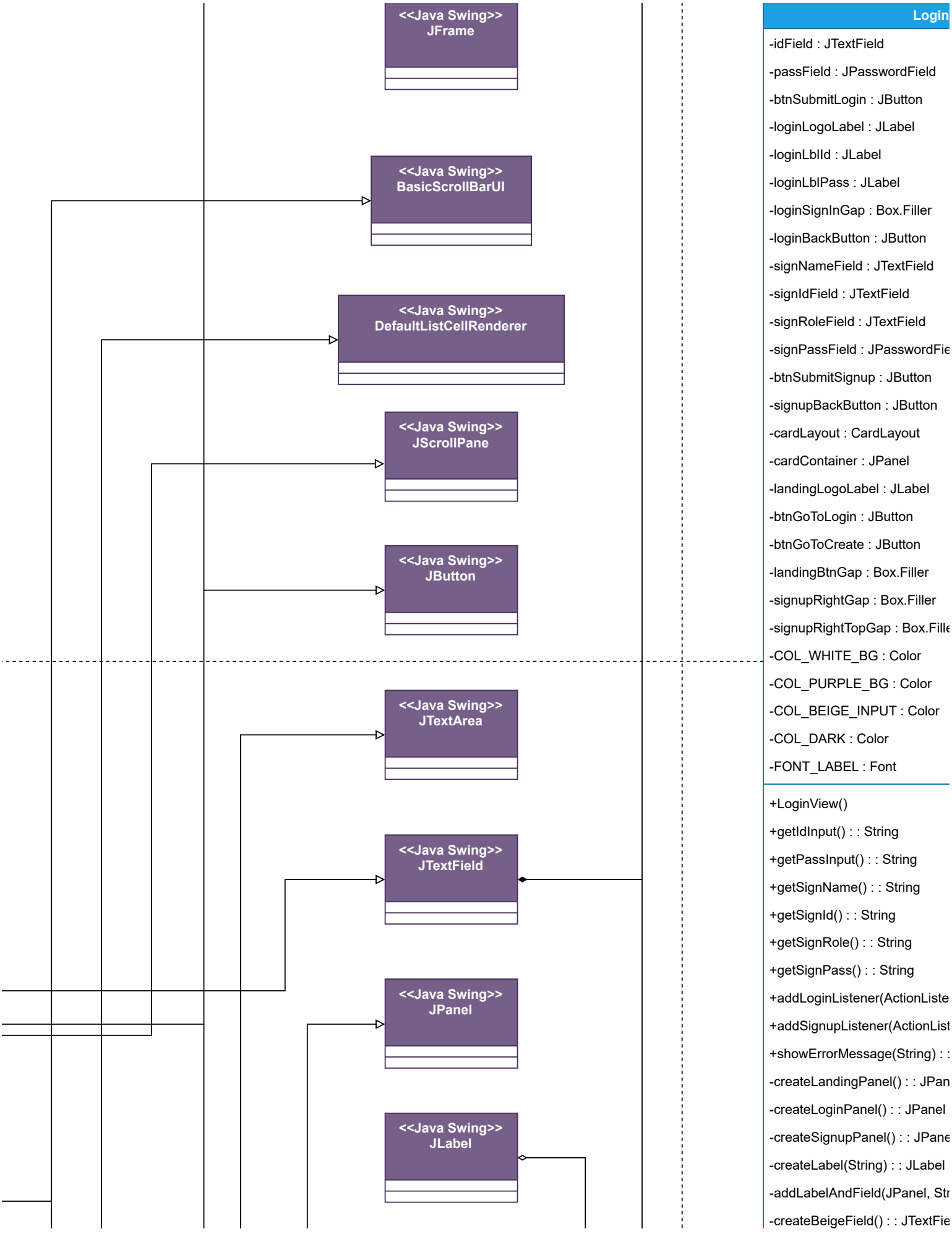

boardController
shboardView
void
Data() : void
) : void
: void
utton(String) : void
ic(String) : void
or(String) : Quiz
) : void
g(String) : void


FileReadException
+ FileReaderException(message : String)
DuplicateQuizException
+ DuplicateQuizException(message : String)
AuthService
<<singleton>>
- instance : AuthService {static}
- students : List<Student>
- teachers : List<Teacher>
- STUDENT_FILE : String = "students.csv" {final}
- TEACHER_FILE : String = "teachers.csv" {final}
+ getInstance() : AuthService {static}
- loadUsers() : void
+ login(String, String) : User
+ register(String, String, String, String) : void
ScoreService
- fileManager : ScoreFileManager
+ getAllResults() : List<QuizResult>
+ saveResult(QuizResult) : void

