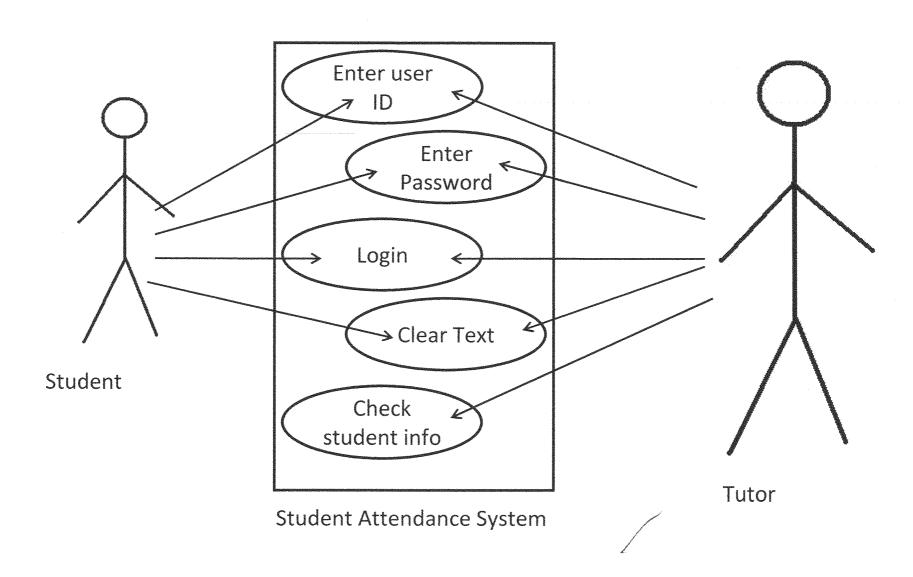
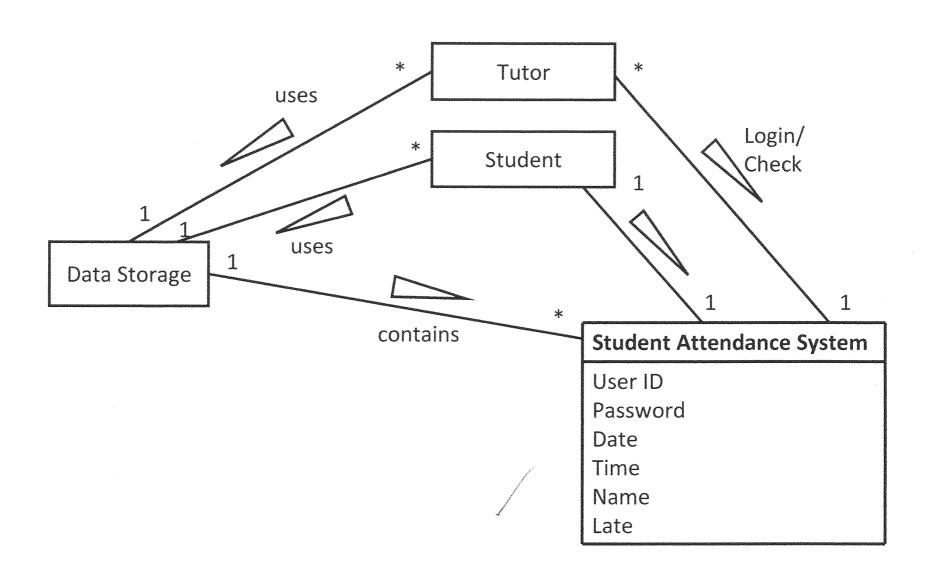
Case Diagram



