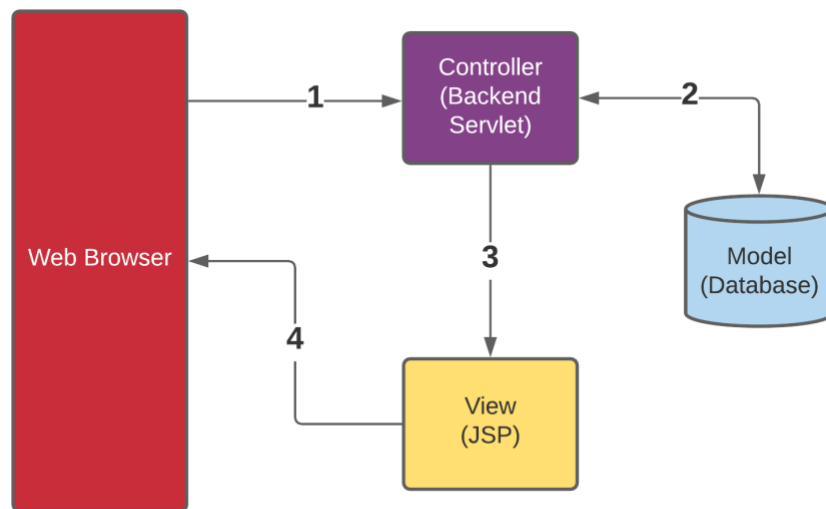
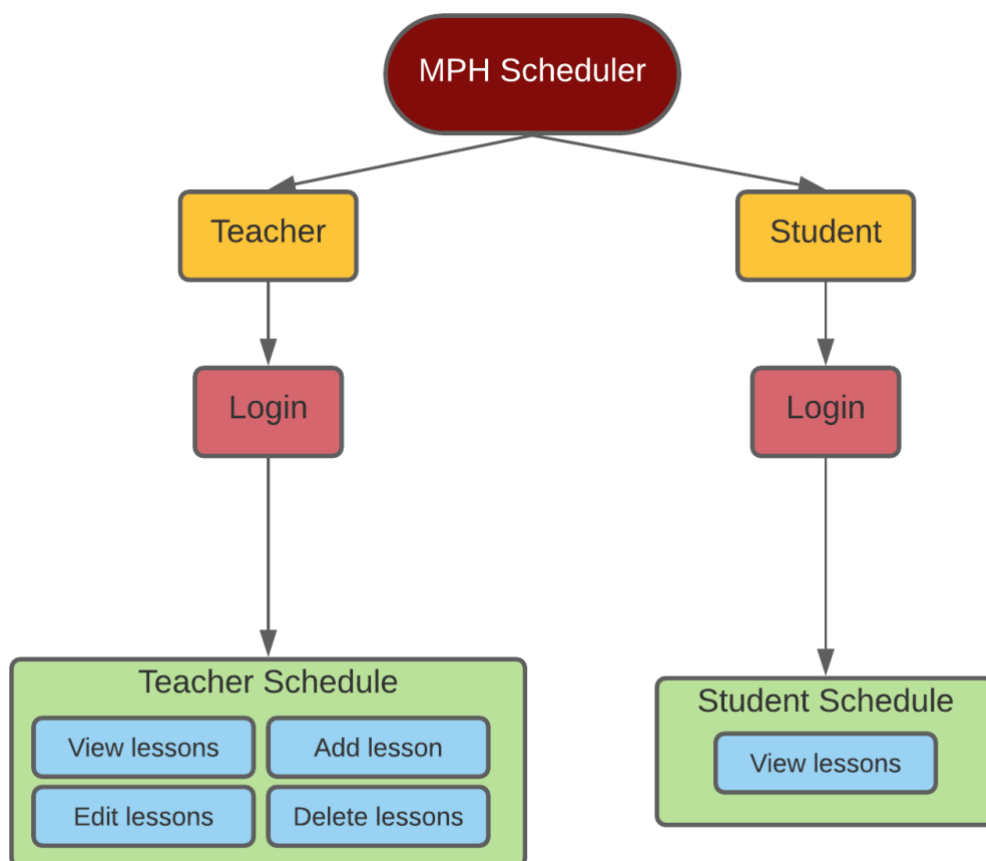