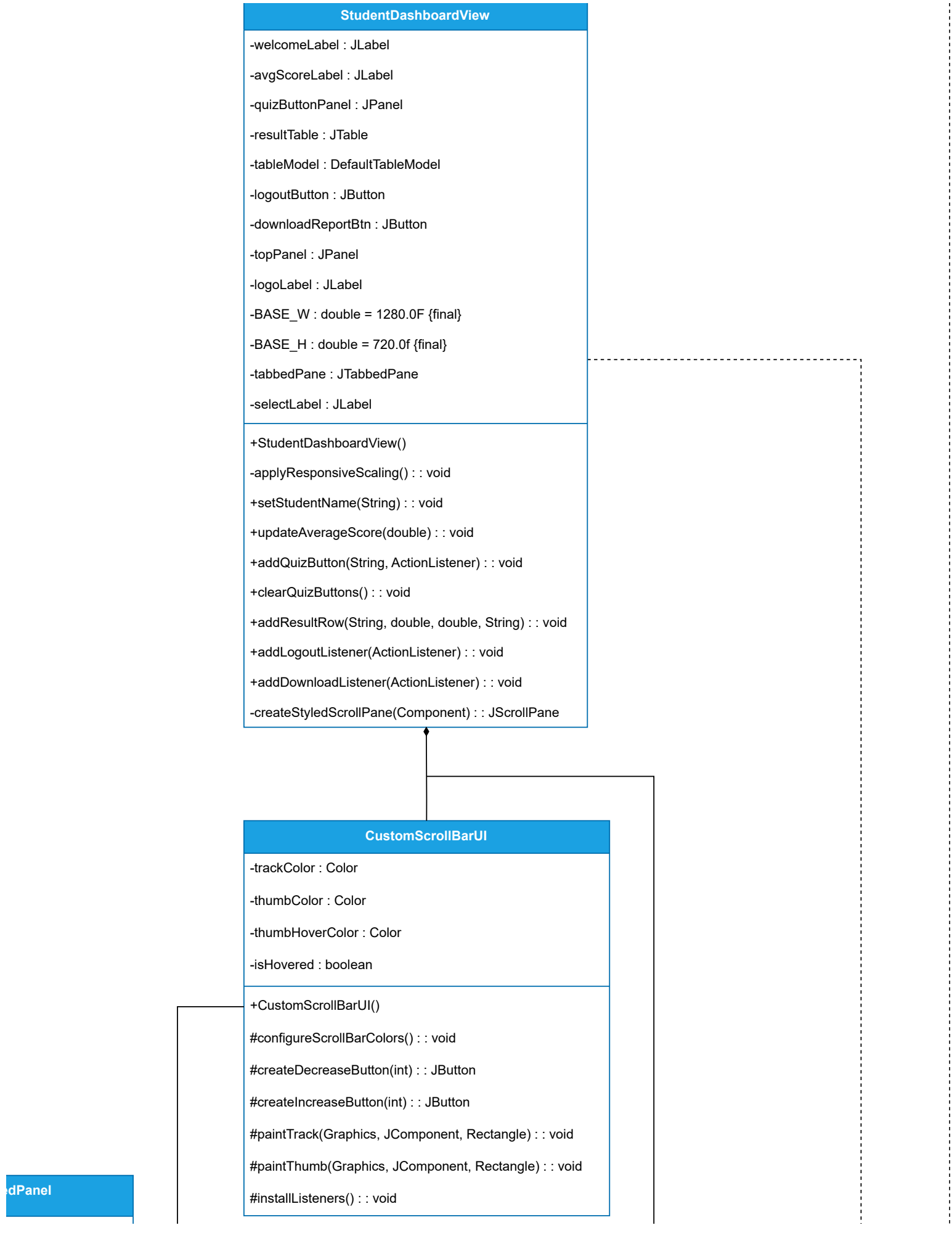
TeacherDashboardView
-welcomeLabel : JLabel
-createQuizButton : JButton
-deleteQuizButton : JButton
-logoutButton : JButton
-rankTable : JTable
-rankModel : DefaultTableModel
-refreshRankBtn : JButton
-backButton : JButton
-studentTable : JTable
-studentTableModel : DefaultTableModel
-addStudentBtn : JButton
-deleteStudentBtn : JButton
-quizButtonsPanel : JPanel
-quizScroll : JScrollPane
-quizContainer : JPanel
-tabbedPane : JTabbedPane
-logoLabel : JLabel
-appLogoImage : Image
-BASE_W : double = 1280.0F {final}
-BASE_H : double = 720.0F {final}
+TeacherDashboardView()
+setTeacherName(String) : : void
+clearQuizButtons() : : void
+addQuizButton(String, ActionListener) : : void
+addRankingRow(int, String, double) : : void
+clearRankings() : : void
+addRefreshRankListener(ActionListener) : : void
+addLogoutListener(ActionListener) : : void
+addCreateQuizListener(ActionListener) : : void
+addDeleteQuizListener(ActionListener) : : void
+addBackListener(ActionListener) : : void
+setQuizList(List<String>) : : void
+addAddStudentToSubjectListener(ActionListener) : : void
+addDeleteStudentFromSubjectListener(ActionListener) : : void
+setStudents(List<Student>) : : void
-getCurrentQuizCols() : : int
-relayoutQuizButtons(int) : : void
-createStyledScrollPane(Component) : : JScrollPane
-applyResponsiveScaling() : : void

