

CS4004 Software Testing and Inspection Autumn 2021 Project Specification

Due*: Monday 29 November (9 am Irish time) Marks for this project: **20%** of the module

Aims: The lab component of CS4004 covers a variety of tools and some of which are more challenging than others. It also involves some learning which is best done at your own pace.

This assignment has two aims:

1. **To guide** you through the learning objectives of the lab sessions
2. **To assess your learning** – to what extent you have achieved these objectives. The assignment is divided into 2 part (group project and individual project) it provide the opportunity for your to can work together and write the contribution of each team member in the Logfile of this project and is deliberately open-ended so you have the opportunity to learn as much as you want and provide the evidence.

Student Name: Luxin Chen

UL Student number: 20239696

Assignment: Final project

Date of Submission: 28/11/2021

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Group Project Title:Library management System

1. Description of project: (4)
- A library management system is intended to manage all aspects of a library. The library management system's primary goals are to store, organize, borrow, issue, and return books. It assists librarians in maintaining a database of new books and books borrowed by members.

Books management system can add details (authors, ISBN, date of published. etc)

Booking system allow user borrow books and return books and the details of transaction.

The user management system allows users to add new users and remove users. Users can check the date of return books, and detail of borrowing books.

The librarian management system can record the different type of the librarian and specific section

2. Team members:

Team members:	ID
Darragh Walsh	20244053
Saw Pu	20238436
Sophia Keady	20231555
Luxin Chen	20239696

3. Task 1 Teamwork report

A. The log:

list of sub-tasks done, how many of them, dates, etc.

must be supported by items referenced in Part C

Class	Name
Main—Library management system(altogether)	altogether
Books MS	Darragh Walsh
Booking MS	Saw Pu
User MS	Sophia Keady
Librarian MS	Luxin Chen

TASKS:	DATE:
Think of Idea for the project	04/10/2021 – 10/10/2021
Create a GitHub repository	04/10/2021 – 10/10/2021
Create a project in Jira software	10/10/2021 – 17/10/2021
Set up Dime and Docker	18/10/2021 – 30/10/2021
Troubleshooting of Dime and Docker	18/10/2021 – 30/10/2021
Create projects in DIME (each team member has a sub management system)	1/11/2021 – 29/11/2021
Troubleshooting of Dime deployment	8/11/2021 – 26/11/2021
Project finished	23/11/2021 – 29/11/2021

B. Reflections: (75 – 100 words)

C. Things you are submitting to demonstrate what you did and what you learned.

[List of headings]

3.1 Bug Report 1 - Failure to set up dime application in Eclipse

SOLUTION: create a new blank folder for dime workplace on desktop, keep the JDK11 in JAVA_HOME path, delete any JDK versions except JDK11 in your desktop, make sure you open dime application not Eclipse.

3.2 Bug Report 2- Failure to set Java JDK 11 in Dime











Go to reference in dime and set java JDK reference into version 11.

3.3 Bug Report 3- Failure to initialize docker desktop

SOLUTION: delete all the containers you have in Docker, download wsl2 correctly, make sure turn on the feature of WSL2 in your computer.

3.4 Bug Report 4 – Runtime error in deployment view in DIME application

SOLUTION: Use some command in week12 of lesson section in Sulis. Open Git Bash in administrator mode to type the command in it.

★	Name ▾	Key ▾	Type	Lead ▾
★	 CS4004	TGQY	Team-managed software	 Saw Pu
★	 CS4004_Sophia	CS	Team-managed software	 Sophia Keady
★	 Librarian	LIB	Team-managed software	 Luxin Chen
★	 Library Management System	MAIN	Team-managed software	 Luxin Chen
★	 CS4004_GroupX_Group_Project	CS4004GP	Team-managed software	 Darragh Walsh

DONE 9 ISSUES ✓

Failure to initialize docker
desktop

MAIN-25 ✓ SK

Failure to initialize docker
desktop

MAIN-24 ✓ SP

Failure to initialize docker
desktop

MAIN-26 ✓ LC

Runtime error in deployment
view in DIME application

MAIN-30 ✓ LC

Runtime error in deployment
view in DIME application

MAIN-27 ✓ DW

how do i join?

