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PROJECT NAME :Parent In Class

Definition

Parent in class system is a system that will help a parent to know the information of his/her child at school as if he/she is there.

All information of child like marks, behaviour, attendance, homework and all information related to a child.

Those information will be uploaded and updated daily so that a parent will be able to see daily activities of his/her child at school.

The parent will be able to view the information of his/her child only and comment.

Parent in class is an online system that helps parents to access what goes on with his/her child at schools especially in class and allow them interact with teachers and school leaders (parent in class). To summarise parents will be in class virtually.

Goals and objectives

This system my child at school will help a parent to know the information of his/her child as if she/he is there and it will

help student in their studies because the parent knows the whole information and knows what to contribute to the child's studies.

- It will keep parent updated
- It will boost student and parent engagement
- It will help to promote communication
- It will allow parent to access student information
- It will provide absent note

The problems the future system needs to solve

The problem this System will solve is the lack of parent particitipation in learning of their children .

As we know parent play big role in child education because parents are the first teachers of their children.

It is important as a parent to have an aye on the child's activity in school and home and give timely advice and correct any abnormal behaviour and inspire them to be good.

This system will help a parent in easy way to know the information of their children

2. Design

Functional requirements

- Admin can register another admin
- Admin can update any info to the system
- Admin can add or delete student
- Admin can add or delete parent
- Admin can add or delete teacher
- Admin can modify any info to the system

- Parent can register/signup with the system
- Parent can log into the system
- Parent can access his child's information regarding academics
- Parent can print out the documents (His child's report, school document, etc.)
- Parent can leave comment or request
- Teacher can register with the system
- Teacher can add student's marks
- Teacher can print out some reports
- Teacher can leave comment for certain parent
- Teacher/school leader can upload announcements

3. Development

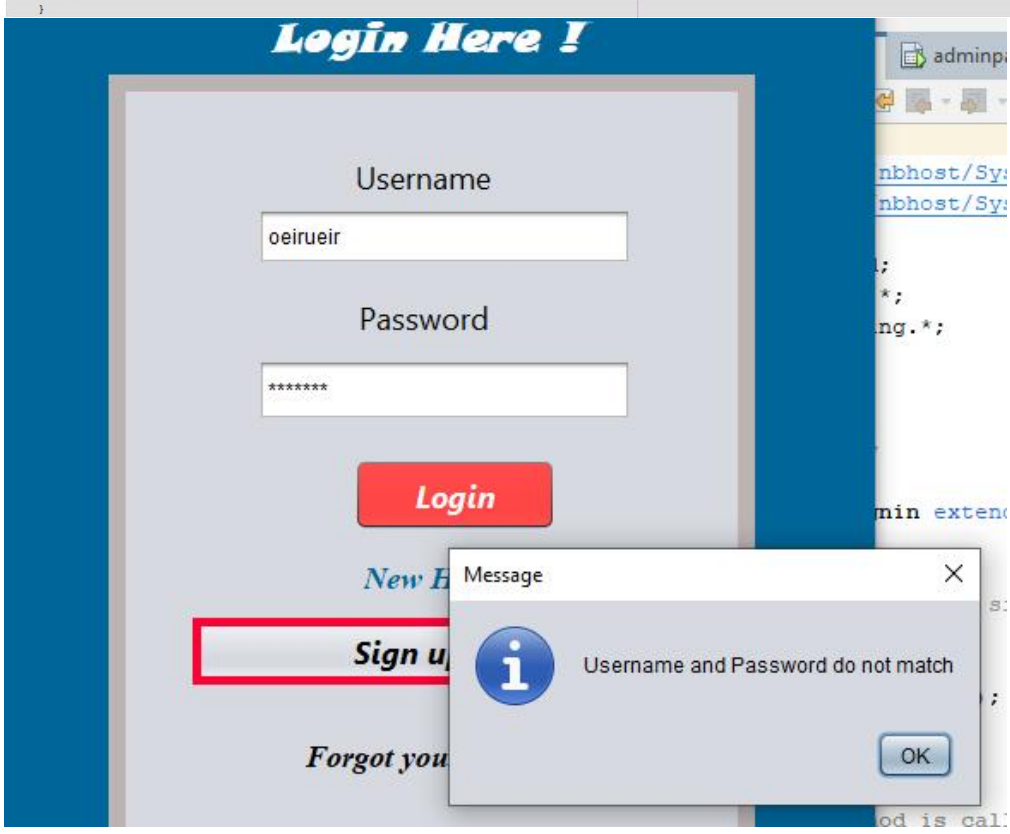
As the system is configured to serve for the academic purpose, its backend looks like this:

- The system, is built in the way that no unauthorized user can access it (in other words it is secured)

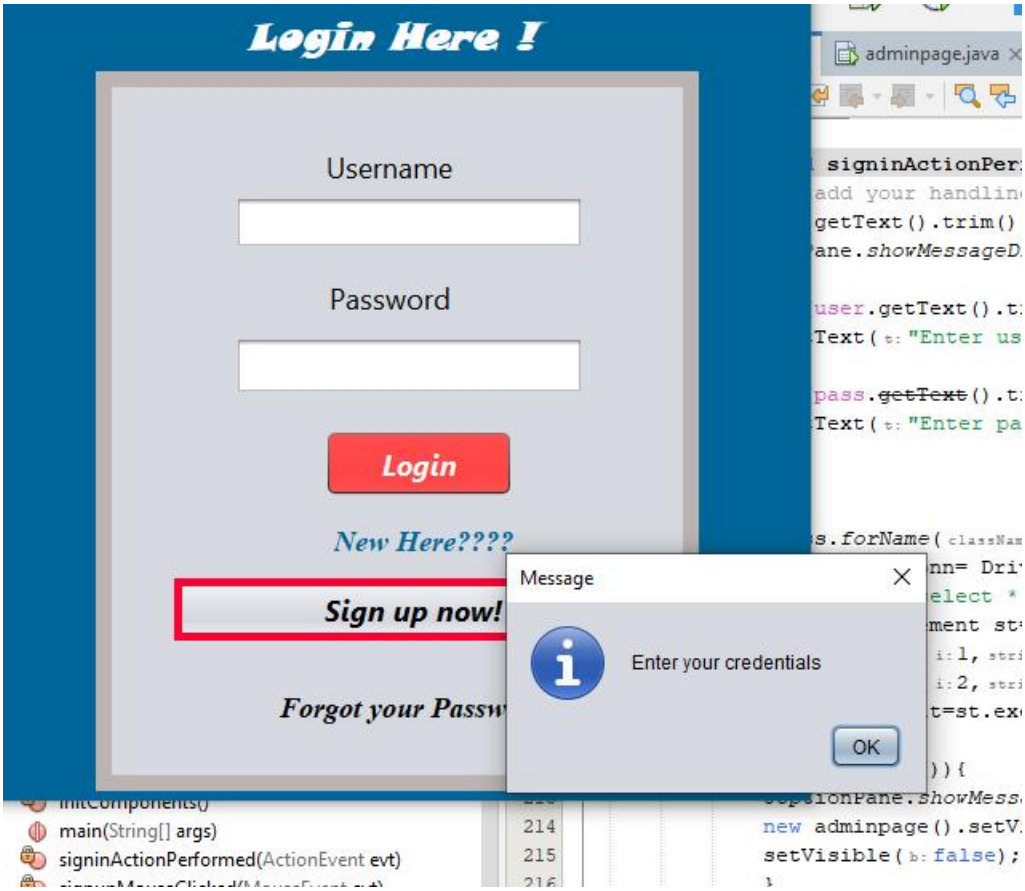
```
private void signinActionPerformed(java.awt.event.ActionEvent evt) {
    // TODO add your handling code here:
    if(user.getText().trim().isEmpty()&&pass.getText().trim().isEmpty()){
    JOptionPane.showMessageDialog( parentComponent: null, message: "Enter your credentials");
    }
    else if(user.getText().trim().isEmpty()){
    user.setText( s: "Enter username please");
    }
    else if(pass.getText().trim().isEmpty()){
    pass.setText( s: "Enter password please");
    }
    else{
   try{
        Class.forName( className: "com.mysql.jdbc.Driver");
        Connection conn= DriverManager.getConnection( url: "jdbc:mysql://localhost:3306/my_child", user: "root", password: "");
        String sql="select * from parent where username=? and password=?";
        PreparedStatement st=conn.prepareStatement( string: sql);
        st.setString( i: 1, string: user.getText());
        st.setString( i: 2, string: pass.getText());
        ResultSet rslt=st.executeQuery();

        if(rslt.next()){
        JOptionPane.showMessageDialog( parentComponent: null, message: "Login successfull");
        new adminpage().setVisible( b: true);
        setVisible( b: false);
        }
        else{
        JOptionPane.showMessageDialog( parentComponent: null, message: "Username and Password do not match");
        }


        }
    catch(ClassNotFoundException | SQLException e){
    JOptionPane.showMessageDialog( parentComponent: null,"Something went wrong"+e);
    }
    }
}
```