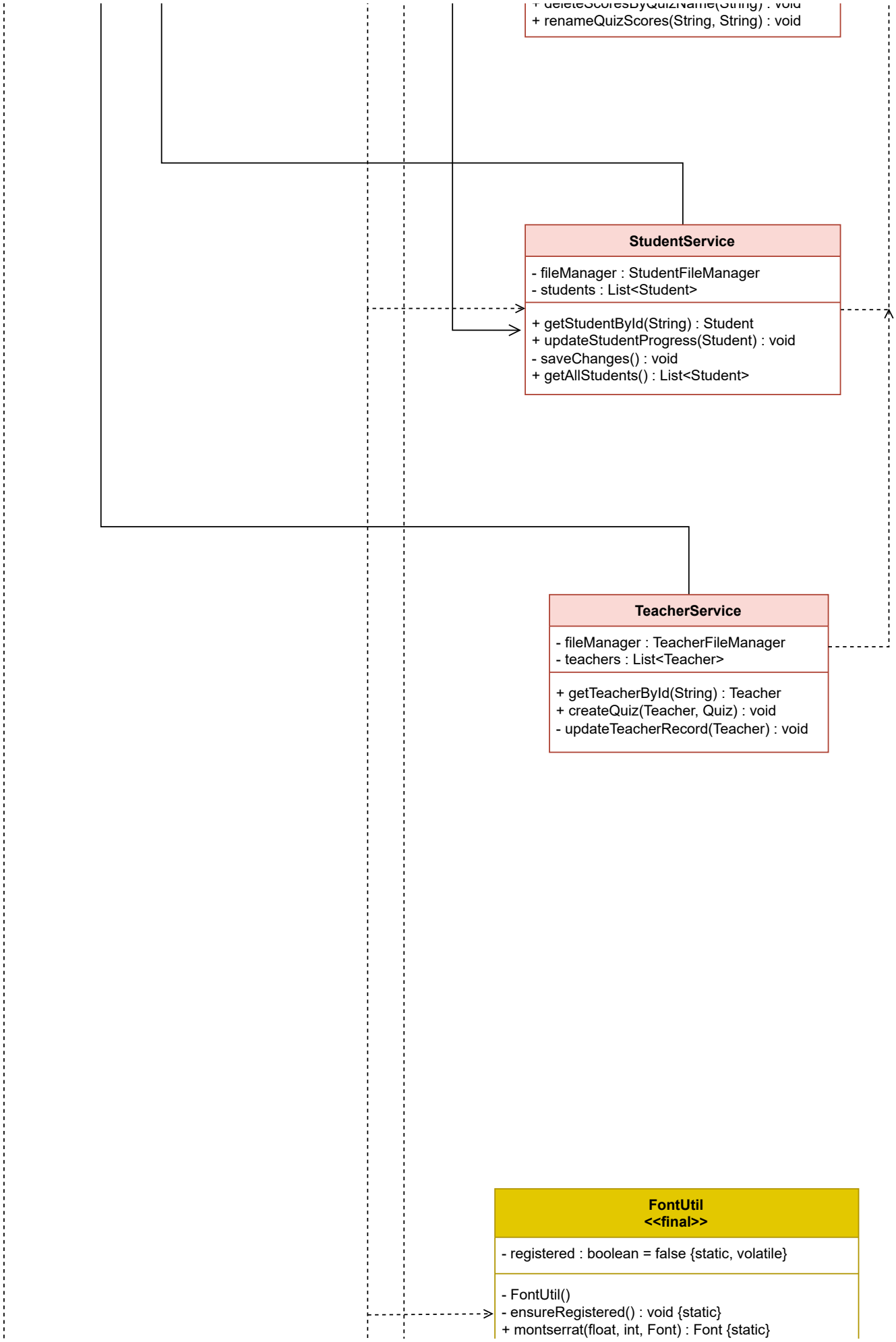

TeacherSubjectDashboardView
-titleLabel : JLabel
-subjectTableModel : DefaultTableModel
-subjectTable : JTable
-idField : JTextField
-nameField : JTextField
-onAdd : Consumer2
-onRemove : Consumer<Subject>
-onOpen : Consumer<Subject>
+TeacherSubjectDashboardView()
+setSubjects(List<Subject>) : : void
+setTeacherGreeting(String) : : void
+onAddSubject(Consumer2) : : void
+onRemoveSubject(Consumer<Subject>) : : void
+onOpenSubject(Consumer<Subject>) : : void
+addLogoutListener(ActionListener) : : void
+showError(String) : : void
-getSelectedSubject() : : Subject
Consumer2
<<FunctionalInterface>>
+accept(String, String) : : void
-quizTitleField : Cus
-questionTextArea :
-optionFields : Cust
-correctBoxes : JCh
-questionList : JList
-listModel : DefaultL
-addQuestionBtn : (
-removeQuestionBt
-saveQuizBtn : Cus
-cancelBtn : Custor
-selectedCorrectInc
-COLOR_BEIGE : (
-COLOR_BLUE : C
-COLOR_GREEN :
+CreateQuizView()
+getQuizTitle() : : S
+setQuizTitle(String
+setQuizTitleEditab
+getQuestionText()
+getOption(int) : : S
+getSelectedCorre
+getSelectedListInc
+clearQuestionInpu
+addQuestionToPre
+removeQuestionF
+appendToPreview
+clearPreview() : :
+addAddQuestionL
+addRemoveQuest
+addSaveQuizListe
+addCancelListene
+addRemoveLastQ
CustomTextField
-fillColor : Color
-isOption : boolean
+CustomTextField(Color, boolean)
CustomButton
-bg : Color
-fg : Color
-border : boolean
-bgColor
-thickBor
+Custom


CreateQuizView
stomTextField
: CustomTextArea
tomTextField[]
heckBox[]
t<String>
ListModel<String>
CustomButton
tn : CustomButton
stomButton
mButton
dex : int
Color
Color
: Color
)
String
g) : : void
ole(boolean) : : void
) : : String
String
ctIndex() : : int
dex() : : int
uts() : : void
eview(String) : : void
FromPreview(int) : : void
(String) : : void
void
Listener(ActionListener) : : void
tionListener(ActionListener) : : void
ener(ActionListener) : : void
er(ActionListener) : : void
QuestionListener(ActionListener) : : void
CustomScrollPane
: Color
rder : boolean
nScrollPane(JComponent, Color)
PurpleScrollBarUI
-trackColor : Color
-thumbColor : Color
-thumbHoverColor : Color