Criterion B – Design

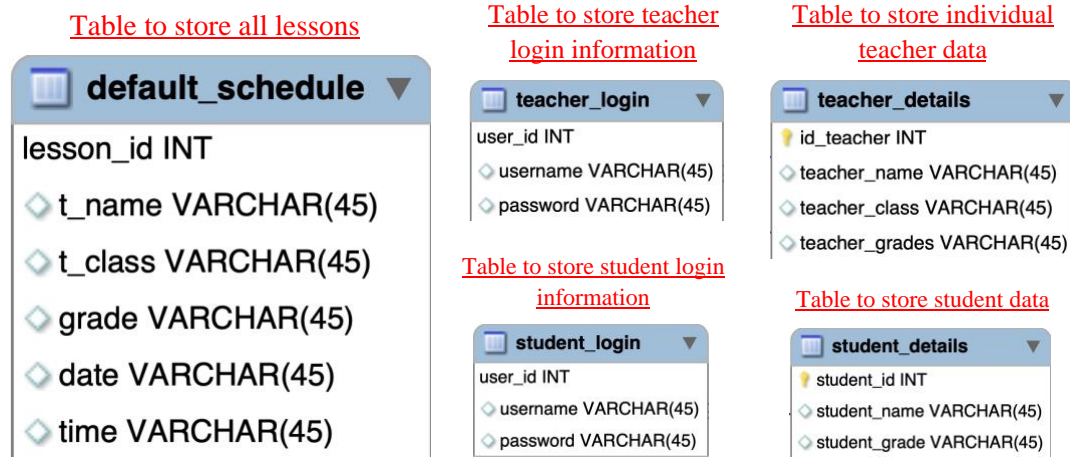
Model-View-Controller Design



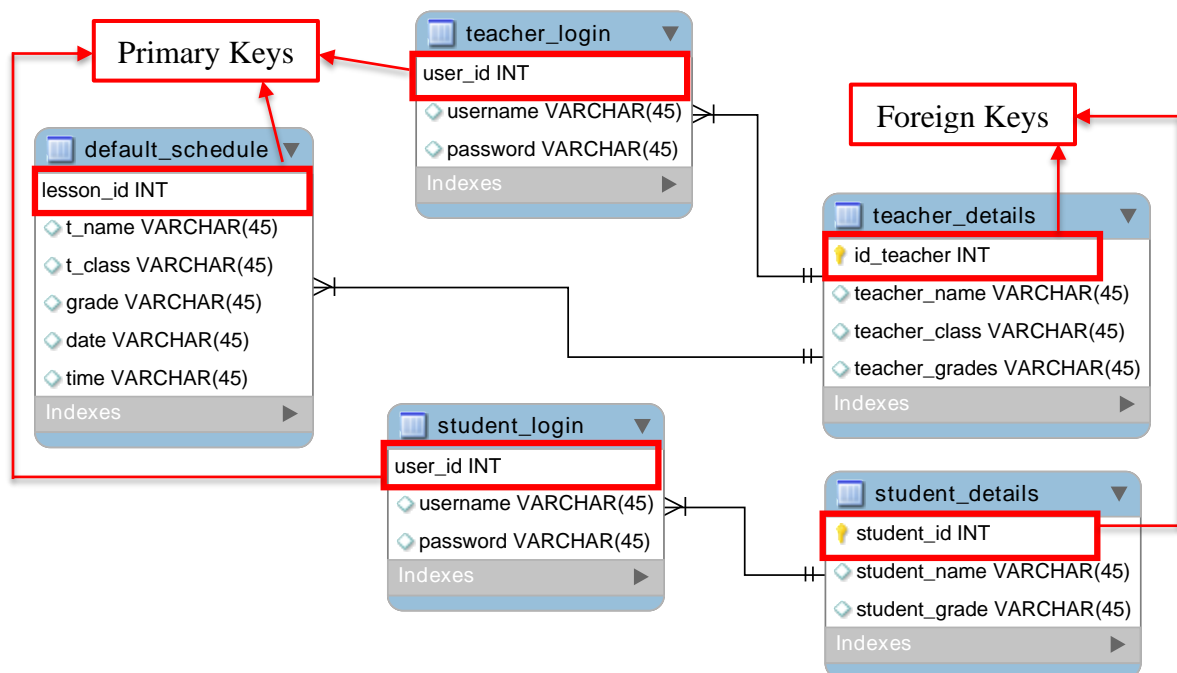
Basic Structure Chart



Database Design



Database Design with Entity Relationships



Database Tables

default_schedule: Used to store all lessons in the schedule

Column Name	Purpose of column
lesson_id	Primary key - Used to store the id of the lesson (references id_teacher as a foreign key)
t_name	Used to store name of the teacher taking the lesson
t_class	Used to store the class being taught during the lesson ex. Physics, Biology, etc.
grade	Used to store the grade being taught during the lesson ex. M1, D1, D2, etc.
date	Used to store the date of the lesson being taught
time	Used to store the time of the lesson being taught

teacher_login: Used to store the login information of teachers

Column Name	Purpose of column
user_id	Primary key - used to store teacher's unique id (references id_teacher as a foreign key).
username	Used to store the username of the teacher (username is stored as the teacher's name in all lowercase without any whitespaces, numbers or special characters).
password	Used to store the password of the teacher.

student_login: Used to store the login information of students

Column Name	Purpose of column
user_id	Primary key - used to store student's unique id (references student_id as a foreign key).
username	Used to store the username of the teacher (username is stored as the student's name in all lowercase without any whitespaces, numbers or special characters).
password	Used to store the password of the student.

teacher_details: Used to store individual teacher details

Column Name	Purpose of column
id_teacher	Primary key - used to store the teacher's unique id.
teacher_name	Used to store the full name of the teacher.
teacher_class	Used to store the class the teacher teaches.
teacher_grade	Used to store any and all grades the teacher teaches.

student_details: Used to store individual student details

Column	Purpose of column
student_id	Primary key - used to store the student's unique id.
student_name	Used to store the full name of the teacher.
student_grade	Used to store the grade in which the student studies.

