Lab No.8

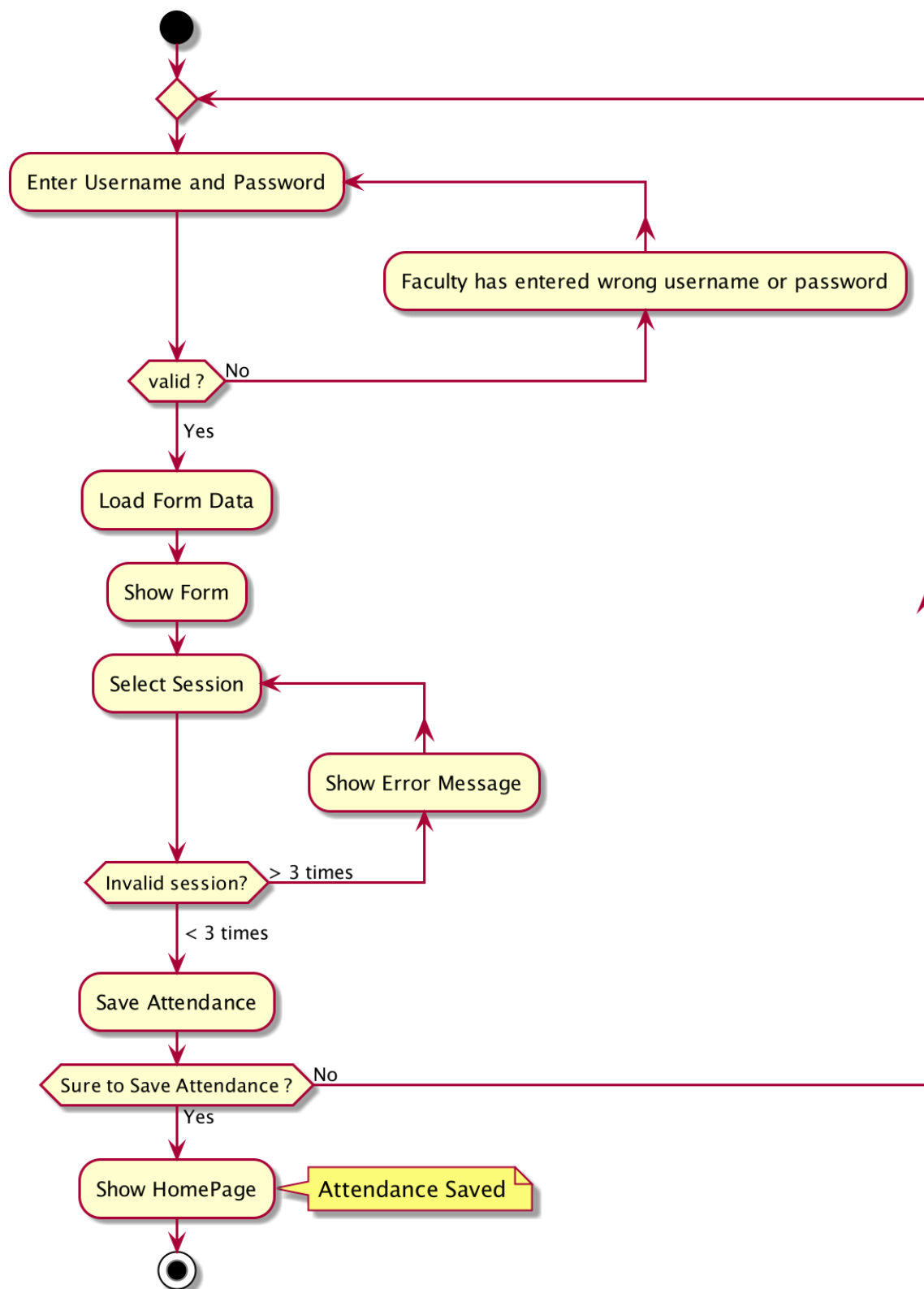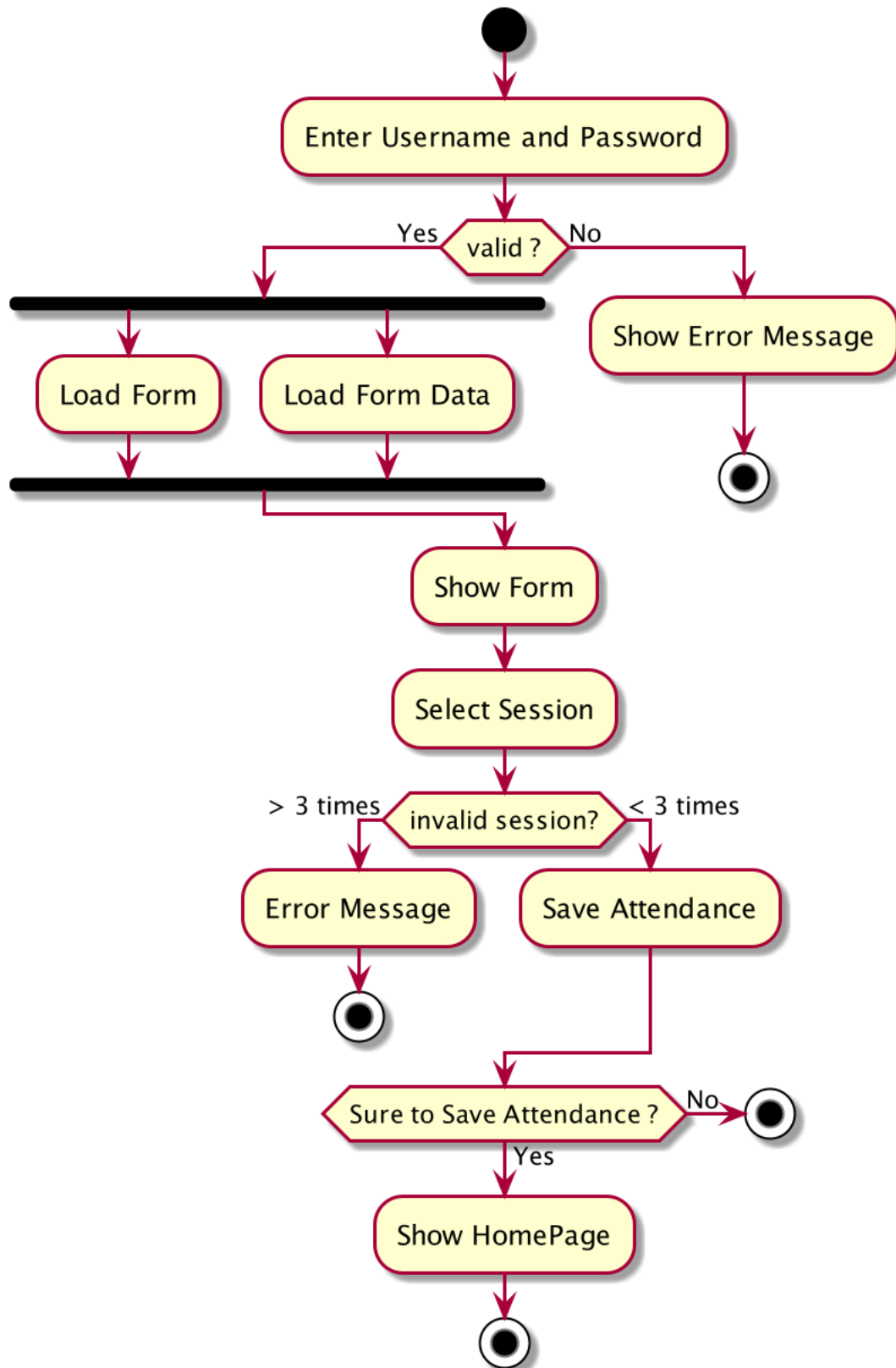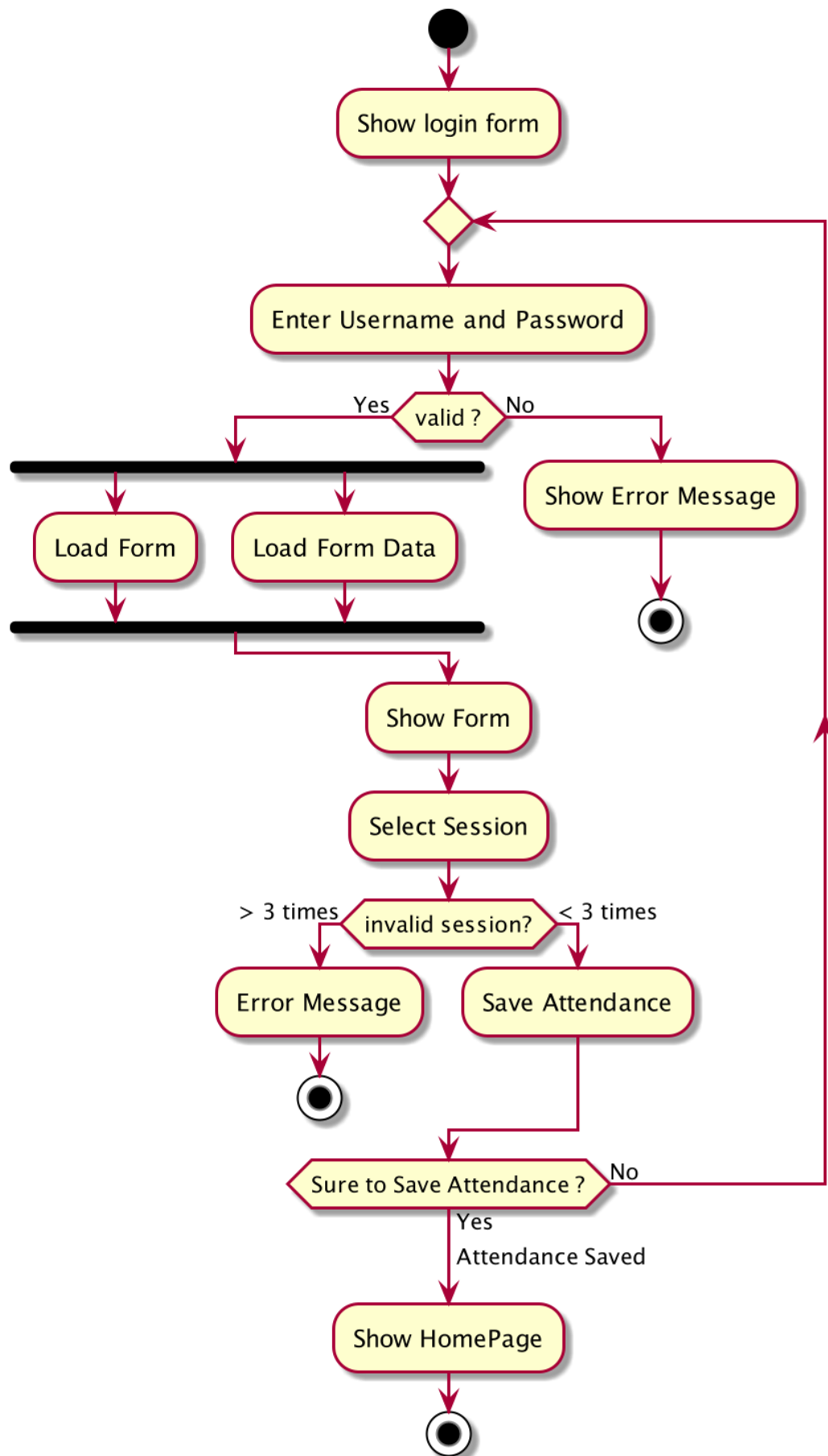| Submitted to:	• Saadia Shabbir
Submitted by:	• Muhammad Inam Ur Rehman • Roll No.12008 • BSSE-5B (Morning)
Subject:	• Software Construction & Development

