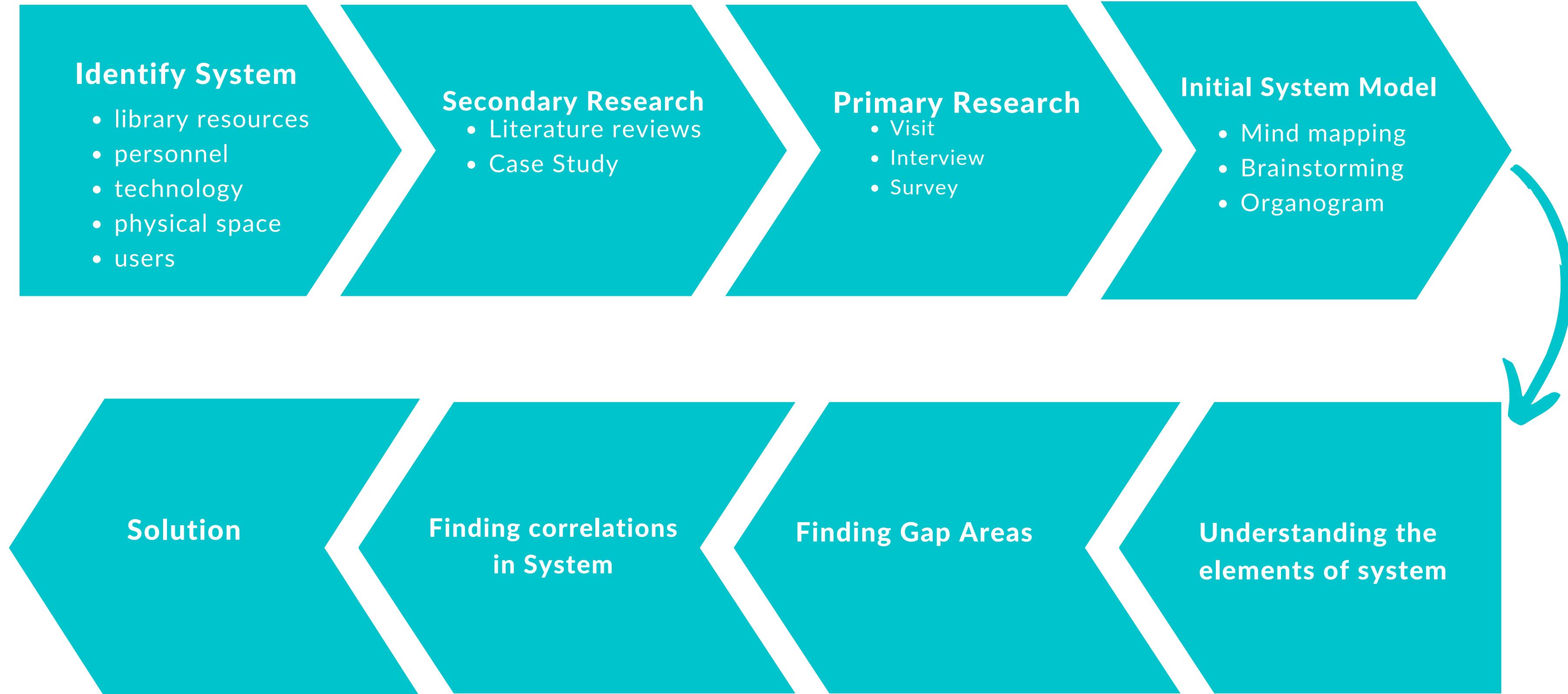


Library System Optimization:  
Understanding & Improving

# WORKFLOW



Library  
Nift Kolkata  
System Identified



# Project Brief



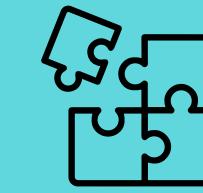
Identify the system



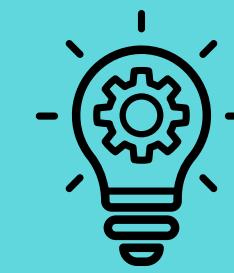
Research



Define the elements  
of system



Find the gap  
areas