- Parent is limited to access the info of other children other than his/her i.e. parent will access any child's info by using children's identity
- The system verifies the user credentials to allow access to the system



- At home page of the parent, parent can view student marks, and teacher's comment regarding discipline
- At teacher's page, teacher can upload student's marks and comment accordingly
- At the admin page, admin can add, delete or modify user's information
- The system can generate kinds of report accordingly
- We have used NetBeans as platform that also helped as run and test our codes
- SQL also was used to create database for the system

There are different errors that can occur occur while running the system that's why you need to test the system before deploying it.

4.Testing

In our system we have faced many errors of different type and many bugs.
Bellow are different types of error:

Syntax errors: These are errors that occur when the code is not written correctly and the Java compiler is unable to understand it. These errors can be fixed by reviewing the code and correcting any syntax errors.

Logical errors: These are errors that occur when the code is written correctly but the logic is not correct. For example, a function to calculate the total bill may be incorrect. Logical errors can be fixed by reviewing the code and identifying the incorrect logic, then correcting it.

Runtime errors: These are errors that occur when the code is executed and there is an issue with the runtime environment, such as a missing library or class. These errors can be fixed by reviewing the code and identifying the missing resource, then adding it to the environment.

Concurrency errors: These are errors that occur when multiple threads are accessing the same resource simultaneously, such as a database or file, and there is a conflict or race condition. These errors can be fixed by implementing proper synchronization techniques, such as using locks or semaphores, to control access to the shared resource.

Input validation errors: These are errors that occur when the system does not properly validate user input, such as allowing a user to enter negative nothing in input field. These errors

can be fixed by implementing proper input validation checks in the code.

Security errors: These are errors that occur due to lack of proper security measures, such as not properly encrypting sensitive data. These errors can be fixed by implementing proper security measures, such as using encryption and secure authentication methods.

User interface errors: These are errors that occur in the user interface, such as buttons not working as intended or incorrect labels being displayed. These errors can be fixed by reviewing the user interface design and ensuring that it is functioning as intended.

It's important to have a thorough testing process in place to catch these bugs and fix them before the final release of the software.

5.Deployment

System deployment involves the transition of the capability to the ultimate end-user, as well as transition of support and maintenance responsibilities to the post-deployment support organization or organizations.

But we have deployed our system using pc software application called NetBeans IDE, the way you can Install it, is having the application we deployed and then run it as well.

- JDK
- NETBEANS
- XAMPP
- And GIT HUB

These are what helped us in development, installation, testing and deployment

we did system testing and we found different errors where user entered the system without entering a password but we have corrected it now you can’t enter in system without entering your username and password that matches the one in database

There was many errors and bugs but we have handled it now system is working well.