

# Training Schedule Management

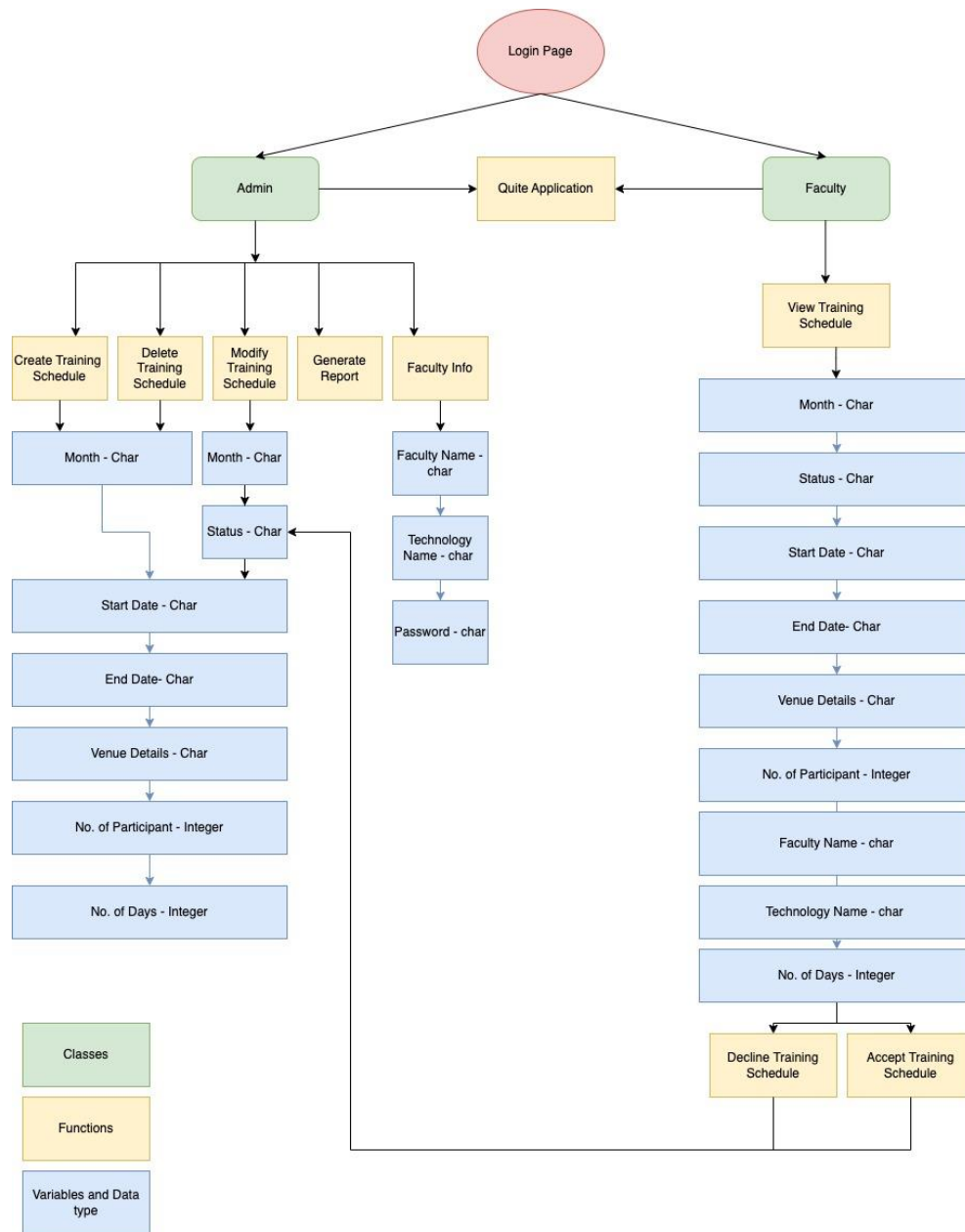
Captone Project

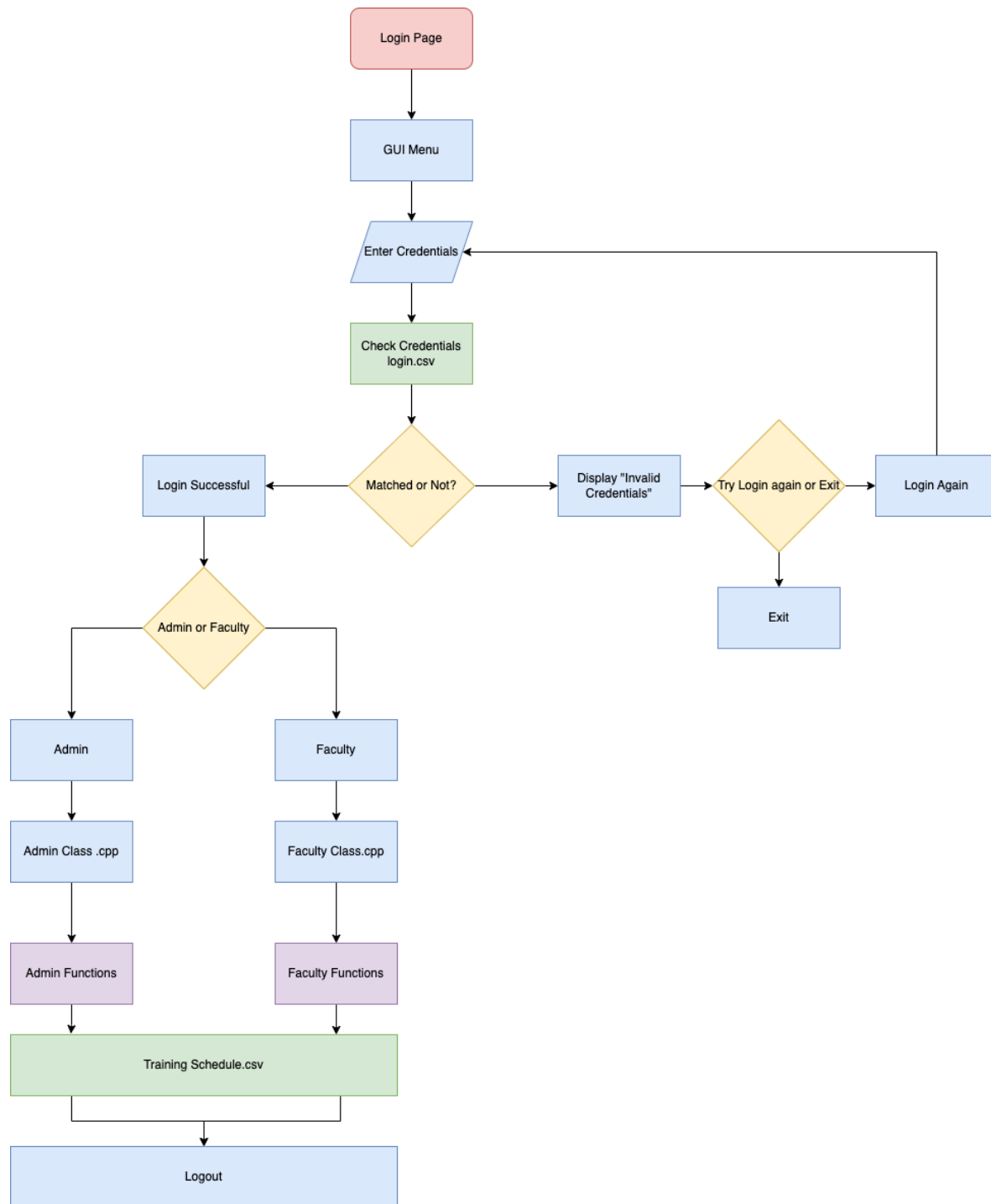
Documentation

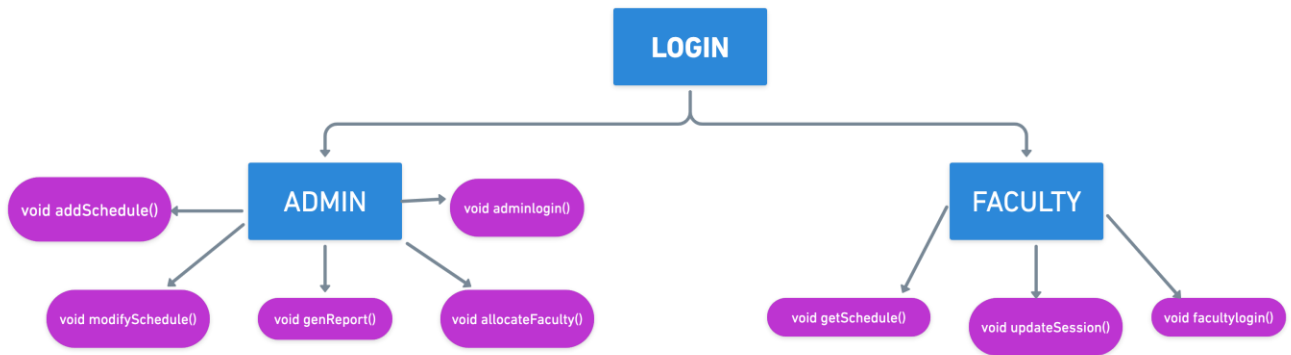
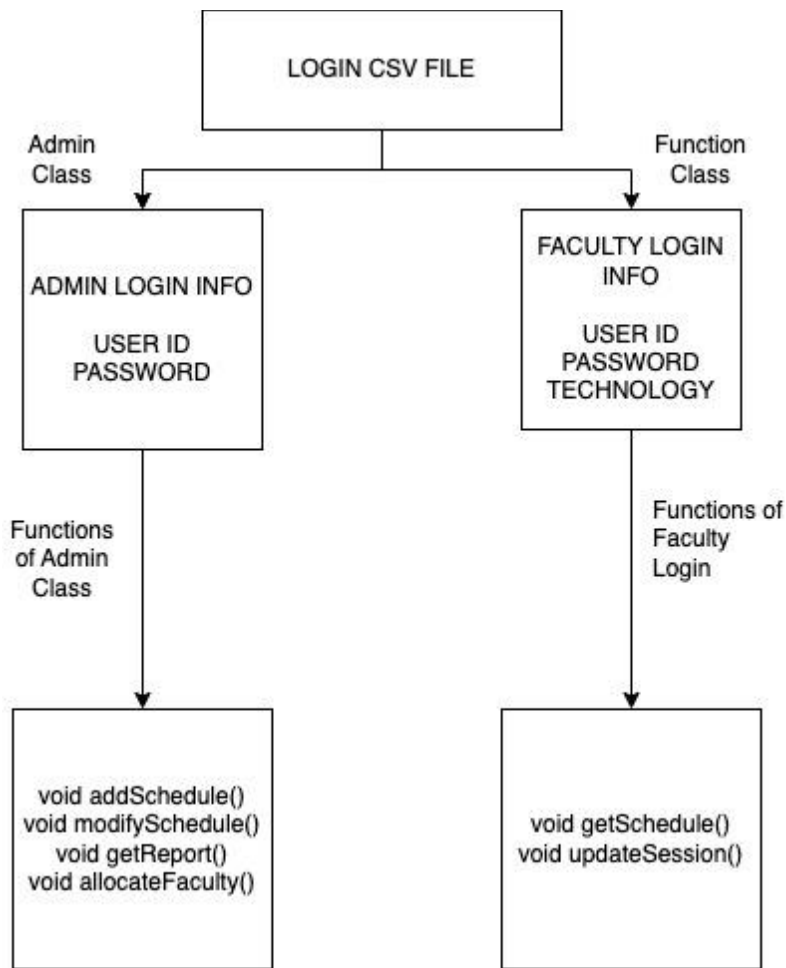
## Abstract -

Training Schedule Management is a system that helps companies to keep track of schedules of all the trainings happening in the organization. It helps admin to Schedule the trainings and appoint faculty to them. In respect to that faculty also have the option to view and take decision whether to accept or decline the assigned training to them.

## Flowchart of Architecture of the program: -







Header Files: -

There are two header files that are used in the program

1. Admin.h
2. Faculty.h

Admin.h - Admin.h contains admin login functionality and all the functionalities of the admin. Such as Add Schedule, modify existing schedule, Download Training Reports or Assigning faculties to the scheduled training.

Faculty.h - Faculty.h contains faculty login functionality and all the functionalities of the faculty such as view scheduled trainings, accept or reject the training assigned to him/ her.