Propose probable  
solution

# Why Library System?



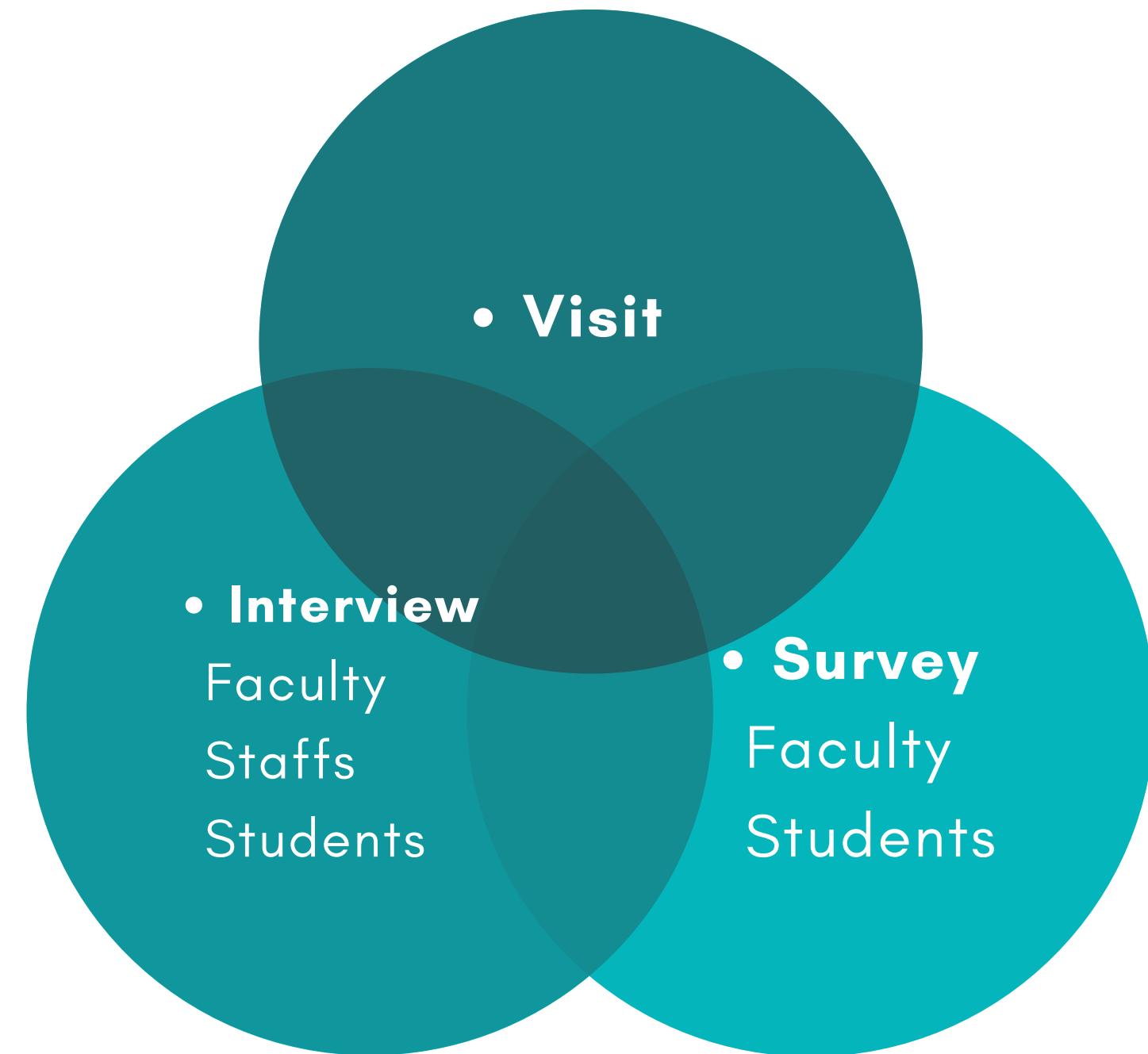
College library would be suitable in all possible ways for research and getting those little changes implemented after the completion of my research. The most important thing is that I am directly connected with the library and it is an integral part in building my knowledge.

