SOFTWARE ENGINEERING PROJECT

# LETTER DISPATCH UNIT

HIMANSHU DHANKHAR, B16CS008 ASHUTOSH YADAV, B16CS005

### KEY FEATURES OF PROJECT

#### MAINOBJECTIVE

Our Project focuses on the maintaining the record of Letter Received,
Posted and complains
Registered(in case if there is a wrong delivery or any other issue).

Accepting only deliverable letters

Correct Delivery of Letters inside institute is maintained through a uniform code of conduct, means there is a unique letter code for each letter that is accepted, and that unique code is used for delivery and Report and status purpose. Manual Delivery system and guards or wardens uses that letter code to ensure correct delivery.

Each letter has unique verification code

WE HAVE COMPLETED MAIN OBJECTIVE







#### KEY FEATURES OF PROJECT

some additional features

Registering and resolving Complains

providing facility to post letters outside campus

Generating Reports

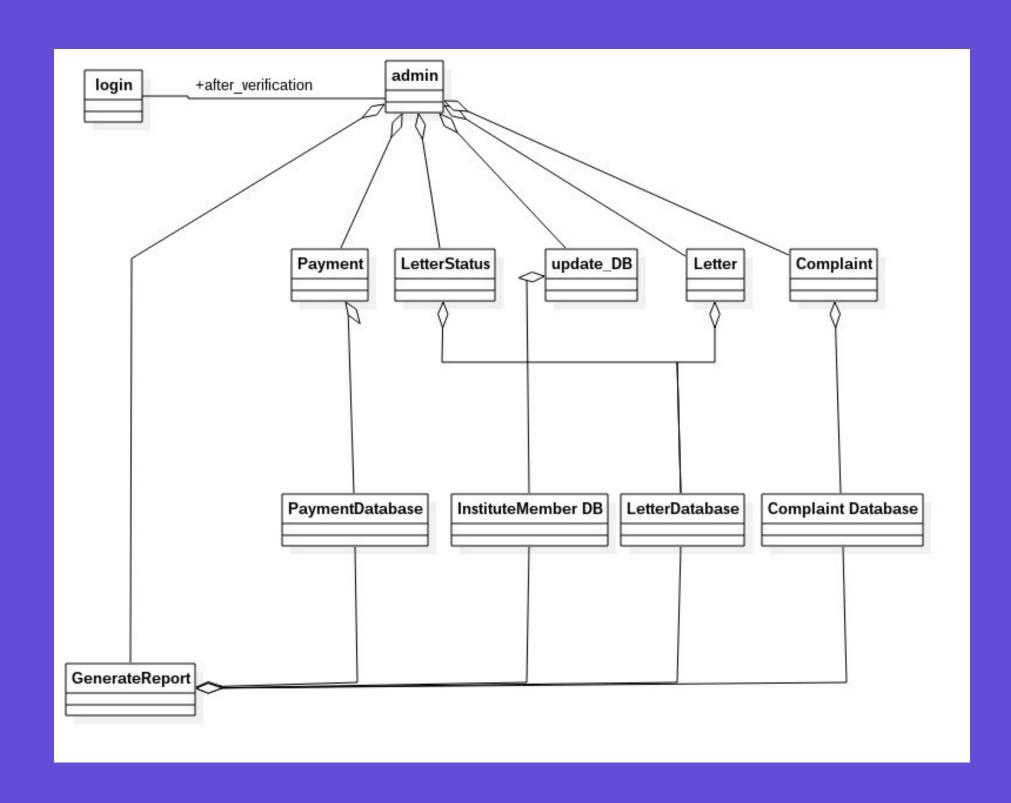
check and updating status of letters





## USE CASES

- ADD LETTER
- POST LETTER (FOR SENDING LETTER OUTSIDE INSTITUTE)
- UPDATE INSTITUTE MEMBER DATABASE( ACCORDING TO INFORMATION PROVIDED BY INSTITUTE BY MAIL)
- GENERATE REPORT (IT WILL PRINT ALL LETTERS ACCEPTED AND PAYMENTS COLLECTED AND COMPLAINS GENERATED) ALL ALINF WITH THERE STATUS
- COMPLAIN SECTION (TO REGISTER AND RESOLVE COMPLAINS).
- LETTER STATUS TO CHECK AND UPDATE THE STATUS OF ANY LETTER BY LETTER CODE OR BY RECIPIENTS INSTITUTE ID.(IT IS ASSUMED THAT ALL MEMBERS OF INSTITUTE HAVE A UNIQUE ID).