Mock-ups

(For client approval see Appendix B)

Login Page:

Student/Teacher Login

User ID:

Username:

Password:

Login Error:

Student/Teacher Login
Incorrect details!
User ID:
Username:
Password:

Teacher Schedule View Page:

MPH Scheduler | Teacher Schedule

Teacher	Class	Grade	Date	Time	Action
xyz	abc	M2	2020-01-01	13:30	Edit Delete

Student Schedule View Page:

MPH Scheduler | Student Schedule

Logout

Teacher	Class	Grade	Date	Time
xyz	abc	M2	2020-01-01	13:30

Teacher Adding Lesson:

MPH Scheduler | Teacher Schedule

Add Lesson

Teacher Name :

xyz ▾


Class :

abc ▾

Grade :

D1 ▾

Date :

dd/mm/yy 

Time :

--:--

Save

Cancel

Teacher Editing/Updating Lesson:

MPH Scheduler | Teacher Schedule

Update Lesson

Teacher Name :

Class :

Grade :

Date :

Time :

Teacher Deleting Lesson:

MPH Scheduler | Teacher Schedule

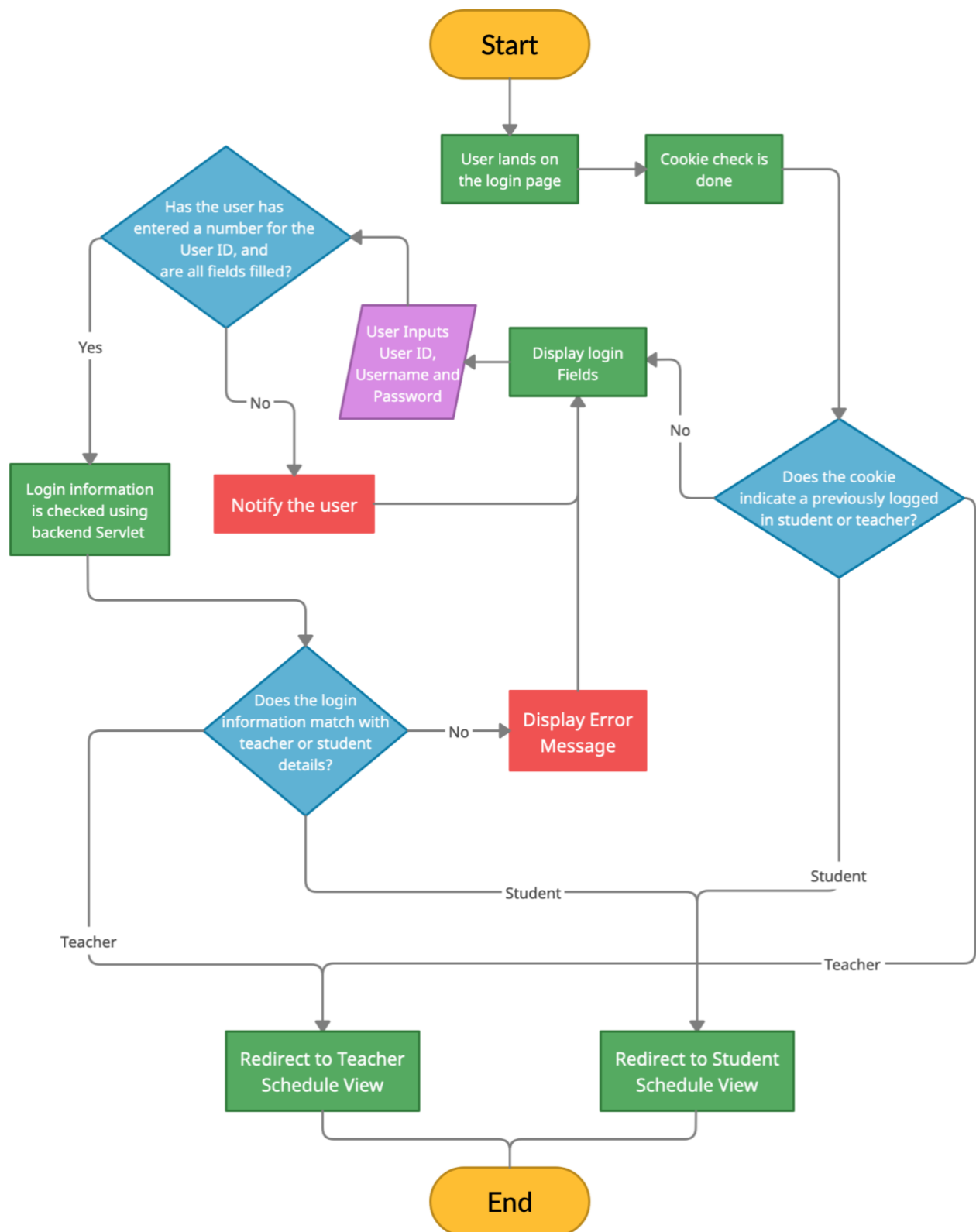
Teacher	Class	Grade	Date	Time	Action
xyz	abc	M2	2020-04-01	12:30	Edit Delete

Do you want to delete the lesson?