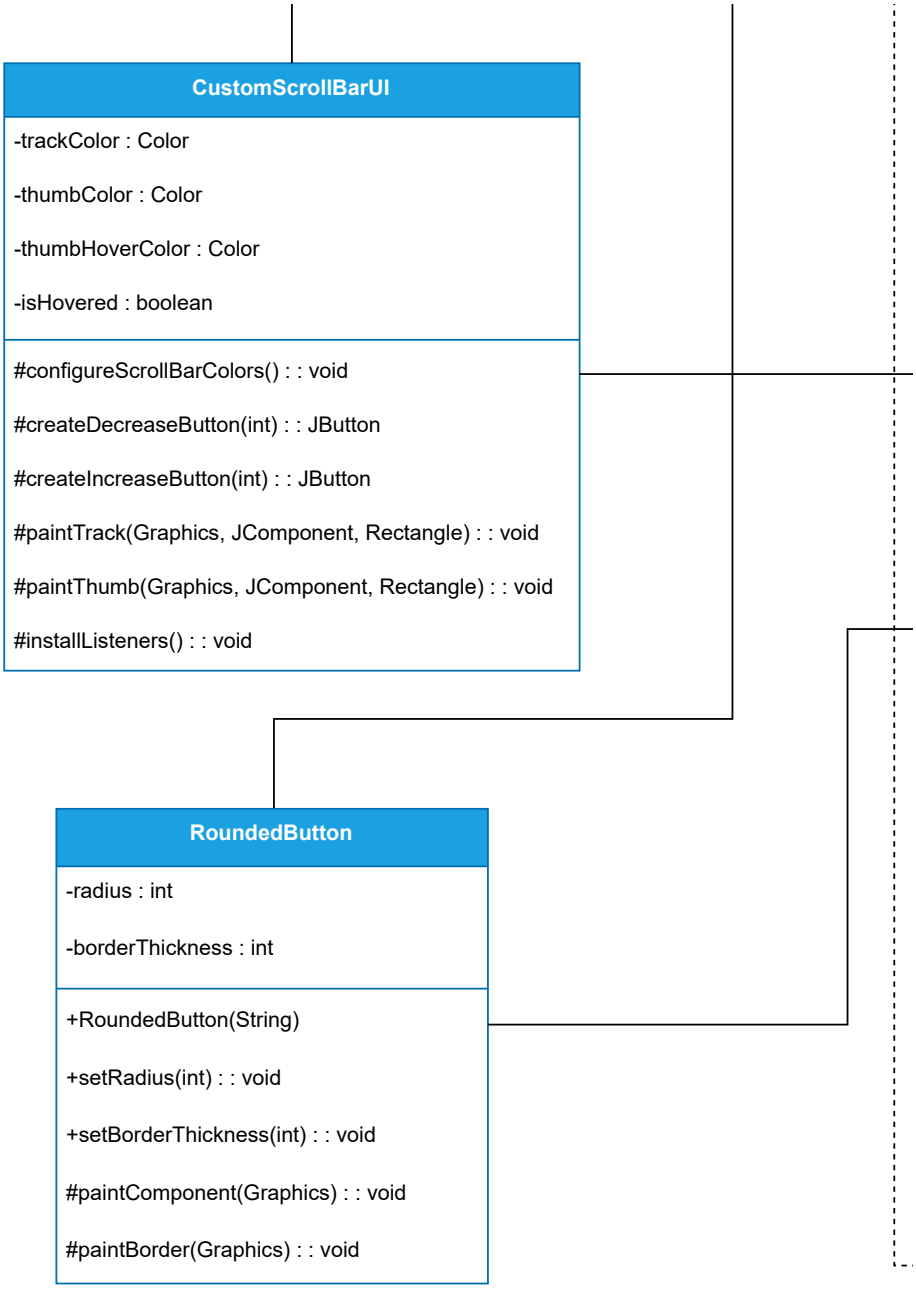

<<Java Swing>>
JFrame
<<Java Swing>>
BasicScrollBarUI
<<Java Swing>>
DefaultListCellRenderer
<<Java Swing>>
JScrollPane
<<Java Swing>>
JButton
<<Java Swing>>
JTextArea
<<Java Swing>>
JTextField
<<Java Swing>>
JPanel
<<Java Swing>>
JLabel
Login
-idField : JTextField
-passField : JPasswordField
-btnSubmitLogin : JButton
-loginLogoLabel : JLabel
-loginLblId : JLabel
-loginLblPass : JLabel
-loginSignInGap : Box.Filler
-loginBackButton : JButton
-signNameField : JTextField
-signIdField : JTextField
-signRoleField : JTextField
-signPassField : JPasswordFie
-btnSubmitSignup : JButton
-signupBackButton : JButton
-cardLayout : CardLayout
-cardContainer : JPanel
-landingLogoLabel : JLabel
-btnGoToLogin : JButton
-btnGoToCreate : JButton
-landingBtnGap : Box.Filler
-signupRightGap : Box.Filler
-signupRightTopGap : Box.Fille
-COL_WHITE_BG : Color
-COL_PURPLE_BG : Color
-COL_BEIGE_INPUT : Color
-COL_DARK : Color
-FONT_LABEL : Font
+LoginView()
+getIdInput() : : String
+getPassInput() : : String
+getSignName() : : String
+getSignId() : : String
+getSignRole() : : String
+getSignPass() : : String
+addLoginListener(ActionListe
+addSignupListener(ActionList
+showErrorMessage(String) : :
-createLandingPanel() : : JPan
-createLoginPanel() : : JPanel
-createSignupPanel() : : JPane
-createLabel(String) : : JLabel
-addLabelAndField(JPanel, Str
-createBeigeField() : : JTextFie

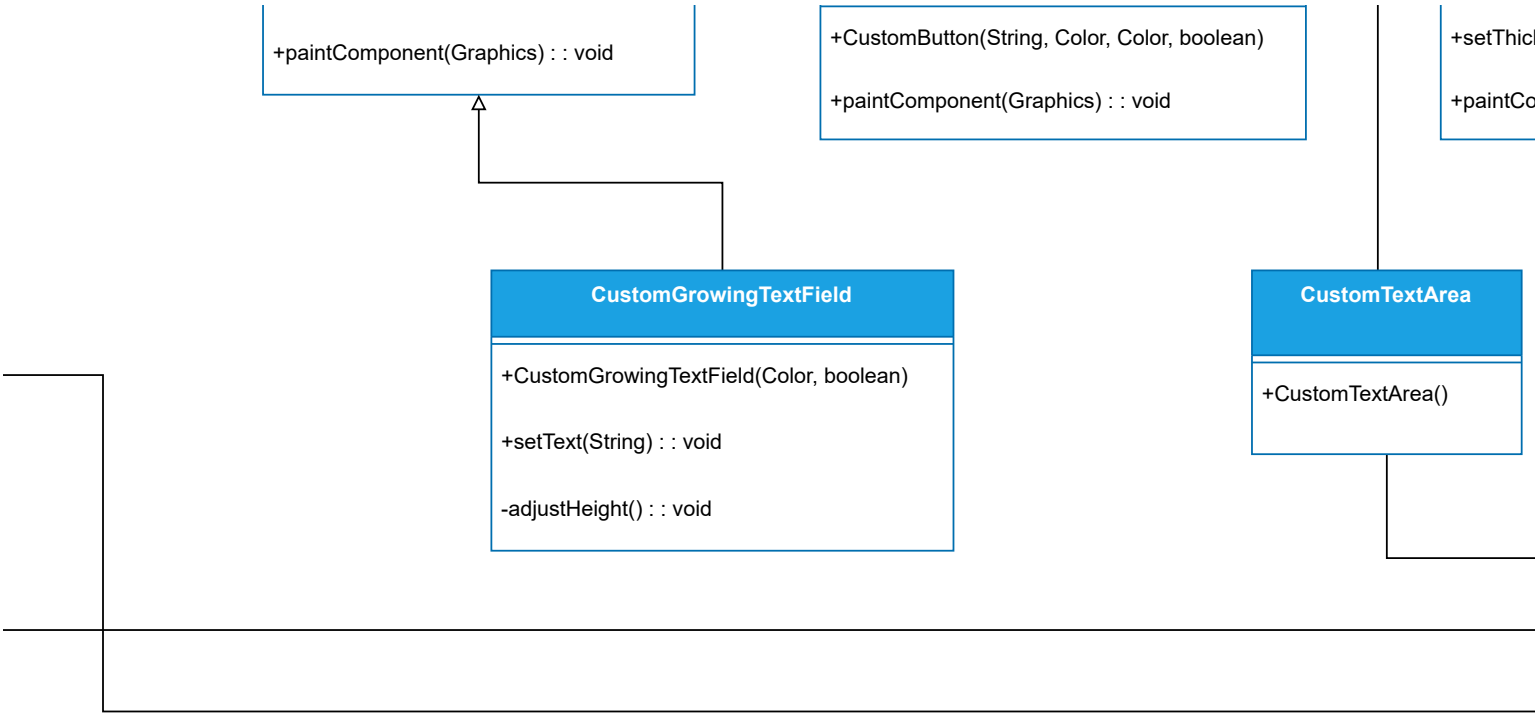
View
eld
er
ner) : : void
tener) : : void
: void
nel
el
ring) : : JTextField
eld
QuizTakingView
-COLOR_BG_OUTER : Color
-COLOR_BG_CARD : Color
-COLOR_TEXT_WHITE : Color
-OPTION_COLORS : Color[]
-COLOR_OPT_CORRECT : Color
-COLOR_OPT_WRONG : Color
-COLOR_DISABLED : Color
-COLOR_NAV_BG : Color
-COLOR_FINISH_BG : Color
-COLOR_CIRCLE_DEFAULT : Color
-COLOR_CIRCLE_GREEN : Color
-COLOR_CIRCLE_RED : Color
-questionLabel : JLabel
-optionButtons : JButton[]
-questionCircles : JButton[]
-btnPrev : JButton
-btnNext : JButton
-btnSubmit : JButton
-selectedOptionIndex : int
+QuizTakingView()
+setupQuestionNavigator(int) : : void
+addNavigationListener(ActionListener) : : void
+setQuestionText(String) : : void
+setOptions(String[]) : : void
+getSelectedOptionIndex() : : int
+setSelectedOption(int) : : void
+setQuestionStatus(int, int) : : void
+getBtnNext() : : JButton
+getBtnPrev() : : JButton
+getBtnSubmit() : : JButton
-createOptionButton(String, int) : : JButton
-createCustomButton(String, Color, Color, int, int, int) : : JButton
-createCircleButton(String) : : JButton
CustomHoverButton
Rounde