# About

The NIFT Kolkata Library is part of the NIFT Library System, which is a network of libraries across the National Institute of Fashion Technology (NIFT) campuses in India. The NIFT Kolkata Library provides access to a wide range of physical and digital resources to support teaching, research, and professional development in fashion and related fields. The library offers a diverse collection of books, journals, magazines, audio-visual materials, and digital resources such as online databases and e-books. The library's online catalog allows users to search for resources across all of the NIFT libraries, and its online databases provide access to a wealth of research materials related to fashion and related fields.



# Primary Research





EMPTY DISPLAY



UNORGANISED SHELVES



EXCESS SUNLIGHT CAUSING HEAT



PLUG POINTS ARE NOT WORKING



OLD MAGAZINES



DAMAGED WALLS



LACK OF WORKING AREA

# Interview Questionnaire



Q. Can you explain the library's policies on borrowing materials, including loan periods and renewals?

Q. How does the library organize its collections?

Q. Can you describe the library's computer and internet access and whether there are any limitations on their use?

Q. Can you tell me about any special collections or archives that the library maintains?

Q. How do you acquire new materials for the library's collection, and how do you decide which items to add?

Q. What measures does the library have in place to ensure the safety and security of the materials?

Q. Can you describe the library's policies on late fees and fines and how the users can pay for any outstanding charges?

Q. Does the library have any special services or resources for students with disabilities?

Q. How does the library maintain and preserve materials, particularly older or fragile items?

Q.How is the library's budget allocated and managed?

Q.What percentage of the college's overall budget is allocated to the library?

Q.Are there any current budgetary challenges that the library is facing?

Q.How many librarians and other staff members work at the library?

Q.What are their primary roles and responsibilities?

Q.Are there any open staff positions currently, or any plans to add new positions in the near future?

Q.What databases does the library provide access to, and how are they selected?

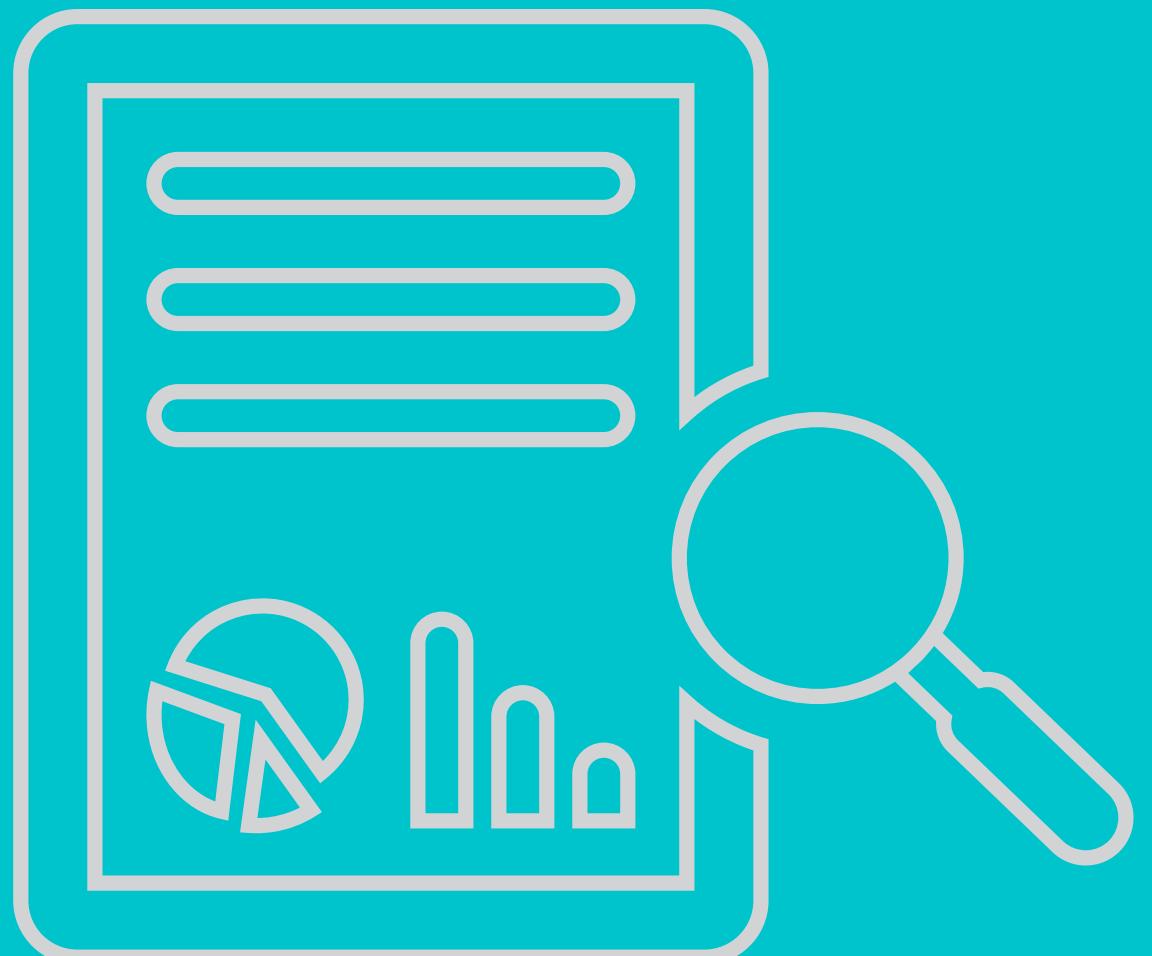
Q.Are there any new databases that have been added recently?