Flowcharts

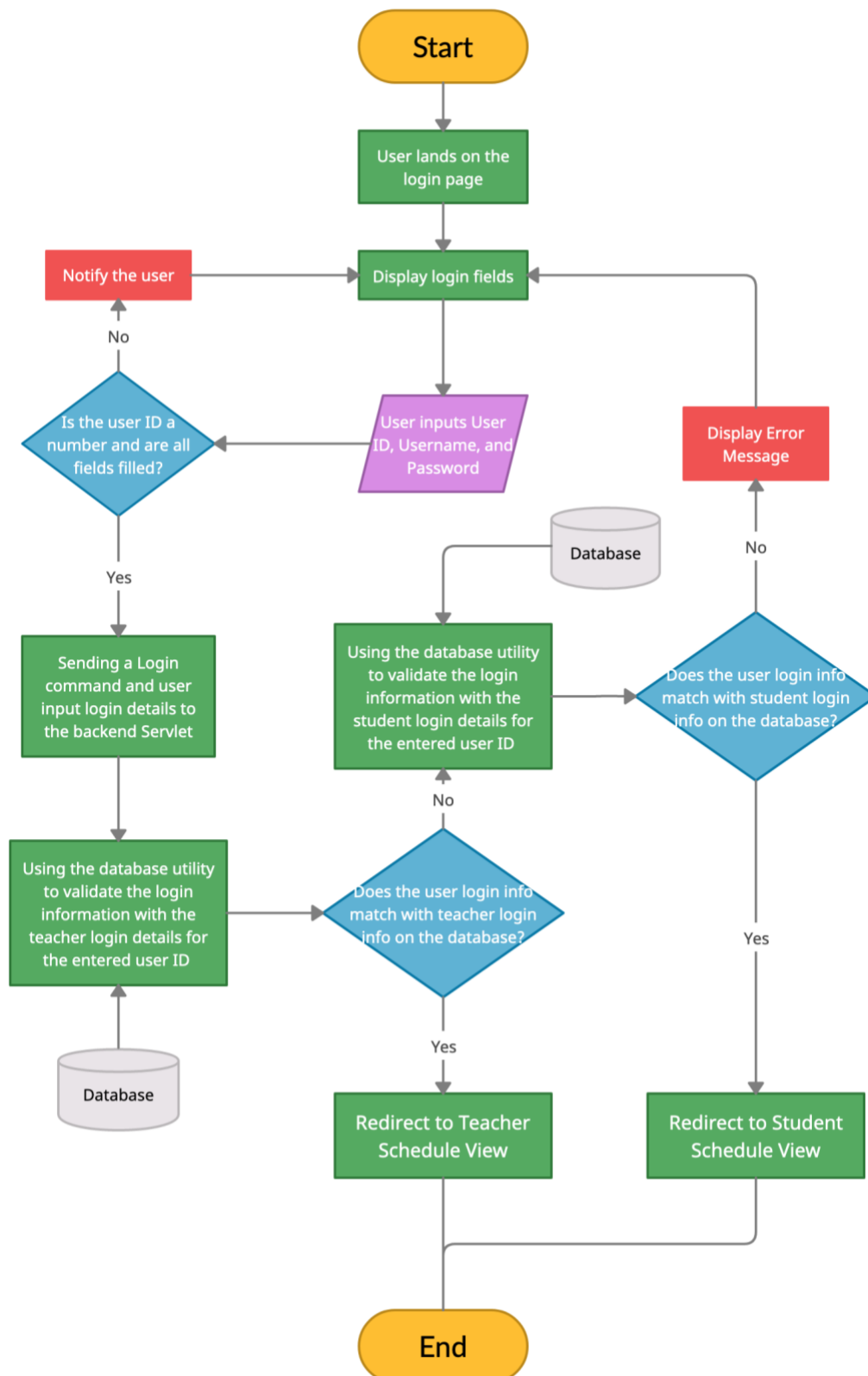
Basic User Login Flowchart (Success criteria: A, C, G)

The overall logic for the login page of the MPH Schedule website:



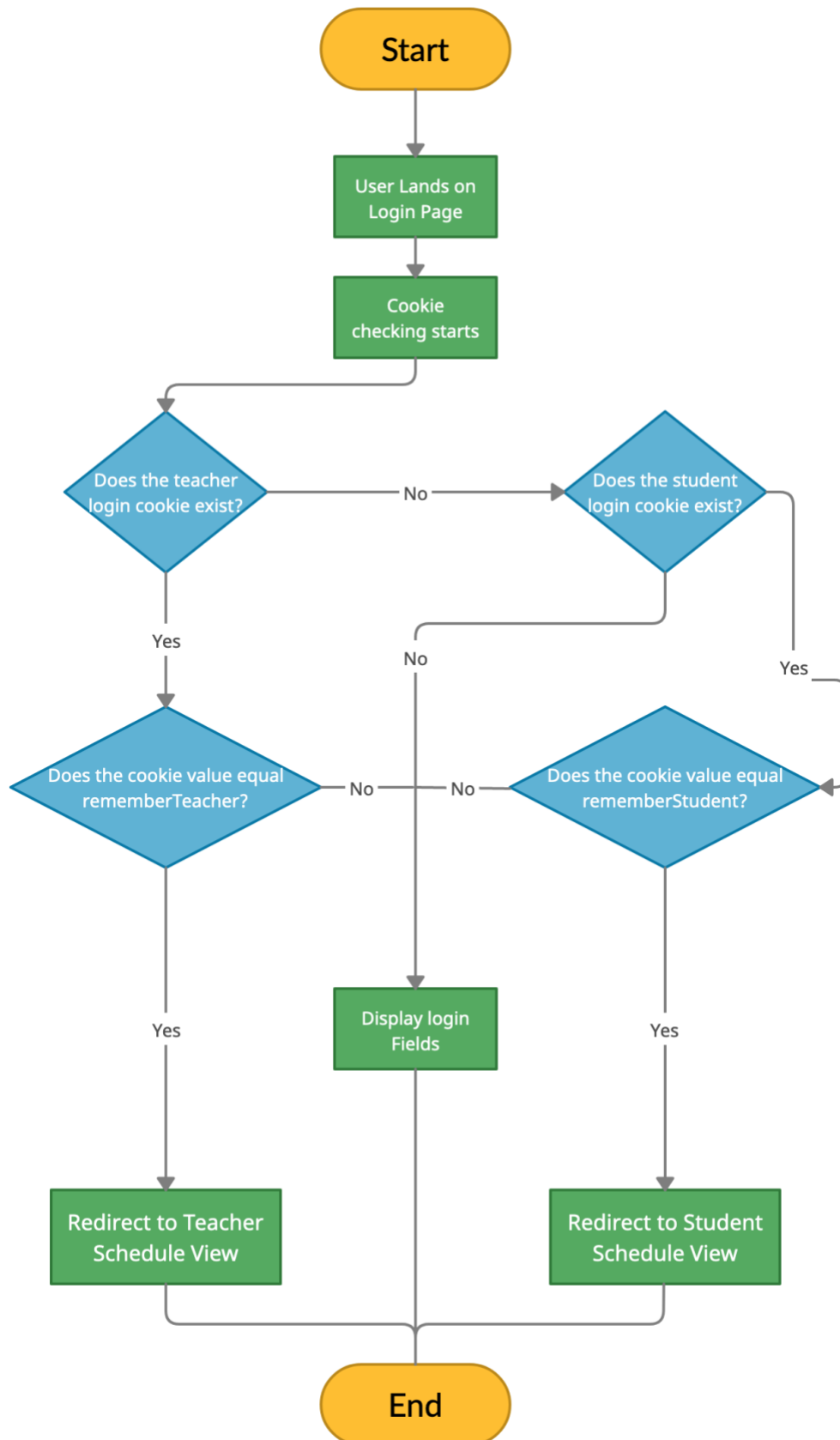
Login Validation Flowchart (Success criteria: A, C, G)

Logic for the login validation used in the Login page:



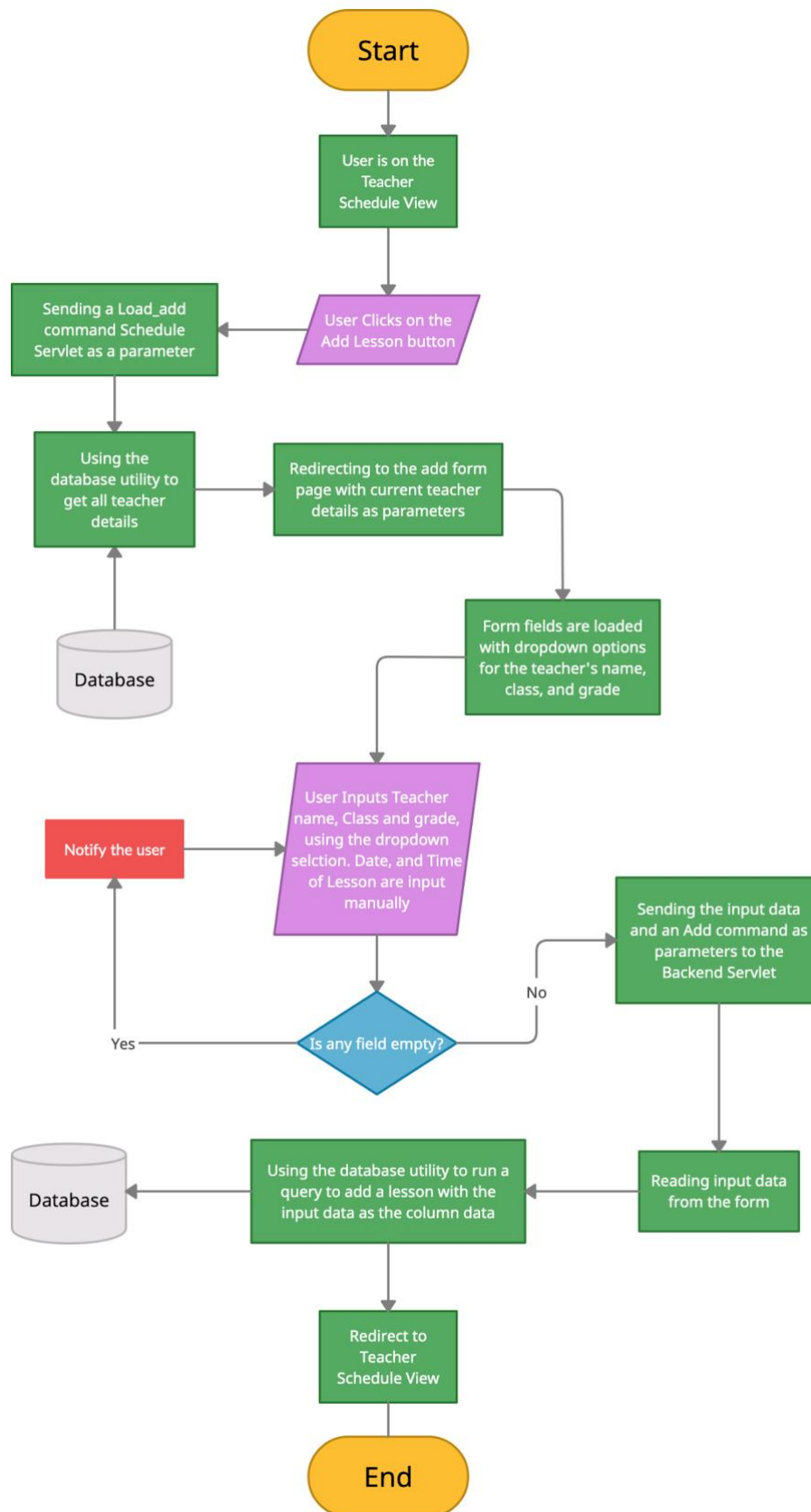
Cookie checking Flowchart (Success criteria: C, D)

Logic for checking of Cookies used in the Login page:



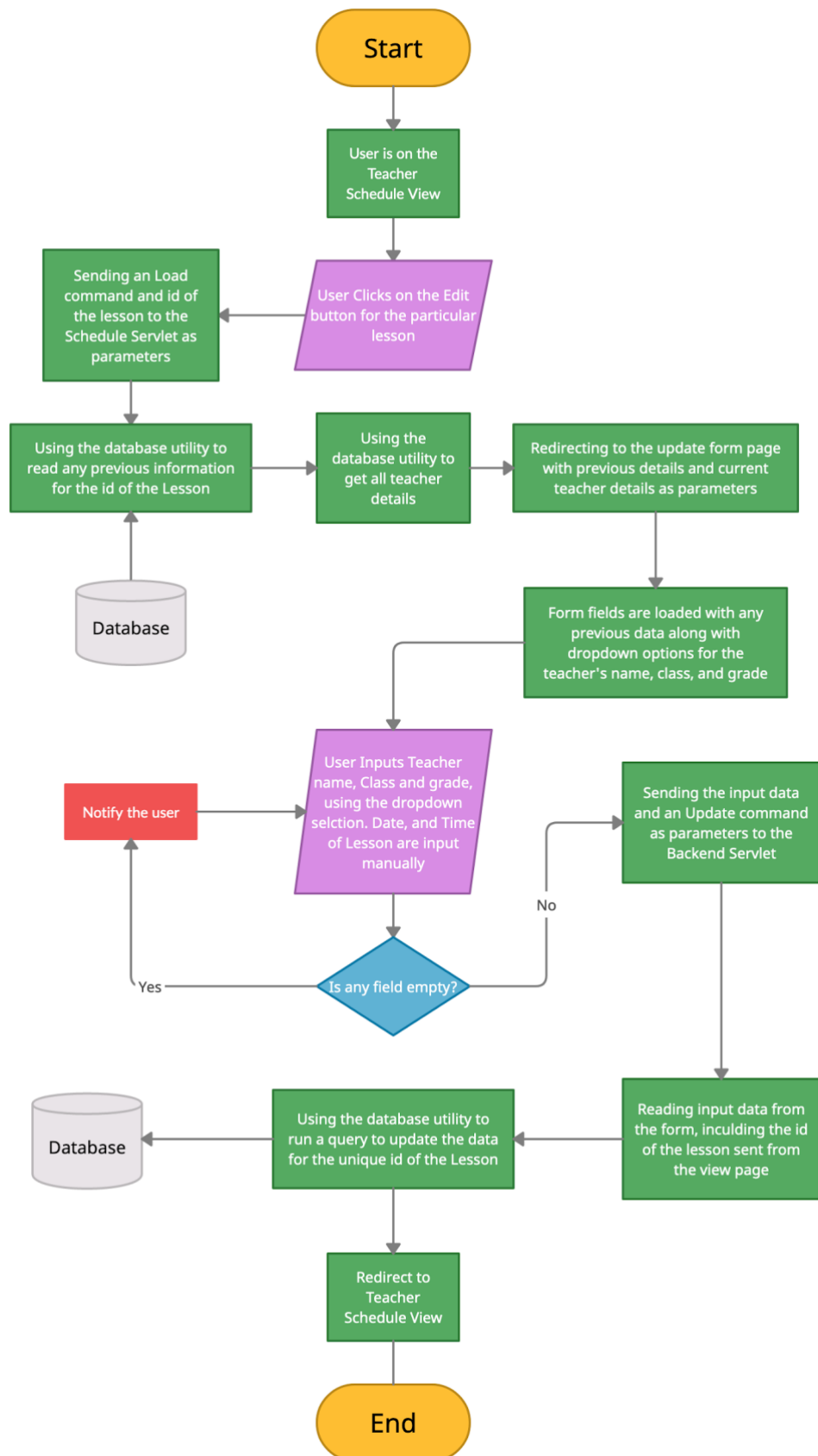
Add Lesson Flowchart (Success criteria: B, E, F, H)