# STRUCTURE OF DATABASE



# STRUCTURE OF:: DATABASE

DATABASE IS USED IN THE FORM OF TXT FILES AND IS USED USING

FILE STREAM OBJECTS OF FSTREAM LIBRARY IN C++.

STRUCTURE OF DATABASE IS SIMPLE, FOUR FILES ARE USED PAYMENTDATABASE
INSTITUTEMEMBER DATABASE
LETTER DATABASE
COMPLAINTDATABASE

THEY ALL ARE INDEPENDENT OF EACH OTHER HOWEVER SOME FUNCTIONS USES OTHER DATABASE FILE FOR VERIFICATION PURPOSES



## FAILURES IN IMPLEMENTATION



- Using a robotic delivery system (automatic) between the hostels and departments was a initial idea(but not included in SRS), later it was excluded or avoided because to implement it, we have to add extra work to implement its working, it would have increased the project completion time, So to manage the project and complete it in time, manual delivery system is opted.
- We have not used a SQL based database, we have used txt file based database, this could be a negative for us.
- Other than these any idea or functionality mentioned in SRS was implemented accurately.

# STATISTICS OF UNITAND SYSTEM TESTING

#### UNIT TESTING

In Unit Testing, we have tested all the major functions that were playing a crucial role in any way, like processing Data, storing and displaying it or taking input.

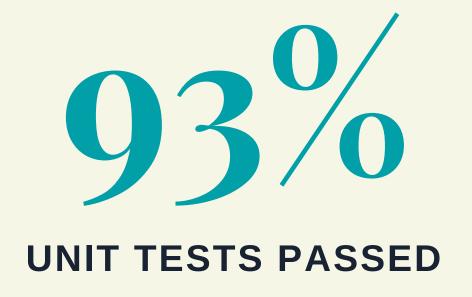
# STATISTICS OF UNITAND SYSTEM TESTING

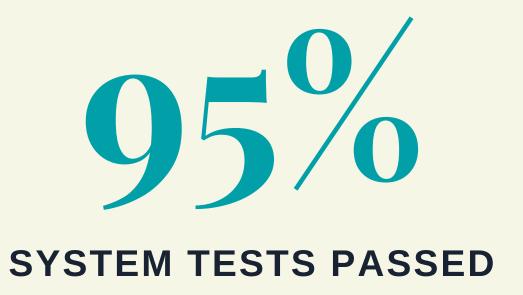
SYSTEM TESTING

In System Testing all the possible paths were tested after combining the project.

At the time of Testing we didn't know that we have to use automated testing, so that's why we cannot conduct automated testing. All the testing was done manually.

We admit it that we missed a test case in ADD Letter, that later testing team identified it as a error causing segmentation fault. Testing team also identified other Errors also but some of them were due to lack of clarity about actual functionality that is to be provided at later stage there was a clear clarification and those errors were resolved.





# CLASSROOM BOOKING SYSTEM

#### **USE CASES TESTED**

- Add professor
- Book slot
- Availability of classroom
- login as professor
- login as admin
- cancel booked slot
- Add a new slot
- However each and every function was not tested major functions were tested and in system testing all routes possible were tested.

We have made a SRS that correctly solves the identified problem of distributing the letters correctly Software was made on the basis of specified requirements in the SRS, All the functionalities mentioned in the SRS were implemented correctly. Testing was done thoroughly and all possible tests were done to remove the bugs from the project. Testing team also helped in detecting test cases and resolving.

#### Conclusion

## THANK YOU

We hope to do quality work with quality in the future because this project taught us alot of ethics.....