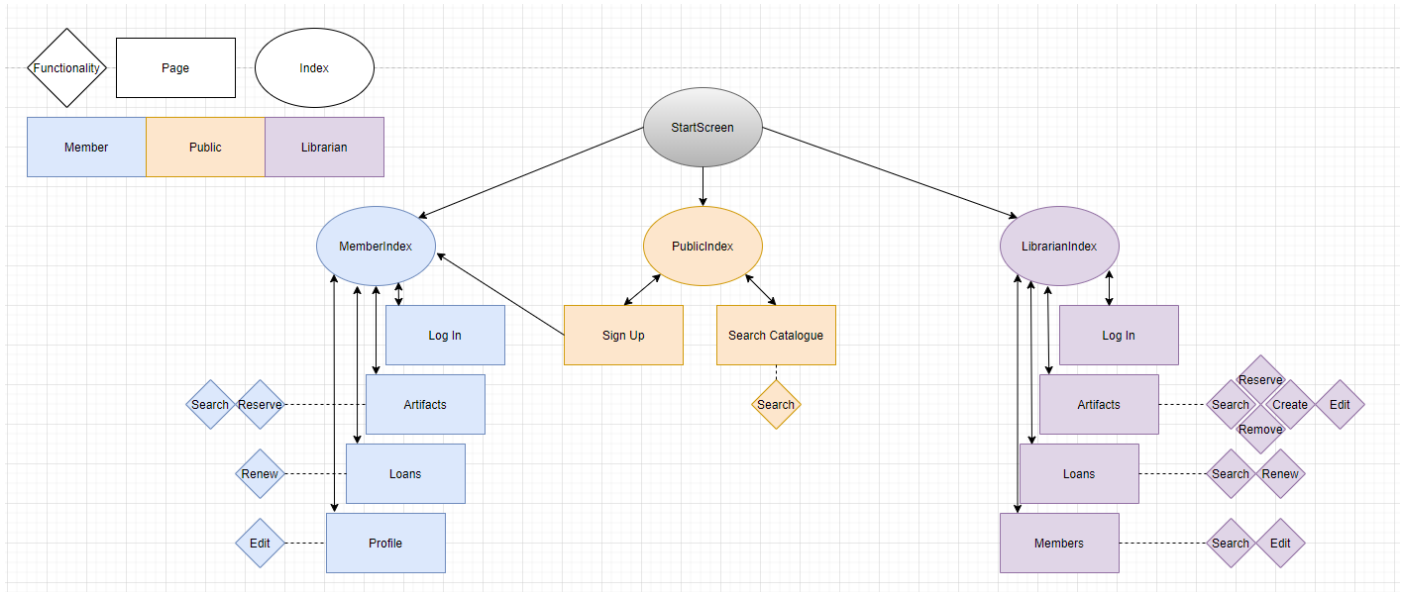# Library Information System Assignment

MSE

Team Member 1
Edward O'Neill
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Team Member 2
Sam Doyle
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Team Member 3
Mohamed Saleh

WireFrame

Requirements Review

Please complete the following tables indicating which of the mandatory requirements you have completed. In cases where there is an issue or you interpreted the requirement in a specific way, please use the comment field to clarify the issue / your interpretation. In the status column indicate whether each requirement was: COMPLETED (you did it), NOT STARTED (you didn't do it), PARTIAL (you did part of it).

Member Requirements Progress

M0	Member Login	--	COMPLETED
M1	View List of Loans	Time Constraint	NOT STARTED
M2	Renew Loans	Time Constraint	NOT STARTED
M3	Reserve Available Artifacts	Time Constraint	NOT STARTED
M4	Reserve On Loan Artifacts	Time Constraint	NOT STARTED
M5	View Loan History	Time Constraint	NOT STARTED

M6	Search for Artifacts	COMPLETED	COMPLET ED
M7	Update Profile	Difficulty in registering a member to his/her specific account so I wasn't able to update a member as a member but I was able to update a member as a librarian.	NOT STARTED

Librarian Requirements Progress

L0	Librarian Login	--	COMPLET ED
L1	Add / Remove Artifacts	--	COMPLET ED
L2	Search for Members	--	COMPLET ED
L3	View Members Current Loans	--	COMPLET ED
L4	View Members Past Loans	Time Constraint	NOT STARTED
L5	Renew Loans	Shallow renewal - A message is displayed that a renewal is successful when it is pressed in the loans page	COMPLET ED
L6	Reserve Artifacts	Shallow reservation - Artifacts can be reserved in that they cannot be reserved again but who they have been reserved for isn't shown as I couldn't figure out a many to one mapping.	Completed
L7	Record Loaned Artifacts	The status of an artefact is on loan when a member is created because I operated upon the idea that a member must check out an artifact when their account is created.	Partial
L8	Record Returned Artifacts	If an artifact is created, I deemed it's status as returned.	Partial

L9	Search for Artifacts	--	COMPLETED
L10	Edit Member Profiles	A member can be edited but all of it's information must be edited.	COMPLETED

General Requirements Progress

G0	Search for Artifacts	--	COMPLETED
G1	Join Library	Time Constraint	NOT STARTED

Additional Requirements

Describe any additional requirements you have completed above and beyond the spec of the project. Use as much space as you require to do this.

Summarise these requirements using the requirements table below.

A0	<insert a title>		
A1	<insert a title>		

Reflections

Please summarise your experiences on the project: what did you learn; what challenges did you have to overcome; what would you have done differently if you could have started over.

DO NOT WRITE MORE THAN ONE PAGE

One of the challenges I faced in this project was being in control of the master branch. This was my first time in managing other people's insofar as having to merge our work to the master. Complications arose however when my controllers,models,and views disappeared after a push and I had to go back to a previous commit. This action untangled the project and I had to then recover a teammates branch because in my fix his work was lost. Afterwards we had to be careful and we pushed to git less, well I pushed and went to other branches less because when I came back to my branch my "backend" files kept disappearing.

With regards to backend development, the challenge here was keeping in mind the scope of what I'm actually doing and thus my aim was to keep the code simple enough. I learned a lot from this and I feel like I could develop such an application by myself as a side project using git because I had to learn the solutions to my git problems quite quickly.

In general I found the process of designing the backend to be extremely challenging but rewarding in the end. I would like to discuss the edit member functionality as an example. This function was one of the earliest things I tried to implement but I kept having trouble with it. I tried many things and looked at the lecture notes for inspiration but I couldn't figure out a way to do it from them. I looked into 'PutMappings' but this lead to more complications as I found that the version of Spring-Boot I was using didn't really like them. When I designed the search function I noticed that maybe I could use it to help me in an edit function and I explored this for a while and it was successful! I could search for a member to edit and then I was able to change their details. Finishing this function taught me a lot about the MVC design in Spring-Boot in relation to controllers and I feel like it gave me the experience to carry out larger projects in the future using this framework.

 - Edward

Sam's challenge was front-end. He primarily styled the website and came up with how each page should look with regards to consistency and functionality. The most obvious example is the color coding of the different types of people accessing the website; purple librarians, blue members, etc. Furthermore he helped me in particular with regards to my own html files. He styled them after I finished some of the backend as I primarily worked on the backend.

He too had trouble with git. After the problem I stated before, he became the one to manage the merges because he finished his sprint tasks early. He and Mohammed worked together on a restructure of the code base into folders that would allow docker to run. The restructure worked in that he took my folder structure and applied the correct templates from his branch so that the website would look more completed and stylised and would also run with docker.