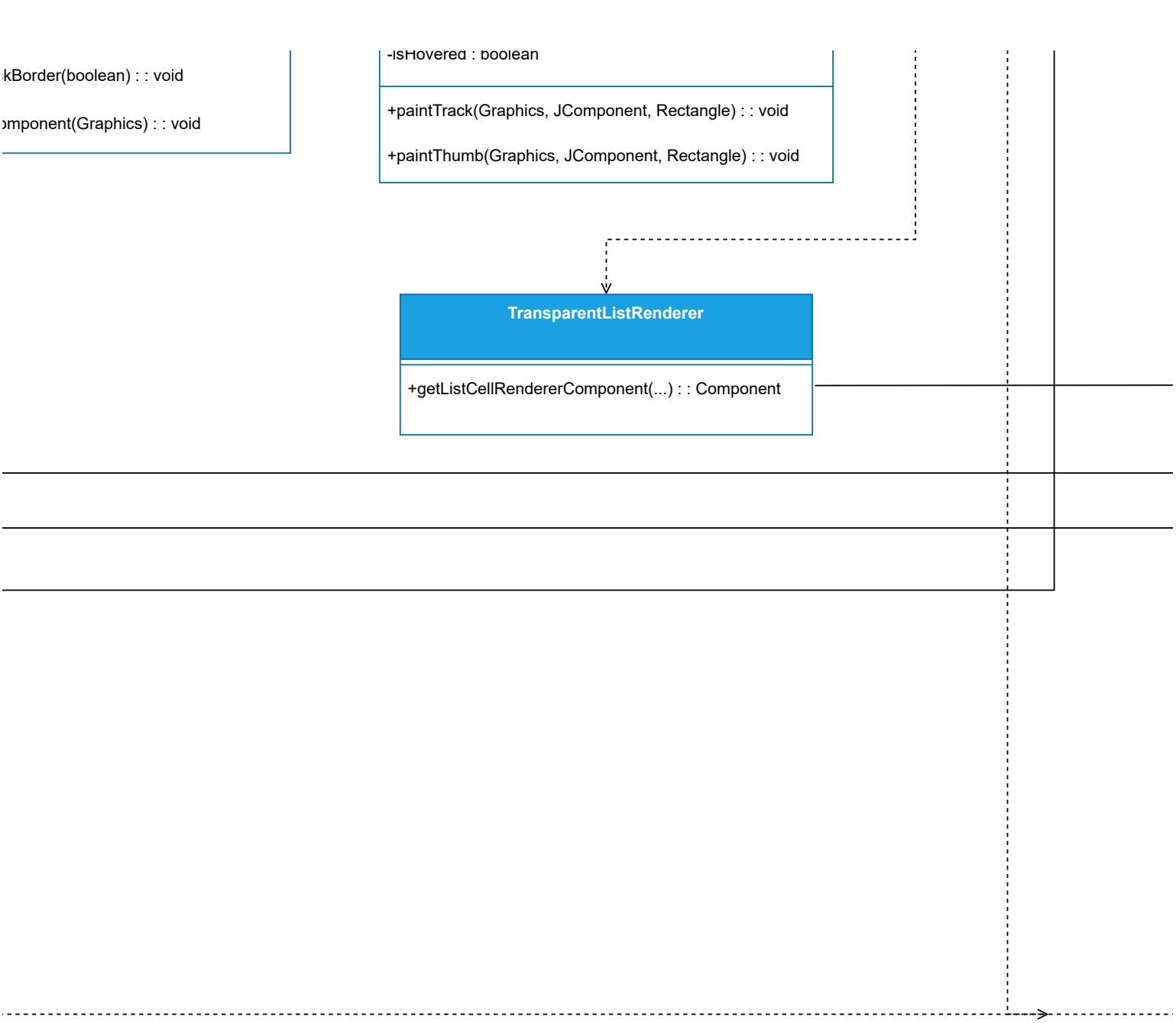

StudentDashboardView
-welcomeLabel : JLabel
-avgScoreLabel : JLabel
-quizButtonPanel : JPanel
-resultTable : JTable
-tableModel : DefaultTableModel
-logoutButton : JButton
-downloadReportBtn : JButton
-topPanel : JPanel
-logoLabel : JLabel
-BASE_W : double = 1280.0F {final}
-BASE_H : double = 720.0f {final}
-tabbedPane : JTabbedPane
-selectLabel : JLabel
+StudentDashboardView()
-applyResponsiveScaling() : : void
+setStudentName(String) : : void
+updateAverageScore(double) : : void
+addQuizButton(String, ActionListener) : : void
+clearQuizButtons() : : void
+addResultRow(String, double, double, String) : : void
+addLogoutListener(ActionListener) : : void
+addDownloadListener(ActionListener) : : void
-createStyledScrollPane(Component) : : JScrollPane
CustomScrollBarUI
-trackColor : Color
-thumbColor : Color
-thumbHoverColor : Color
-isHovered : boolean
+CustomScrollBarUI()
#configureScrollBarColors() : : void
#createDecreaseButton(int) : : JButton
#createIncreaseButton(int) : : JButton
#paintTrack(Graphics, JComponent, Rectangle) : : void
#paintThumb(Graphics, JComponent, Rectangle) : : void
#installListeners() : : void
dPanel