Q.How do students and faculty access the library's databases, and are there any training or support resources available?

# More Questions



# Analysis of Interviews



- Students should behave in a certain way in the library like they should avoid talking and focus on studying.
- Attending phone calls should be strictly prohibited in the library.
- Books should be kept in the place from where it is taken rather than leaving it on the tables.
- Maintenance of the library should be done regularly (changing damaged plug points, renovating damaged walls, table and chairs etc) and organisation of books should be checked time to time.
- Upgrading working space according to the current needs.
- Library should be more spacious with more variety of books.
- Most of the resources should be present online for easy accessibility.
- Curtains should be placed on the windows as direct sun on the student's face can make them fall sick.
- The library needs to motivate people to use the resources as much as possible and its environment needs to be aesthetically pleasing.
- Yearly Promostyl record needs to be available online.



- Yearly Promostyl record needs to be available online.
- Book pages are removed by students which is not acceptable at all.
- Traffic flow of the library needed to be worked upon.
- Students should be made aware of the online resources available.
- Some resources can only be used through library computer system, so, it requires more computers.
- Library is a place where one study in silence and seclusion but here noise and distraction from people entering and leaving breaks off the concentration.
- Library hour is not convenient.
- Library should focus on a more detailed footfall like which department is using it the most and which is using it less and why.
- Students are unaware of the guidelines provided by library.
- Curriculum of every department with references should be provided to the library, so, they can keep a check on the availability of required books. Students can also keep a check on their knowledge in various categories which comes under their department.
- Entrance should be reworked as it creates a chaos.

## Further Analysis

# Survey Questionnaire



Q.How often do you visit library in a week?

- 1.Once
- 2.2- 4 times a week
- 3.Daily
- 4.Rarely

Q.Do you like the physical layout of the library?

- 1.Yes
- 2.No
- 3.May be
- 4.Other...

Q.Do you need changes in any of the following areas of library? (you can select multiple options)

1. Entrance /Exit
2. Workspace
3. Traffic Flow
4. Sitting area
5. Book Shelves
6. Other...

Q.Are you satisfied by the collection of books in the library?

- 1.Yes
- 2.No
- 3.May be
- 4.Other...

# Some More Questions

Q.Which category of books do you think are lacking?

Q.Have you ever experienced any noise or other disruptions in the library?

- 1. Yes
- 2. No
- 3. No Impact
- 4. Other...

Q.Are you aware of the online resources and facilities provided by the library?

- 1. Yes
- 2. No
- 3. Maybe
- 4. Other...

Q.Are the rules and regulations clearly communicated to you?