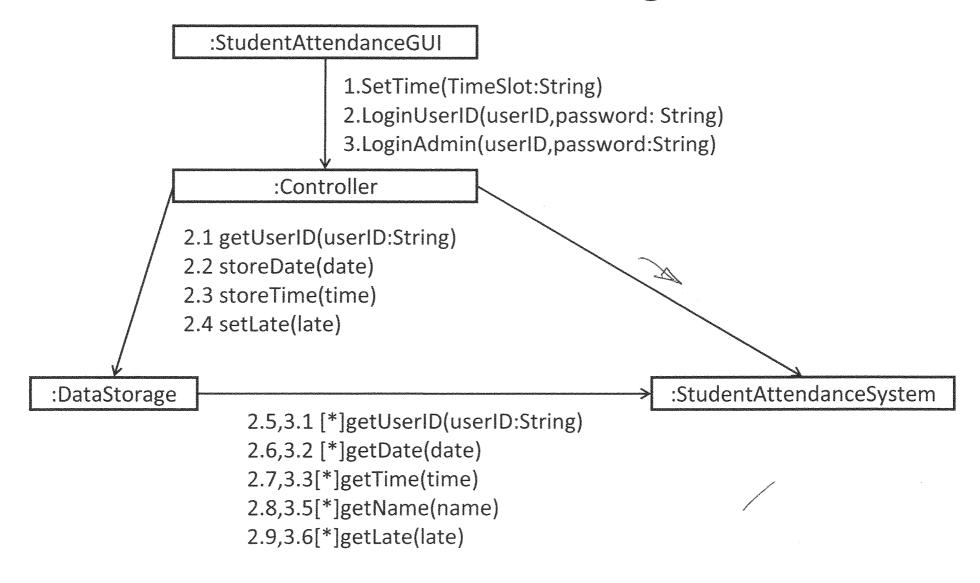
Use-Case

	User		System
		1	Prompt for lesson start time
2	Set lesson start time	3	Prompt for user ID & password
3	Enter user ID & password	4	Check if user ID & password is valid (invaild)
		5	Prompt for user ID & password
6	Enter user ID & password	7	Check if user ID & password is valid (valid)
		8	Check if the user a tutor or student (student)
		9	Display student ID, time and date of login. And store it in dataStorage
10	Enter user ID & password	10	Check if user ID & password is valid (valid)
		11	Check if the user a tutor or student (tutor)
		12	Display admin page & prompt for button to be press
13	Click button show with radio button at student ID	14	Retrieve and display student ID , time & date of login
15	Click button show with radio button at student name	16	Retrieve and display student name, time & date of login.
15	Click button exit with radio button at student ID	16	Retrieve and display student ID, time & date of login, including slotting the late, absent & present student
17	Click button exit with radio button at student name	18	Retrieve and display student name, time & date of login, including slotting the late, absent & present student
		19	End this session

Conceptual Model



Collaboration Diagram



Class Diagram

StudentAttendanceGUI

- -f0,f1,f2,f3,f4:JFrame
- -p0,p1,p2,p3,p4,p5:Jpanel
- -lTitle,lUser,lPW:Jlabel
- -pPW:JPasswordField
- -bLogin,bClear:Jbutton
- -taDisplay,taLate,taPresent,taAbsent:JTextArea
- -bShow,bExit:Jbutton
- -rbName,rbID:JRadioButton
- -bgNameOrID:ButonGroup
- -lTime,lWelcome:Jlabel
- -cbTlme:JComboBox
- -bSetTime:Jbutton
- +StudentAttendanceGUI()
- +exit()
- +LoginHandler
- +ClearHandler
- +ButtonHandler
- +ShowHandler
- +ExitHandler
- +TimeHandler

StudentAttendanceSystem

- -user:String
- -pass:String
- -date:String
- -time:String
- -name:String
- -late:boolean
- +StudentAttendanceSystem()
- +StudentAttendanceSystem(String,String,String)
- +getUser():String
- +getPass():String
- +getDate():String
- +getTime():String
- +getName():String
- +getLate():boolean
- +setUser(String):void
- +setPass(String):void
- +setDate(String):void
- +setTime(String):void
- +setName(String):void
- +setLate(boolean):void

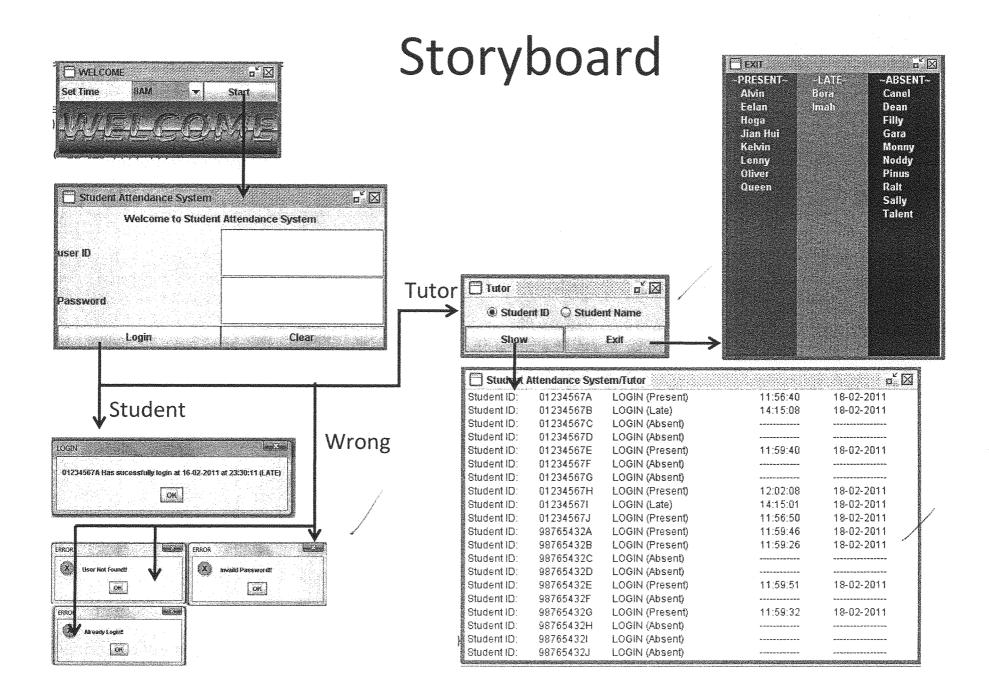
Class Diagram (con't)

DataStorage

- -data:Vector
- +DataStorage()
- +storeData(sas:StudentAttendanceSystem)
- +replaceData(sas:StudentAttendanceSystem)
- +getVectorSize()
- +validateUser(user:String)
- +checkTutor(user:String)
- +retrieveUser(user:String)
- +retrieveUser(i:int)
- +read(n:String)

Controller

- -ds:DataStorage
- -sas:StudentAttendanceSystem
- +Controller()
- +retrieveUser(user:String)
- +retrieveUser(i:int)
- +getVectorSize()
- +replaceData(sas:
- StudentAttendanceSystem)
- +retrieveUserType(user,pass:String)
- +read()



Flowchart