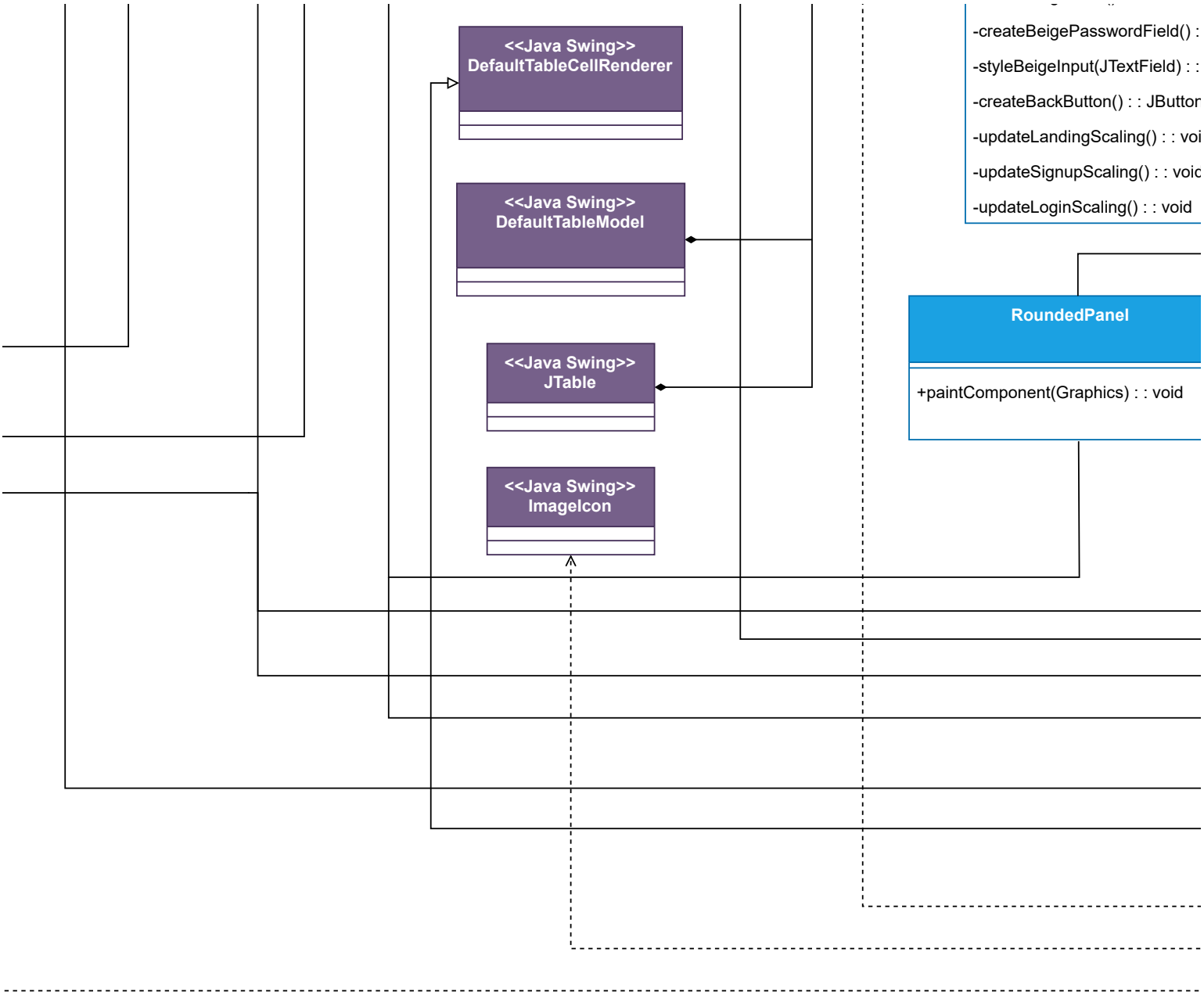

+ renameQuizScores(String, String) : void
StudentService
- fileManager : StudentFileManager
- students : List<Student>
+ getStudentById(String) : Student
+ updateStudentProgress(Student) : void
- saveChanges() : void
+ getAllStudents() : List<Student>
TeacherService
- fileManager : TeacherFileManager
- teachers : List<Teacher>
+ getTeacherById(String) : Teacher
+ createQuiz(Teacher, Quiz) : void
- updateTeacherRecord(Teacher) : void
FontUtil
<<final>>
- registered : boolean = false {static, volatile}
- FontUtil()
- ensureRegistered() : void {static}
+ montserrat(float, int, Font) : Font {static}

