



Application

+ API\_KEY\_FILE\_NAME:String  
+ myApiKey:String  
+ rootUrl:String

+ main(String[] args):void

AuthenticationView

+ panel:Jpanel  
+ userLabel:JLabel  
+ userText:JTextField  
+ passwordLabel:JLabel  
+ passwordText:JPasswordField  
+ loginButton:JButton  
- PREFERRED\_SIZE:Dimension  
- MAX\_INPUT\_LENGTH:int

+ AuthenticationView(Display display)  
- placeComponents():void  
+ getUsername():String  
+ getPassword():String

ContractDurationFrame

- three:JRadioButtonMenuItem  
- six:JRadioButtonMenuItem  
- twelve:JRadioButtonMenuItem  
- twtyfour:JRadioButtonMenuItem  
- longer:JRadioButtonMenuItem  
- longerduration:JTextField  
- duration:ButtonGroup  
- selectedDuration:int

+ ContractDurationFrame()  
+ show():void  
- reload():void  
+ getselecteddduration():int  
- isNumeric(String s):Boolean  
+ getDuration():int

Controller

Display

- frame:JFrame  
+ FRAME\_WIDTH:int  
+ FRAME\_HEIGHT:int

+ Display()  
+ createPanel(JComponent panel):void  
+ setVisible():void  
+ removePanel(JComponent panel):void  
+ closeWindow():void

NearExpiryContractFrame

+ contracts:List<Contract>

+ NearExpiryContractFrame(List<Contract> contracts)  
+ show():void

<<interface>>  
MessageView

+ getLogArea(List<String> messageLog)  
+ getChatBox()

HomeView

- user:User  
+ panel:Jpanel  
+ studentButton:JButton  
+ tutorButton:JButton  
+ logout:JButton

+ HomeView(Display display, User user)  
- placeComponents():void

NotificationFrame

- message:String

+ NotificationFrame(String message)  
+ show():void

<<interface>>  
NavigationPane

+ showNavigationPane(Display display, JPanel parent, JButton[] buttons):void

<<interface>>  
MouseClickedListener

+ mousePressed(MouseEvent e):void  
+ mouseReleased(MouseEvent e):void  
+ mouseEntered(MouseEvent e):void  
+ mouseExited(MouseEvent e) :void

Utils

- mapper:ObjectMapper  
+ format:SimpleDateFormat  
+ SUCCESS\_CONTRACT\_CREATION:NotificationFrame  
+ SUCCESS\_BID\_CREATION:NotificationFrame  
+ INSUFFICIENT\_COMPETENCY:NotificationFrame  
+ SUCCESS\_MATCH\_REQUEST:NotificationFrame  
+ PLEASE\_FILL\_IN:NotificationFrame  
+ INVALID\_FIELDS:NotificationFrame  
+ REACHED\_CONTRACT\_LIMIT:NotificationFrame  
+ CONTRACT\_SIGNED:NotificationFrame  
+ OTHER\_PARTY\_PENDING:NotificationFrame  
+ INVALID\_USER:NotificationFrame  
+ CANNOT\_CREATE\_BID:NotificationFrame  
+ CANNOT\_MODIFY\_BID:NotificationFrame

+ formatDate(String datetime):Date

<<abstract>>  
View

- display:Display  
- homeButton:JButton  
+ activePanel:RemovablePanel

+ View(Display display)  
+ display():void  
- createPanel(LayoutManager layout:JPanel  
- createPanel():JPanel  
- placeComponents():void  
- setSwitchPanelListener(RemovablePanel panel, Component comp, View newView):void  
+ mouseClicked(MouseEvent e):void  
- setSwitchPanelListener(JPanel main, Component comp, RemovablePanel newPanel):void  
+ mouseClicked(MouseEvent e):void  
- addMouseListener(JComponent component, MouseClickListener listener):void

RemovablePanel

+ RemovablePanel()  
+ RemovablePanel(LayoutManager layout)  
+ onRemoved():void  
+ onAttached():void

<<interface>>  
Observer

+ update(EventType e):void



ContractReuse
- contracts:List<Contract> - contractList: JList<Contract>
+ ContractReuse(List<Contract> contracts) + placeComponents():void + update(EventType e):void + setReuseContractListener(MouseClickListener listener):void + getSelectedContract():Contract

StudentAllBids

ReviseContractTerm

CreateSameTutorContract

StudentAllContracts

StudentResponseView

StudentMessageView

StudentView
- user:User + createMatchRequest:JButton + viewAllBids:JButton + viewContracts:JButton + reuseContracts:JButton + main: RemovablePanel
+ StudentView(Display display, User user) - placeComponents():void

CreateRequest