MAIN-3 ✓ SP

Runtime error in deployment
view in DIME application

MAIN-28 ✓ SP

Cancelling a File Copy dialog
crashes File Manager

MAIN-1 ✓

Runtime error in deployment
view in DIME application

MAIN-29 ✓ SK



Individual Project Title: Library management System –Librarian

1. Description of project: (2)

The librarian class enables a librarian to add a membership of the librarians and the section there are working. They can set their first name, last name, identify number, position of the library and the section of the area their working. Then the detail of the librarian can be submitted in the librarianMS section.

2. Category of Requirements (User story): for example, functional requirements, non-functional requirements, general requirements ... (2)

The category of requirement of LibrarianMS (management system) are

> function requirements,

>non-requirement,

>general requirement.

>Business requirement

3. List of Requirements under each category.... (2)

Functional requirements:

- This class allow user to updating data of the librarians,
- storing data of librarian and interact with other library class.
- Show the details of the borrowing book including date of returning book
- Show a specific section of block certain librarians working on.
- Librarian can access detail of users.

Non-function requirements:

- Style of graphical user interface for the system
- Login user interface and private home interface for security.
- Button can be different style.

General requirements:

- add the id number of the staffs,
- first name and last name of the librarian is essential requirement in the librarian class.
- Allow to submit details of librarian

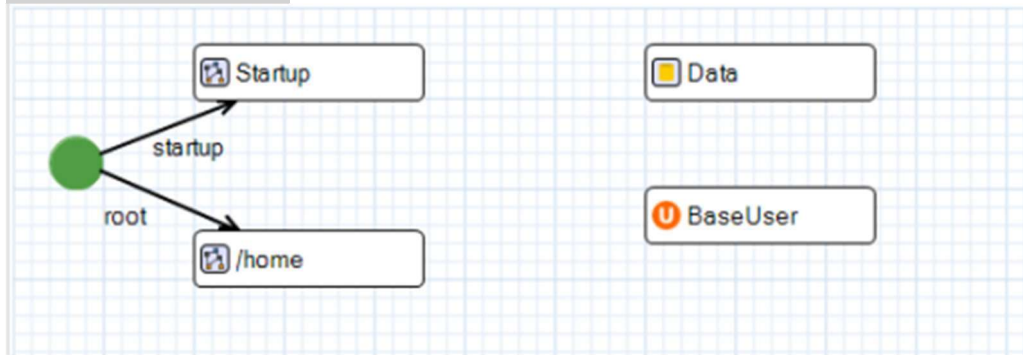
Business requirements:

- Fee is required if a book is not return in a certain period
- Certain books can be purchase
- Collect book from another library