Login Page [Login.cpp] - Login page consists of the GUI of the program. The interface will ask the user whether to login as Admin or login as Faculty using switch case. If the user signs in as an admin. The console will ask only for username or the password and not for the domain [adminlogin()]. But if the user logs in as faculty the console asks for the username, password along with the technology name [facultylogin()]. The credentials will be authenticated by using adminlogin() and facultylogin() functions which will be fetched by using header files admin.h and faculty.h.

CSV Files:-

The program will consist of 3 csv files: -

1. login.csv file

```
CapstoneProject > login.csv
1   Anil,Anil,ac,admin
2   Gautam,Gautam,java,faculty
3   Prince,1234,net,faculty
```

2. Data.csv file

```
CapstoneProject > data.csv
1   213,Java,30,21-03-2023,31-06-2023,Kolkata,50
2   314,Java,67,21-08-2023,32-06-2023,Kolkata,56
3   213,Java,678,21-03-2023,34-02-2023,Delhi,567
```

3. Allocate.csv file

```
CapstoneProject > csv > allocate.csv
1   123,LINUX,45,21-03-2023,24-04-2023,LEH,145,JAN,Gautam,N0
2
```

.csv file - This file contains the login credentials of the user.

Such as Username, Password and Technology (for Faculty Only)

Data.csv file - This file contains all the data of the training schedule

Such as Batch ID, Technology, No. Of Days, Start Date, End Date, No. Of Participants, Month and Location

Allocate.csv - This file contains all the data of data.csv along with the name of faculty and the status whether the faculty accepted or rejected the schedule. Default Value of the status of the schedule will be YES. Faculty can change it to the no if the faculty doesn't want to accept the session.

Functionalities ( Admin.h ) -

Admin.h contains various functionalities such as -

1. adminlogin() - This function allows admin to login into the Training Schedule System.
2. addSchedule() - This function allows admin to add schedule to the csv database. This function will allow the admin to add BatchID, Technology, No. Of days, Start Date, End date, Venue and participants.
3. modifySchedule() - This function allows admin to modify or update the schedule.
4. getReport() - This function allows the user to fetch the report from the system. This function matches the Technology and month of training. If found, displays the training report to the Admin.
5. allocateFaculty() - This function allows admin to allocate faculty to the training scheduled by them



Functionalities ( Faculty.h) -

Faculty .h also contains various functionalities such as -

1. facultylogin()- This function allows admin to login into the Training Schedule System.
2. getSchedule()- This function allows the faculty to fetch the report from the system. This function matches the Technology and month of training. If found, displays the training report to the Admin. The data will be fetched from the allocate.csv file.
3. UpdateSession()- This function allows the faculty to update the status of the training. Whether to accept or reject the training scheduled to them by the admin. If the faculty doesn't want to accept the training he/she may decline the training schedule by modifying it to NO status.\

Inbuilt Header Files used in the Program:-

1. #include<iostream>
2. #include<sstream>
3. #include<fstream>
4. #include<vector>
5. #include<string>

Unit Testing

UTC ID	ReqID	Unit Test Case Description	Expected Result	Actual result	Status
AD-001	AD-001	The admin should be able to create a new training schedule	Data Insertion	Successfull	Passed
AD-002	AD-002	The admin should be able to update or make changes to existing schedules	Data Updation	Successfull	Passed
AD-003	AD-003	The admin allocates a schedule to a specific trainer	Data Insertion & Updation	Successfull	Passed
AD-004	AD-004	The admin should be able to generate a report of the trainings happening on a monthly basis for a specific stream	Viewing Data	Successfull	Passed
FA-001	FA-001	The faculty should be able to find out the schedule assigned to him	Viewing Data	Successfull	Passed
FA-002	FA-002	The faculty should be able to cancel a specific session allotted to him.	Data Updation	Successfull	Passed
AA-001	AA-001	All users logging into the system should be authenticated using a unique login-id and password. (Operations to be supported based on type of user)	Data Check/Validation	Successfull	Passed

Makefile :-

Makefile was used for implementing commands using make command.

Just make any parameter like Compile: then enter what you want to do with this parameter like compile the program, so you write

Compile:

```
g++ login.cpp -o login
```

when you go to terminal and execute make compile command ...the g++ command will be executed

```
check:
    echo "Makefile is working fine"

compile:
    echo "Compiling Login.cpp file"
    g++ src/login.cpp -o Login
```