Last Submission Date: 06 --Dec --2020

QNo.1:

```
                    ●
                    │
                    ▼
                   ◇
                    │
                    ▼
        ┌───────────────────────────┐
        │ Enter Username and Password │◄────────────┐
        └───────────────────────────┘              │
                    │                               │
                    ▼                    ┌──────────────────────────────────────────┐
                   ╱  ╲      No          │ Faculty has entered wrong username or password │
                  ╱valid?╲───────────►   └──────────────────────────────────────────┘
                   ╲    ╱
                    ╲  ╱
                    │ Yes
                    ▼
           ┌──────────────┐
           │ Load Form Data │
           └──────────────┘
                    │
                    ▼
             ┌───────────┐
             │ Show Form │
             └───────────┘
                    │
                    ▼
           ┌──────────────┐
           │ Select Session │◄────────────┐
           └──────────────┘              │
                    │           ┌─────────────────────┐
                    │           │ Show Error Message  │
                    │           └─────────────────────┘
                    ▼                     ▲
                   ╱  ╲   > 3 times        │
                  ╱Invalid╲────────────────┘
                  ╲session?╱
                   ╲    ╱
                    │ < 3 times
                    ▼
           ┌────────────────┐
           │ Save Attendance │
           └────────────────┘
                    │
                    ▼
              ╱            ╲    No
             ╱ Sure to Save ╲──────────►
             ╲ Attendance ? ╱
              ╲            ╱
                    │ Yes
                    ▼
           ┌─────────────────┐    ┌──────────────────┐
           │ Show HomePage   │◄───│ Attendance Saved │
           └─────────────────┘    └──────────────────┘
                    │
                    ▼
                   ◉
```

