

# CS206 Miniproject Report

Accreditation Compliance System

April 21, 2020

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# Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Project Description</b>	<b>2</b>
<b>3</b>	<b>Tools and technology used</b>	<b>2</b>
<b>4</b>	<b>Screens</b>	<b>3</b>
4.1	Login screen . . . . .	3
4.2	Screen 1 . . . . .	4
4.3	Screen 2 . . . . .	6
<b>5</b>	<b>Functional requirements</b>	<b>7</b>
<b>6</b>	<b>Conclusion</b>	<b>11</b>

# **1 Introduction**

The purpose of the project which is titled as "Accreditation Compliance System" is to provide a GUI application for managing the accreditation compliance system in a university. The application has two roles defined as principal and department staff in the access hierarchy.

## **2 Project Description**

The main function of the system is to validate the documents completed by each department by the principal of the institution for producing before the accreditation team.

Each department has to complete the checklist of required documents to submit it for validation. The updated status of each document is stored in the database. The principal can view the progress of each department and validation is done only if all the documents in the checklist are completed by the department.

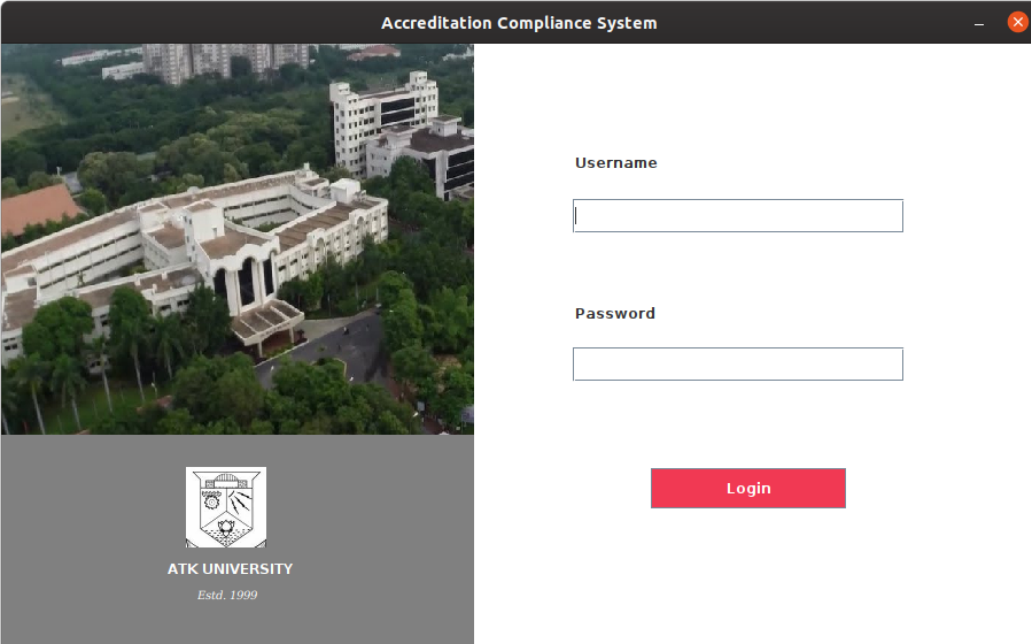
## **3 Tools and technology used**

- Java AWT and Swing for building the GUI application.
- MySQL and phpmyAdmin for storing tables containing user level information, department level information and checklists.

## 4 Screens

### 4.1 Login screen

- Text Boxes for username and password and login button are provided.