Logic for the adding of new lessons to the Teacher Schedule View:



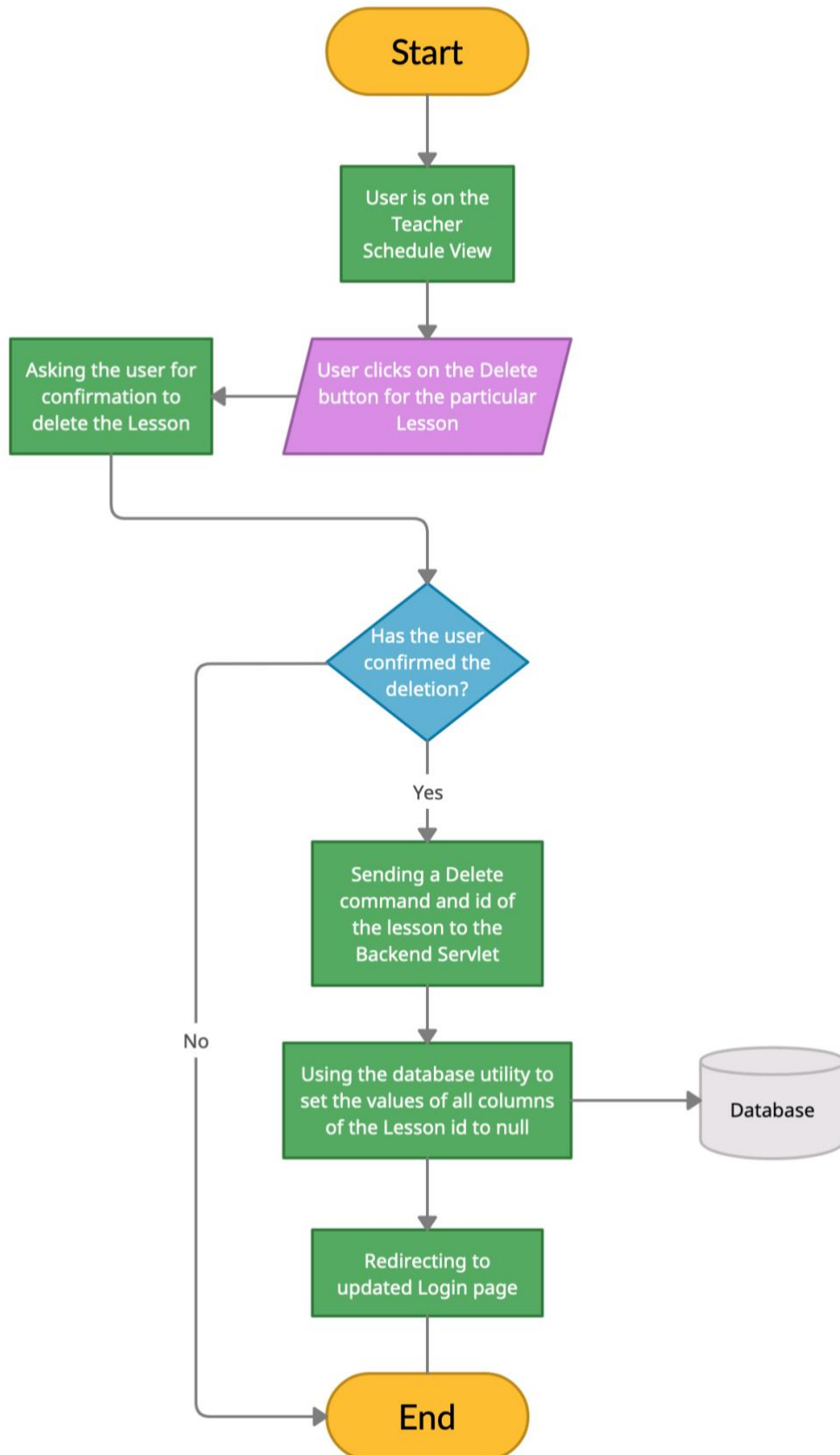
Edit Lesson Information Flowchart (Success criteria: B, E, F)