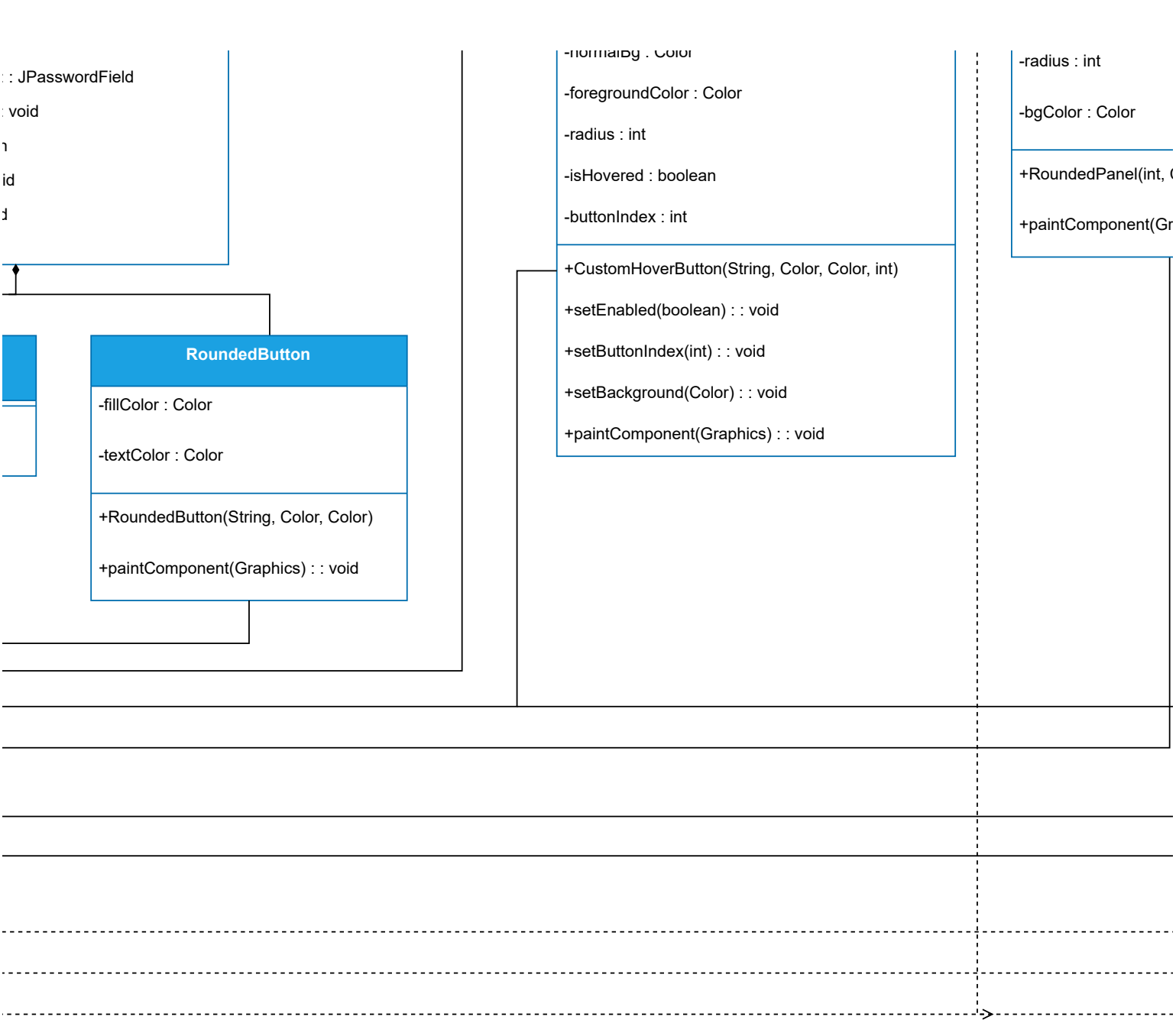
Service

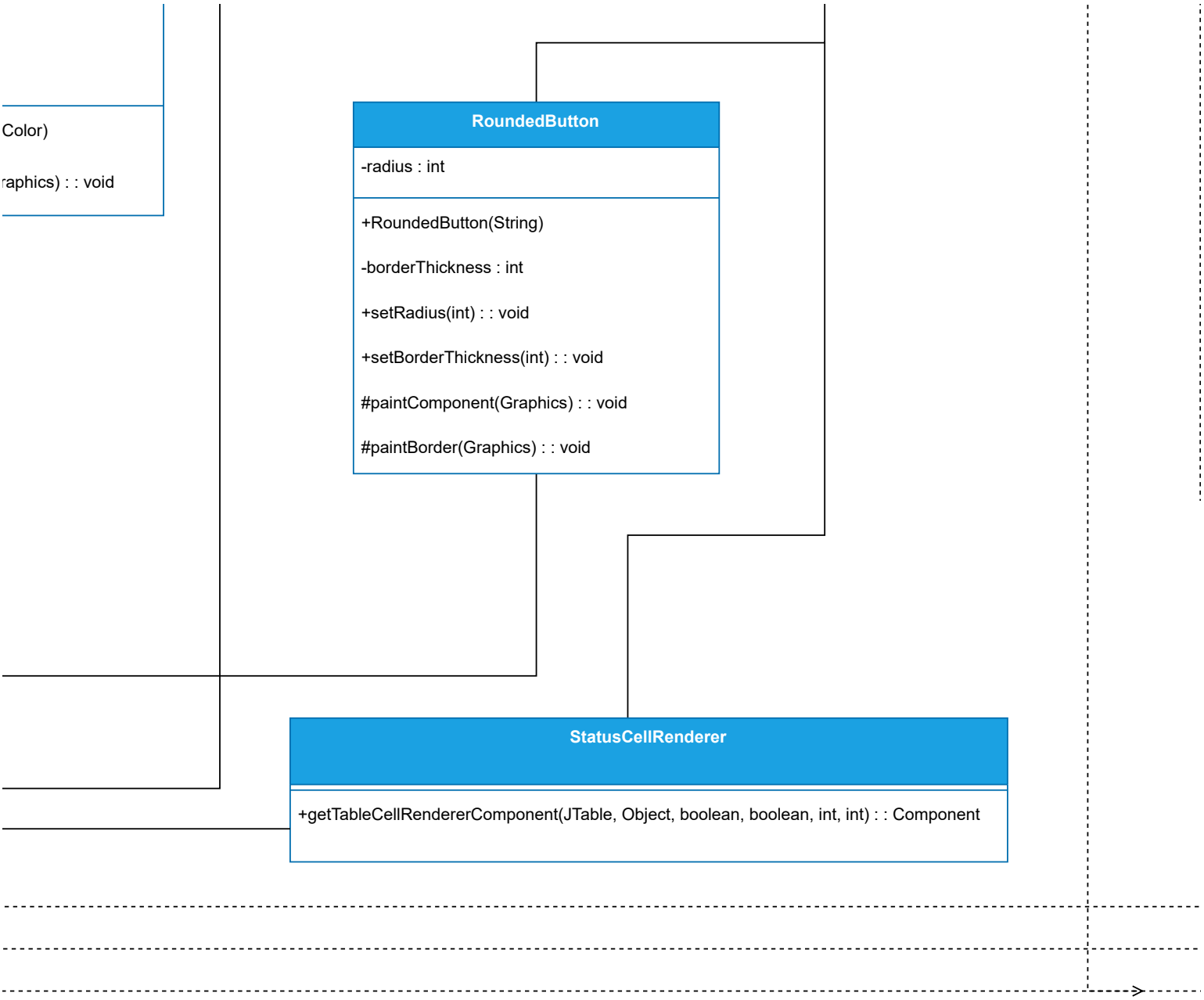

CustomScrollBarUI
-trackColor : Color
-thumbColor : Color
-thumbHoverColor : Color
-isHovered : boolean
#configureScrollBarColors() : : void
#createDecreaseButton(int) : : JButton
#createIncreaseButton(int) : : JButton
#paintTrack(Graphics, JComponent, Rectangle) : : void
#paintThumb(Graphics, JComponent, Rectangle) : : void
#installListeners() : : void
RoundedButton
-radius : int
-borderThickness : int
+RoundedButton(String)
+setRadius(int) : : void
+setBorderThickness(int) : : void
#paintComponent(Graphics) : : void
#paintBorder(Graphics) : : void