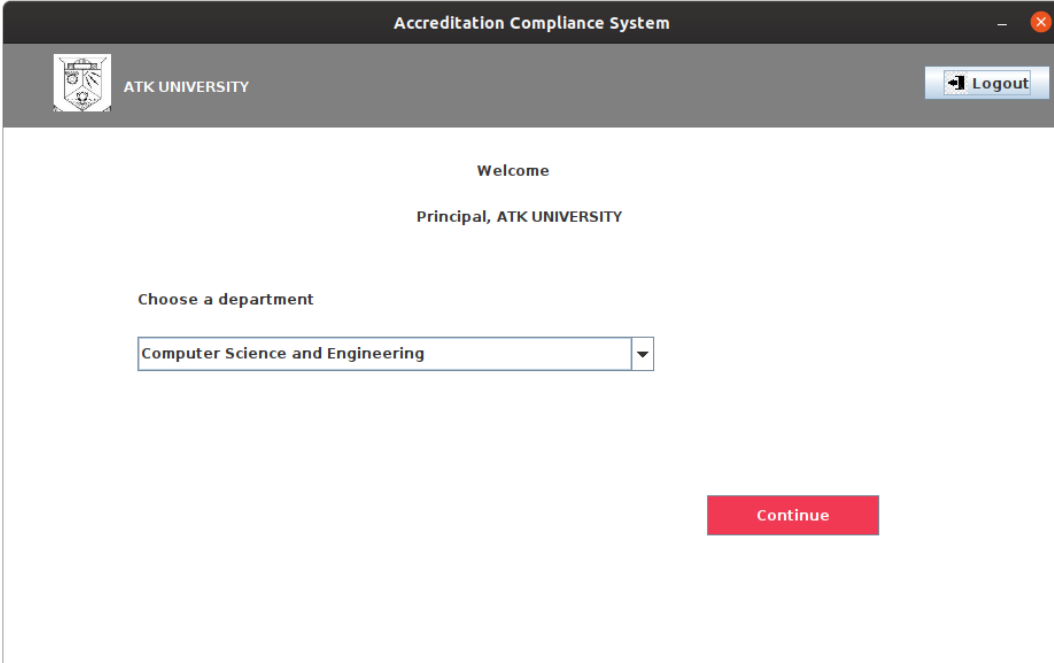


The screenshot displays a web application window titled "Accreditation Compliance System". The interface is split into two main sections. On the left, there is a vertical banner. The top half of the banner features an aerial photograph of a large, modern university building with a central courtyard, surrounded by lush green trees. The bottom half of the banner is a solid grey rectangle containing the ATK University logo, which is a shield-shaped emblem with various symbols inside. Below the logo, the text "ATK UNIVERSITY" is written in a bold, sans-serif font, and "Estd. 1999" is written in a smaller, italicized font below it. On the right side of the window, the login form is presented on a white background. It includes a label "Username" above a single-line text input field. Below this is a label "Password" above another single-line text input field. At the bottom of the form area, there is a prominent red rectangular button with the word "Login" in white text.

## 4.2 Screen 1



To view information for the principal login.

- The screen provides a list in the form of a combobox to select a department.



The screenshot shows a web application window titled "Accreditation Compliance System". The header bar is dark grey and contains the ATK UNIVERSITY logo on the left and a "Logout" button on the right. The main content area is white and displays a "Welcome" message to the "Principal, ATK UNIVERSITY". Below this, there is a prompt "Choose a department" followed by a combobox menu. The combobox currently displays "Computer Science and Engineering" with a downward arrow on the right. At the bottom right of the main content area, there is a red "Continue" button.

- Once the department is selected, the new screen populates the checklist, the status of each document and the validate button. The progress bar is also shown to view the progress of the department to the principal. (The progress bar only shows 0,25,50,75 and 100)



ATK UNIVERSITY

Accreditation Compliance System

Logout

Department of Computer Science and Engineering, ATK UNIVERSITY

Progress:

75%


Sl.No	Documents	Status
1	Accreditation reports of past visits	Completed
2	Curriculum, POs, PEOs, Mission and Vision statements	Completed
3	List of students who cleared the program in 4 years	Completed
4	Average Grade point (last 3 years data of students' CGPA)	Completed
5	Placements and higher studies data	Completed
6	Department budget and allocations	Pending
7	Details of faculty student ratio	Pending
8	Direct and indirect assessment to show attainment of POs and PSOs	Pending

Validate

### 4.3 Screen 2

- This is only visible for department login.
- Checklist is provided and checkboxes beside them to edit. Update button is provided. An edit / refresh button to fetch updated value from database for further corrections.

Accreditation Compliance System

 ATK UNIVERSITY 

Logout

Department of Computer Science and Engineering, ATK UNIVERSITY

Sl.No	Required Documents	
1	Accreditation reports of past visits	<input checked="" type="checkbox"/>
2	Curriculum,POs,PEOs,Mission and Vision statements	<input checked="" type="checkbox"/>
3	List of students who cleared the program in 4 years	<input checked="" type="checkbox"/>
4	Average Grade point (last 3 years data of students' CGPA)	<input checked="" type="checkbox"/>
5	Placements and higher studies data	<input checked="" type="checkbox"/>
6	Department budget and allocations	<input type="checkbox"/>
7	Details of faculty student ratio	<input type="checkbox"/>
8	Direct and indirect assessment to show attainment of POs and PSOs	<input type="checkbox"/>

Update

Refresh

## 5 Functional requirements

- Each department to have a separate login(username and password). Check for username and password match in Database (DB). If matched, allow login else display error message.