Show login form

Enter Username and Password

Yes — valid ? — No

Load Form

Load Form Data

Show Error Message

Show Form

Select Session

> 3 times — invalid session? — < 3 times

Error Message

Save Attendance

Sure to Save Attendance ? — No

Yes
Attendance Saved

Show HomePage

Q No.2:
Working:
      First of all, the system takes the detention decision then inform the patient rights and record the detention decisions concurrently then with this data check the status of the patient if it is dangerous then search for the secure place if place founds then the patient admits to the hospital otherwise if no place found then take him to the police station after this it informs the social care, next of kin and update the register simultaneously.

On the other hand, if, the status is not dangerous patient directly admit to the hospital, then there inform about social care, next of kin, and then update the register.

Errors:
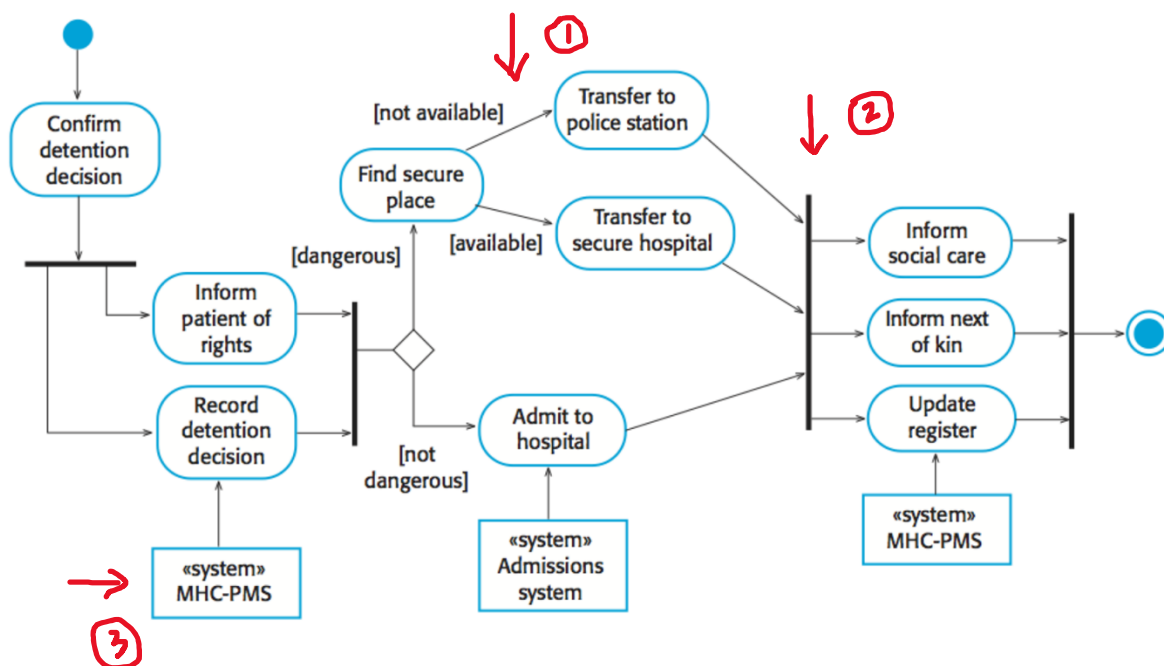
i)   In first point, activity directly splits down into two activities on the basis of some decision.
        Sol: There must be a decision symbol.

ii)   In second point, three activities directly attach to the fork which is against the application of fork.
        Sol: There we have to use the merge symbol.

iii)   In third point, the representation of systems is wrong.
        Sol: Use swimlanes.