Logic for the editing of lessons on the Teacher Schedule View:



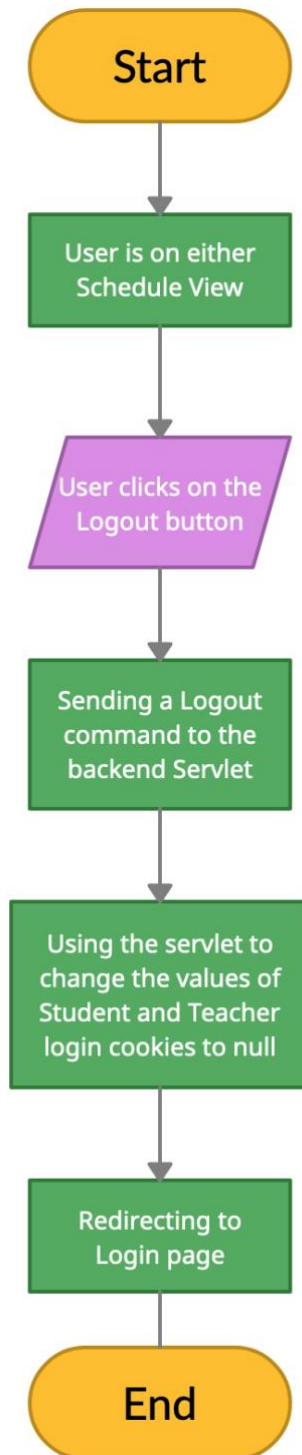
Delete Lesson Information Flowchart (Success criteria: B)

Logic for the Deletion of lessons on the Teacher Schedule View:



Logout Flowchart

Logic for logging out from either Schedule View (Student or Teacher) (Success Criteria: D):



Test Plan

Test No.	Test	Success Criteria	Nature of the Test	Expected Result
1	Teacher Login	A	Login with a teacher's details (user id, username and password).	A successful login will take the user to the Teacher Schedule and an incorrect login or empty fields will display an error.
2	Student Login	C	Login with a teacher's details (user id, username and password).	After a successful Login the student should be redirected to the Student Schedule where they can only view the schedule.
3	Non-member Login	G	Login with incorrect details (neither student nor teacher)	A Login Error should be displayed, and the user is not allowed to view either schedule.
4	Check Add Lesson	E, F	Click the Add Lesson button on the Teacher Schedule View	The teacher should be redirected to the Add Lesson page where their details should be pre-populated in the fields (other than the date and time fields).
5	Add Lesson	B	Add a lesson to the Schedule using the Add Lesson Page	A new lesson should be added, and the Teacher and Student Schedule View's should update.
6	Check Edit Lesson	E, F	Click the Edit button for a Lesson on the Teacher Schedule View	The teacher should be redirected to the Update Lesson page where the old lesson details should be pre-populated in the fields, including the date and time. The only options for the drop-down selections should be the old details and the teacher's details.
7	Edit Lesson	B, E, F	Edit a lesson in the Schedule using the Update Lesson Page	The old lesson should be updated with the newly entered details and both Schedule Views should be updated.
8	Delete Lesson	C	Delete a lesson using the Delete button on the Teacher Schedule View	A popup should appear asking the teacher to confirm deletion of a lesson. A subsequent 'OK' should remove the lesson from both Schedule Views and a "Cancel" should close the popup with no other action being performed.

9	Teacher reopen schedule	D	Close the web-app as a Teacher and reopen it within 14 days	The teacher should be automatically be redirected to the Teacher Schedule View.
10	Student reopen schedule	D	Close the web-app as a student and reopen it within 14 days	The teacher should be automatically be redirected to the Student Schedule View.
11	Teacher Logout	D	Logout from the web-app as a teacher and reopen it.	The teacher should be faced with the login page and is required to login once again.
12	Student Logout	D	Logout from the web-app as a student and reopen it.	The student should be faced with the login page and is required to login once again.
13	Add Multiple Lessons	H	Add 5+ Lessons to the schedule as a teacher.	There should be no upper limit to the number lessons that can be added to the schedule.