Dept.id	Dept.name	Username	Password
D01	Computer Science and Engineering	computerscience@cet	cetcse3000
D02	Mechanical Engineering	mechanical@cet	cetmech3000
D03	Electronics and Communication Engineering	electronics@cet	cetece3000
D04	Electrical and Electronics Engineering	electrical@cet	ceteee3000
D05	Civil Engineering	civil@cet	cetcivil3000

Figure 1: Snapshot from the database table that holds the login information.

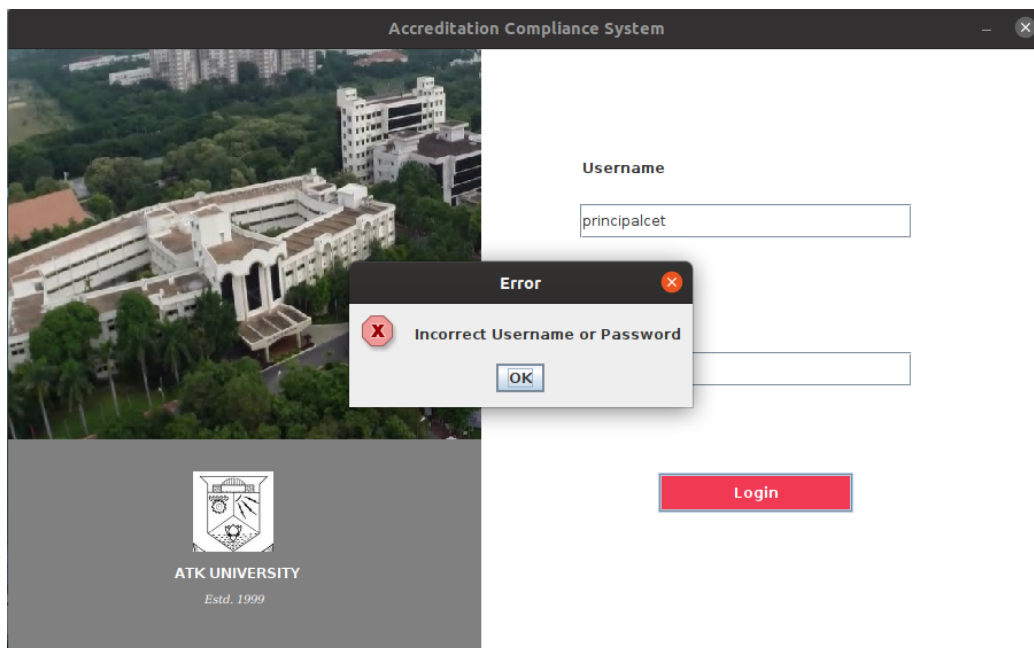


Figure 2: Error message when the username and password does not match



- Each department in the university to be provided a separate checklist (which is populated from the database). This must be editable.


```
mysql> SELECT * FROM `csedocs`;
```

Sl.No	Documents	Status
1	Accreditation reports of past visits	Completed
2	Curriculum,POs,PEOs,Mission and Vision statements	Completed
3	List of students who cleared the program in 4 years	Completed
4	Average Grade point (last 3 years data of students' CGPA)	Completed
5	Placements and higher studies data	Completed
6	Department budget and allocations	Pending
7	Details of faculty student ratio	Pending
8	Direct and indirect assessment to show attainment of POs and PSOs	Pending

8 rows in set (0.00 sec)

Figure 3: List of documents of Computer Science department

Accreditation Compliance System


ATK UNIVERSITY
Logout

Department of Computer Science and Engineering, ATK UNIVERSITY

Sl.No	Required Documents	
1	Accreditation reports of past visits	<input checked="" type="checkbox"/>
2	Curriculum,POs,PEOs,Mission and Vision statements	<input checked="" type="checkbox"/>
3	List of students who cleared the program in 4 years	<input checked="" type="checkbox"/>
4	Average Grade point (last 3 years data of students' CGPA)	<input checked="" type="checkbox"/>
5	Placements and higher studies data	<input checked="" type="checkbox"/>
6	Department budget and allocations	<input type="checkbox"/>
7	Details of faculty student ratio	<input type="checkbox"/>
8	Direct and indirect assessment to show attainment of POs and PSOs	<input type="checkbox"/>