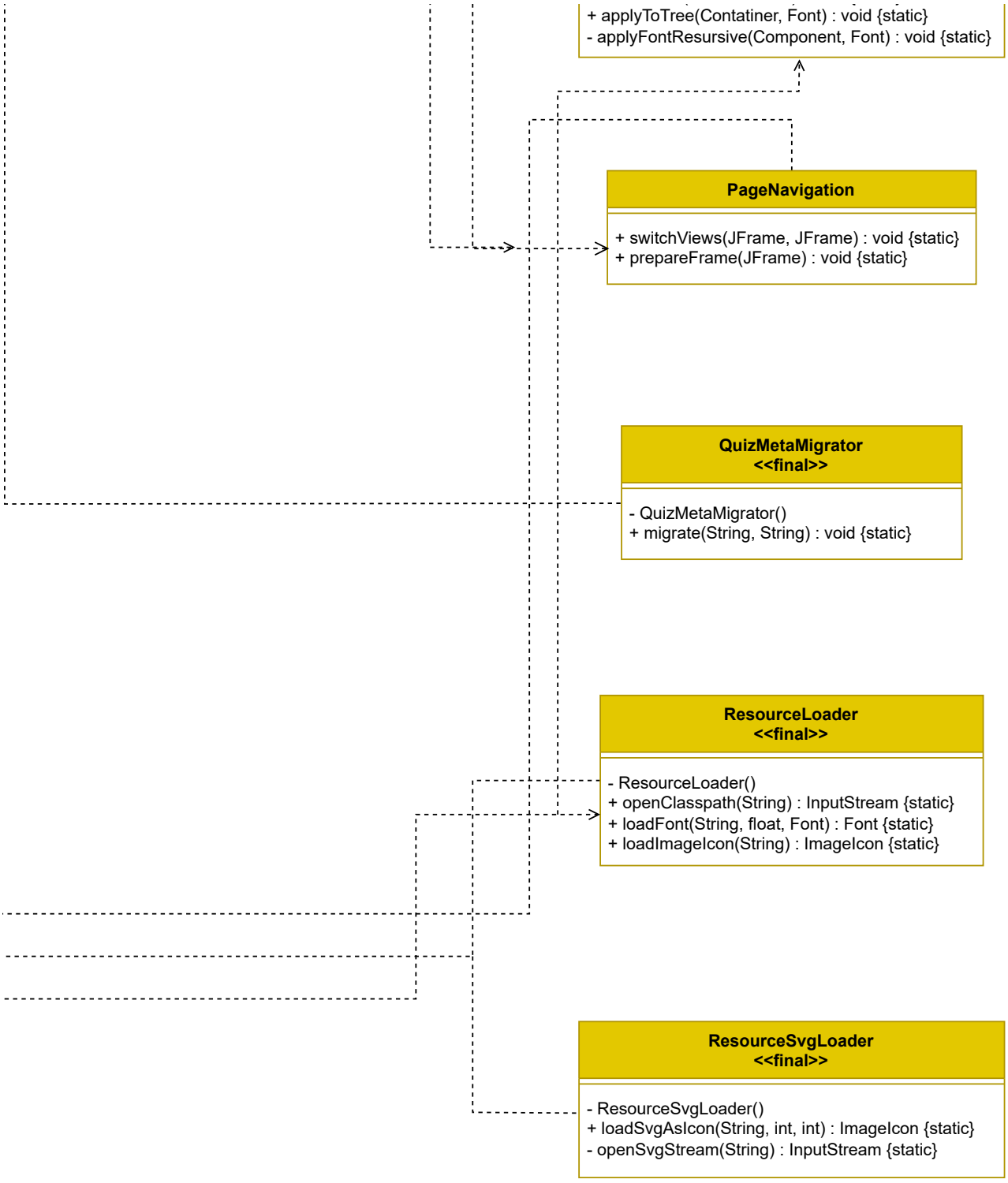

+paintComponent(Graphics) : : void
+CustomButton(String, Color, Color, boolean)
+paintComponent(Graphics) : : void
+setThicl
+paintCo
CustomGrowingTextField
+CustomGrowingTextField(Color, boolean)
+setText(String) : : void
-adjustHeight() : : void
CustomTextArea
+CustomTextArea()

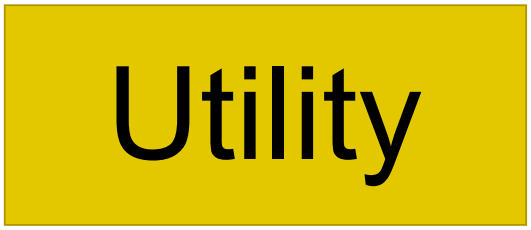

kBorder(boolean) : : void
ɔmponent(Graphics) : : void
-isHovered : boolean
+paintTrack(Graphics, JComponent, Rectangle) : : void
+paintThumb(Graphics, JComponent, Rectangle) : : void
TransparentListRenderer
+getListCellRendererComponent(...) : : Component


<<Java Swing>>
DefaultTableCellRenderer
<<Java Swing>>
DefaultTableModel
<<Java Swing>>
JTable
<<Java Swing>>
ImageIcon
-createBeigePasswordField() :
-styleBeigeInput(JTextField) : :
-createBackButton() : : JButtor
-updateLandingScaling() : : voi
-updateSignupScaling() : : voic
-updateLoginScaling() : : void
RoundedPanel
+paintComponent(Graphics) : : void


: JPasswordField
: void
id
RoundedButton
-fillColor : Color
-textColor : Color
+RoundedButton(String, Color, Color)
+paintComponent(Graphics) : : void
-foregroundColor : Color
-radius : int
-isHovered : boolean
-buttonIndex : int
+CustomHoverButton(String, Color, Color, int)
+setEnabled(boolean) : : void
+setButtonIndex(int) : : void
+setBackground(Color) : : void
+paintComponent(Graphics) : : void
-radius : int
-bgColor : Color
+RoundedPanel(int,
+paintComponent(Gr


Color)
raphics) : : void
RoundedButton
-radius : int
+RoundedButton(String)
-borderThickness : int
+setRadius(int) : : void
+setBorderThickness(int) : : void
#paintComponent(Graphics) : : void
#paintBorder(Graphics) : : void
StatusCellRenderer
+getTableCellRendererComponent(JTable, Object, boolean, boolean, int, int) : : Component


+ applyToTree(Contatiner, Font) : void {static}
- applyFontResursive(Component, Font) : void {static}
PageNavigation
+ switchViews(JFrame, JFrame) : void {static}
+ prepareFrame(JFrame) : void {static}
QuizMetaMigrator
<<final>>
- QuizMetaMigrator()
+ migrate(String, String) : void {static}
ResourceLoader
<<final>>
- ResourceLoader()
+ openClasspath(String) : InputStream {static}
+ loadFont(String, float, Font) : Font {static}
+ loadImageIcon(String) : ImageIcon {static}
ResourceSvgLoader
<<final>>
- ResourceSvgLoader()
+ loadSvgAsIcon(String, int, int) : ImageIcon {static}
- openSvgStream(String) : InputStream {static}


Utility