

Software Engineering Project

UNEET MEENA: B16CS037

SANCHIT TALIYAN: B16CS031

Key features of the project

- Simulator for solving a given Boolean expression.
- Restricted within the registered users
- Useful for generating truth table as an output for an given boolean expression.
- Taking a Boolean expression as input

Key features of the project

- ▶ Truth table is generated only for the truth cases.
- ▶ Backtracking algorithm is used for generating all the possible 2^n cases.

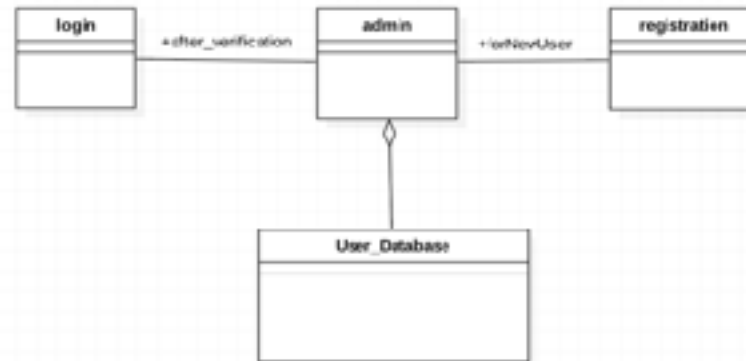
List of use cases

- ▶ User: Login
- ▶ User: Register To The System
- ▶ User: Logical Expression
- ▶ System: Valid Input
- ▶ System: Decoding
- ▶ System: Truth Table

Structure of the database/ file system :

- ▶ A logic circuit simulation system stores the following information.
- ▶ **Registered Account:**
It includes User's name and the password user give. This information is used for logging in user so that, user can give input expression.
- ▶ **LOGIN DATABASE:**
New User uses this option to create a new account following which Registered Account will be updated.

Structure of the database/ file system :



Things that could not be implemented

- ▶ False cases can not be shown in the truth table.
- ▶ Input independence is not given to the user.

Statistics of Unit Testing

- ▶ In unit testing, all the major unit tests are tested like checking for valid expression, admin processing, etc.

Statistics for system testing

- ▶ All the possible paths were tested in system testing



GROUP:6

CROSS TESTING PROJECT

EXAM GRADE MANAGEMENT

List of Use cases tested

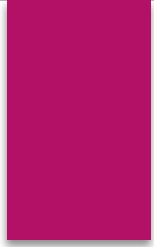
- ▶ Login
- ▶ Register
- ▶ Modify Profile
- ▶ View Profile
- ▶ Select Courses
- ▶ Put Marks
- ▶ Modify Grades
- ▶ View Stats

Statistics of the test cases

- ▶ Total 17 functions were tested
- ▶ All the functions were correct according to the given input in the report, but there was a common error for input.
- ▶ If function takes input as string then it fails for any input other than strings.

Conclusion

- ▶ We learn how to use git.
- ▶ We learn backtrack algorithm during this project.
- ▶ We get a good practice of making uml diagrams.



Thank you