**Object Oriented Programming ­­**

**Project Report**

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**Group Members**

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**Course Code:** CL-1002

**Section:** BAI-2B

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**Introduction:**

We have achieved our initiative to develop an interactive “Back End Java code” using detailed concepts of Object-Oriented programming. We have tried our level best to make the code as efficient as possible and adding more features. Our Teamwork was on equal basis and with the help of multiple sources i.e., extra concepts; to be once step ahead. We assured complexity and simplicity on every aspect in our code as we believe that it’s the best way to learn.

**Feature Details:**

Our Project comprises of three major classes which are inherited from each other. It includes:

* Class Admin Work
* Class Teacher
* Class Student.

**Admin Work:**

This part of the code is basically the login screen, where it will ask the user to enter the choice of “Student” or “Teacher”. And for the first time would ask to sign up an account on the student portal. Further On, moving towards the login, multiple wrong password entries would lock the portal. In this code we have used function/method overriding, inheritance, polymorphism, file and exception handling.

**Class Teacher:**

This Java class is inherited with the Admin Work class, further on, it gives the choice to the teacher to enter the student details saved in txt file format. Such as name, section, subjects, total marks, percentage, attendance etc. Teachers can add their records as well.

**Class Student:**

This part is accessed when user enters the choice of student, where students will have their records saved by the teachers in txt files, and would be able to access and view. They can check their marks, assignments due, attendance. Grades etc.

**Real Life Application:**

The scope of this project is quite large, considering how every day, schools are moving towards advancement, and want portals to manage huge and bulky records. This project is of huge use in our daily life.

**Limitations:**

This project works on the terminal of any specific IDE, the implementation of GUI is missing in the code. However the backend java code that we worked on has no limitations, We have worked our best to implement and add as my features as possible

**Conclusion:**

With the ample knowledge we gained this semester related to object oriented Programming, We have put our extreme efforts to be presentative and create an interactive system, which is easy to learn and use.