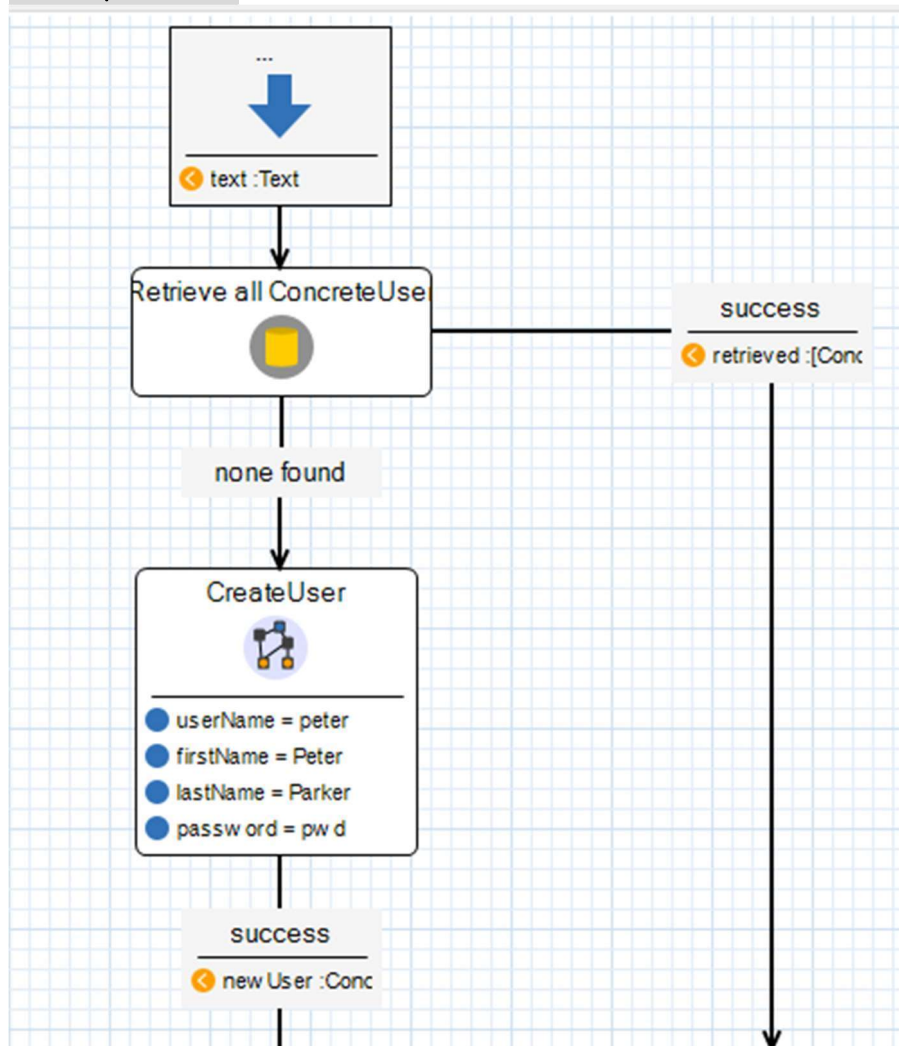
4. Prototype of project

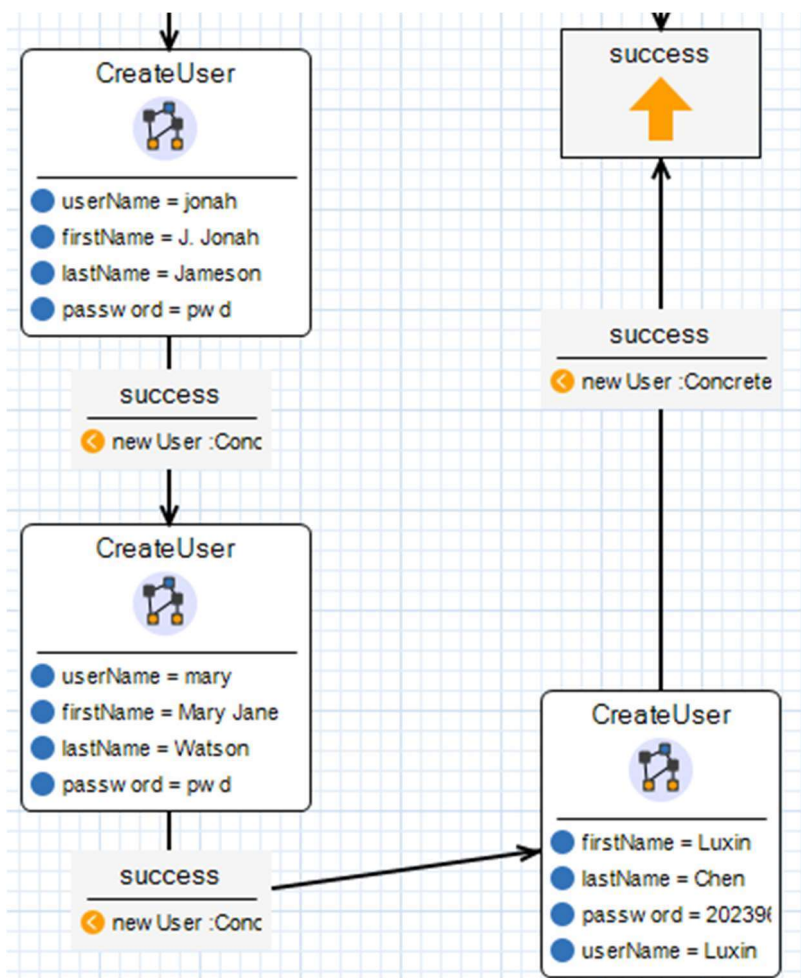
4.1. Data Main Model:

(2)

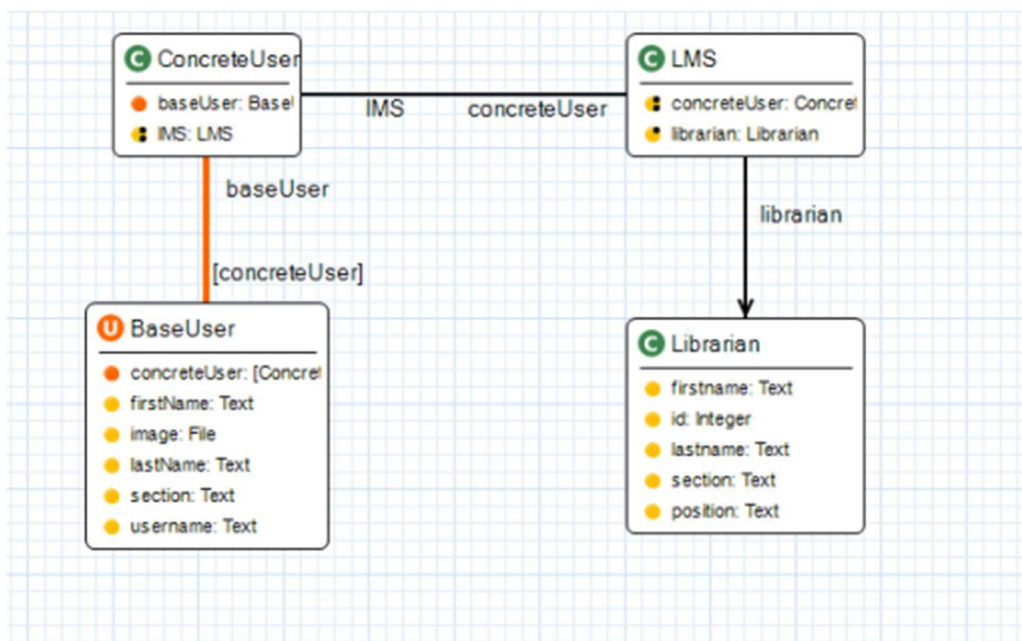


Startup Model:





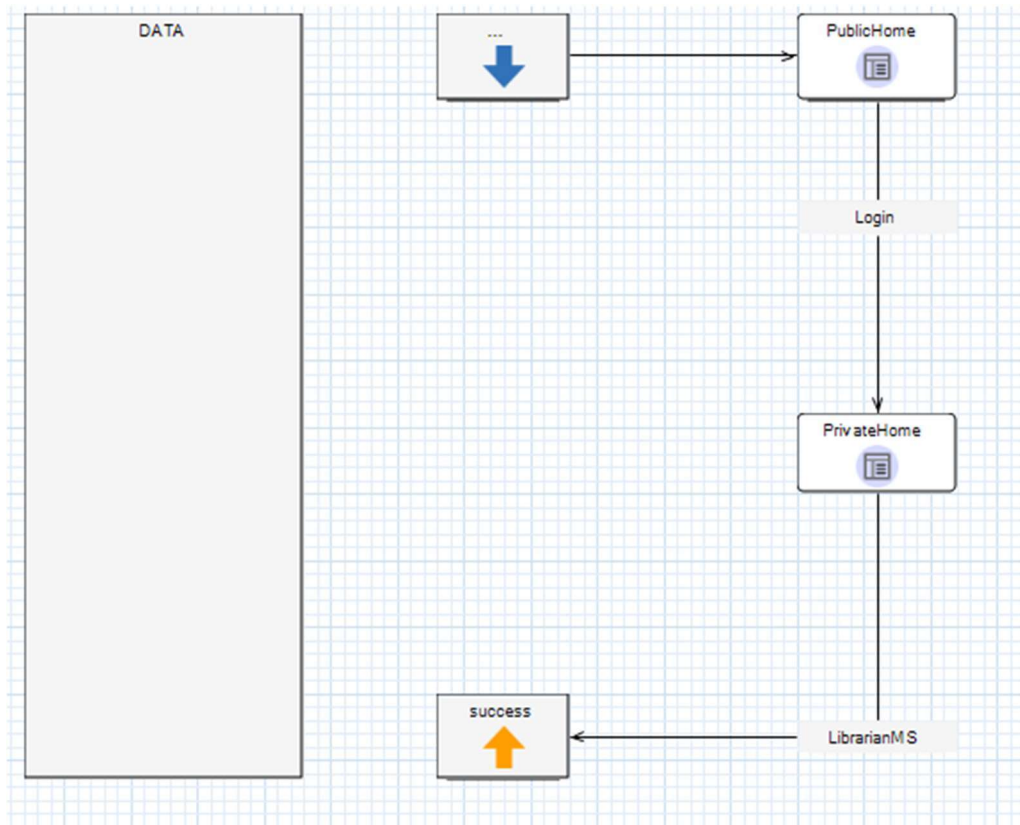
Data Model:



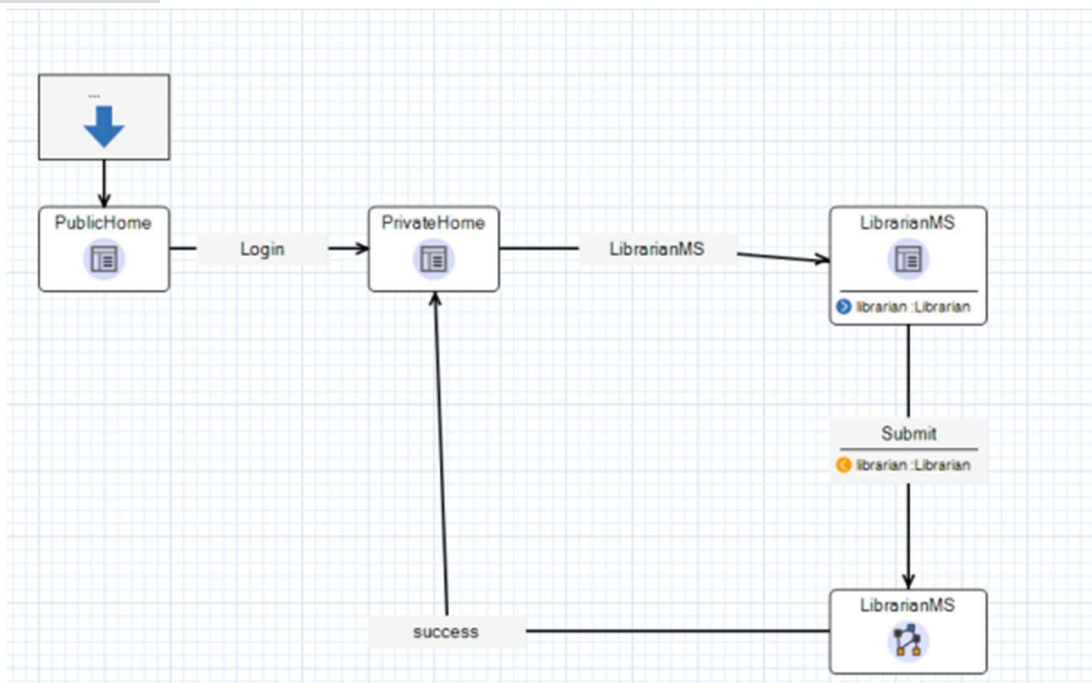
4.2.Process Models

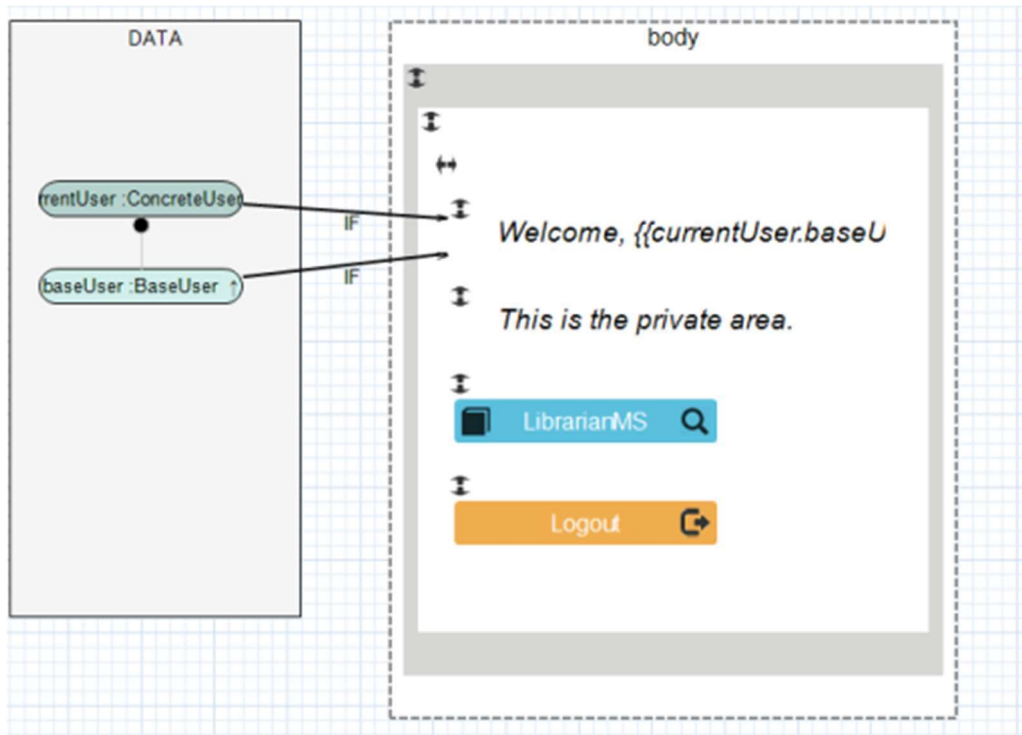
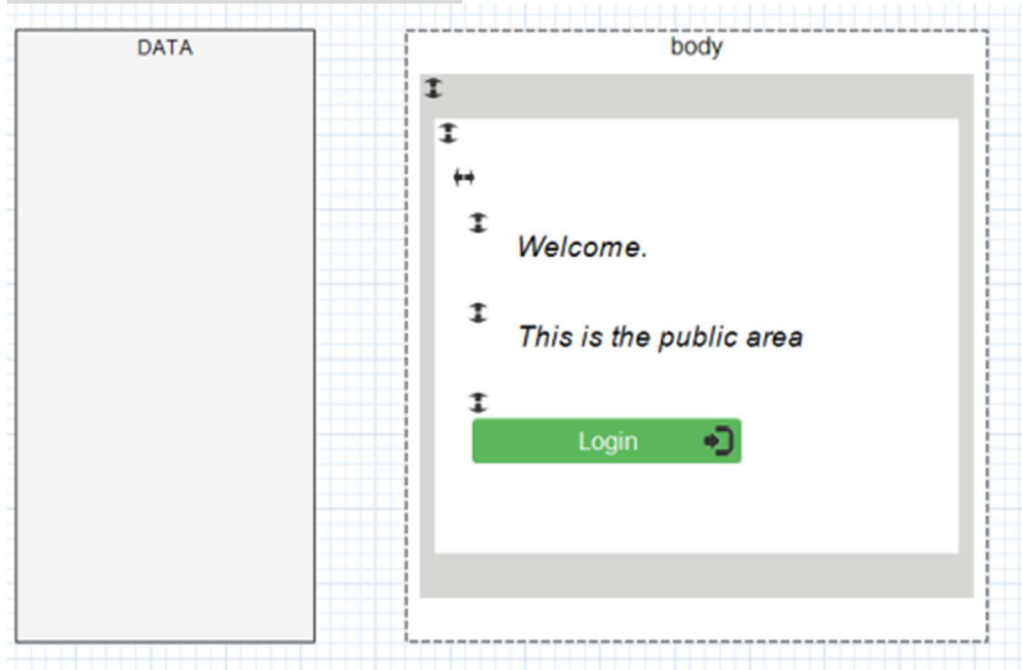
(3)