Update
Refresh

Figure 4: Checklist populated from the database

- A progress bar to indicate level of completeness for each department. (Only display 0%, 25%, 50% and 100% depending on the no of rows in checklist completed)

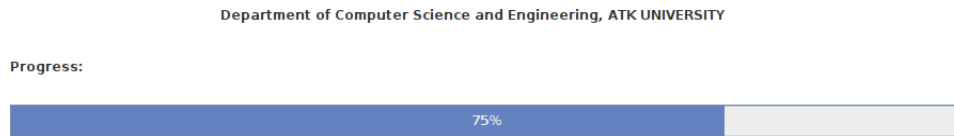


Figure 5: Displaying the progress of Computer Science department

- The principal should be able to mark as validated each department which has procured/ completed the necessary documents for accreditation.

Department of Electronics and Communication Engineering, ATK UNIVERSITY

Progress:

25%

Sl.No	Documents	Status
1	Department budget and allocations	Completed
2	List of students who cleared the	Completed
3	Curriculum, POs, PEOs, Mission and	Pending
4	Accreditation reports of past vis	Pending
5	Direct and indirect assessment to show attainment of POs and PSOs	Pending
6	Placements and higher studies data	Pending
7	Details of faculty student ratio	Pending
8	Average Grade point (last 3 years data of students' CGPA)	Pending

Message: Some documents are pending!!

Validate

Figure 6: Validation is only possible when the department has completed all the necessary documents.

- Validate button on checklist page to write a file in the background (developer may decide on the location of the file) containing department name, code and each item in checklist.

ATK UNIVERSITY

Logout

Department of Civil Engineering, ATK UNIVERSITY

Progress:

100%

Sl.No	Documents	Status
1	Average Grade point (last 3 years data of students' CGPA)	Completed
2	Accreditation reports of past visits	Completed
3	Placements and higher studies data	Completed
4	Curriculum, POs, PEOs, Mission and Vision	Completed
5	Direct and indirect assessment to show attainment of POs and PSOs	Completed
6	Details of faculty student ratio	Completed
7	List of students who cleared the program in 4 years	Completed
8	Department budget and allocations	Completed

Validate

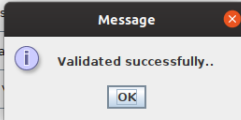


Figure 7: Validation is successful when all the necessary documents are completed

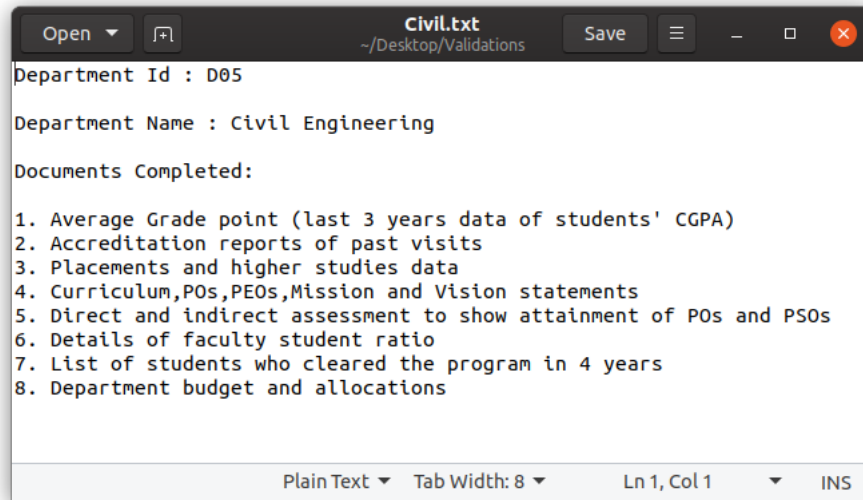


Figure 8: The file which is written in background while pressing the validate button.

- Access Hierarchy: Two roles to be defined as Principal and staff. Both should inherit from base type “User”.
- Principal:
  - Principal should be able to view progress of each department based on department selection from a list.
  - If a department has completed the checklist then ‘Validate’ button to be provided. This generates file in the background based on department information
- Staff:
  - The staff members of a department can edit the checklist and submit it for validation

## 6 Conclusion

Created a Java AWT/Swing application with MySQL database for managing the accreditation compliance system in a university.