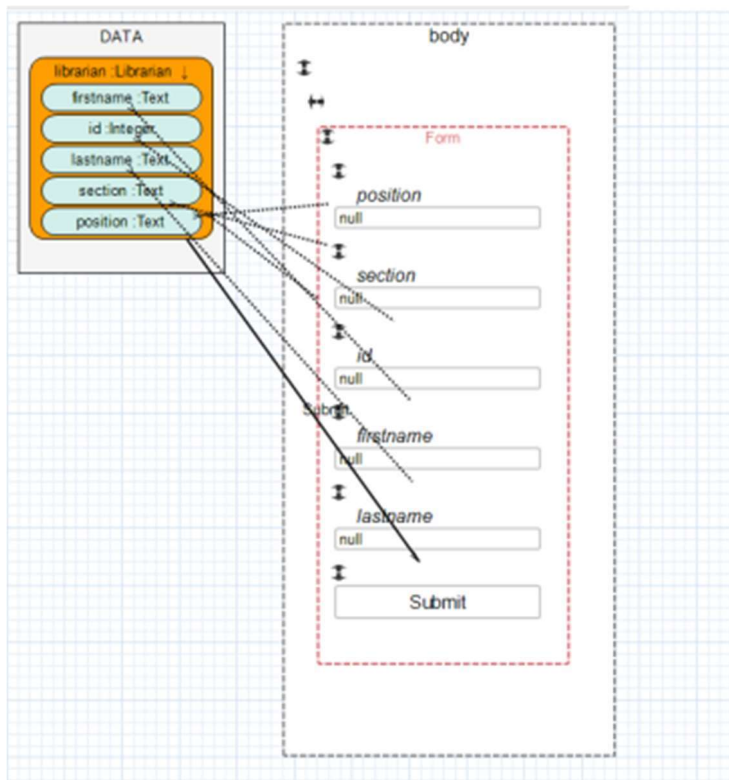
LibrarianMS process



HOME PROCESS:



Private home interface:**Public Home interface:****LibrarianMS interface:**



4.4. Interfaces

(2)



A screenshot of a login form titled 'Please login...'. It contains two input fields: 'Username' with the value 'Luxin' and 'Password' with masked characters. There is a green 'Login' button at the bottom right.

Welcome, Luxin Chen.

This is the private area.

LibraryMS Q

Login

position

Administrator

section

Block B - Children Section

id

20239696

firstname

Peter

lastname

Par

Submit

Welcome.

This is the public area.

Login

Note: The source of the project also needs to be uploaded in a zip folder to SULIS.

Example in windows: Open the DIME folder>>Workspace>> right click on the project folder>> send to Zip