- 1. Yes
- 2. No

Q.Is the library open in convenient hours for you?

- 1. Yes
- 2. No
- 3. Other...

Q.Choose one of the following options for alternate library hours?

- 1.10 am- 8 pm ( Monday to Friday)
- 2.10 am- 8 pm ( Monday to Saturday)
- 3.10am- 5:30pm ( Monday to Friday) & 10 am- 8 pm ( Saturday)
- 4.10am- 5:30pm ( Monday to Saturday)
- 5.Other...

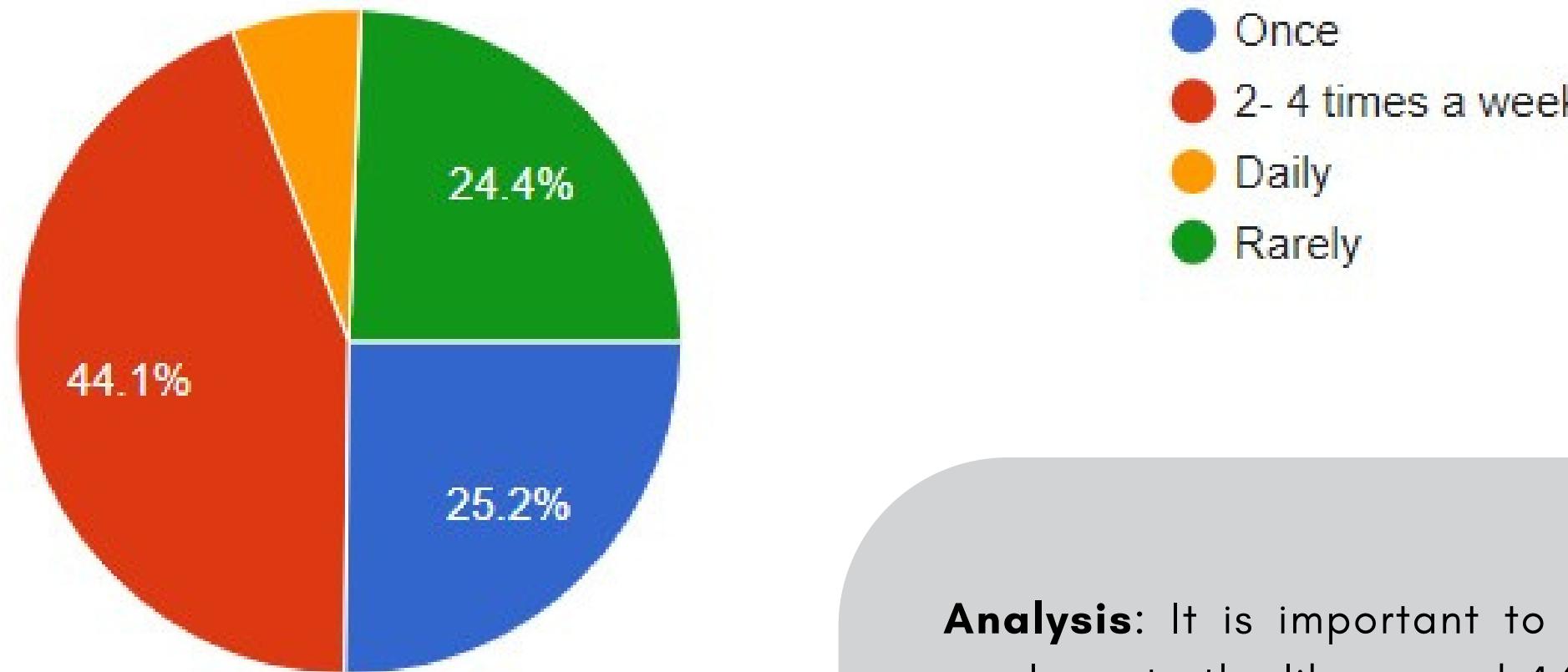
Q.What are the other alternative options do you have when the library is closed?

Q.Do you need any improvement in infrastructure or services provided by library?

**Few More...**

# ANALYSIS

## Q1 How often do you visit library in a week? 127 responses



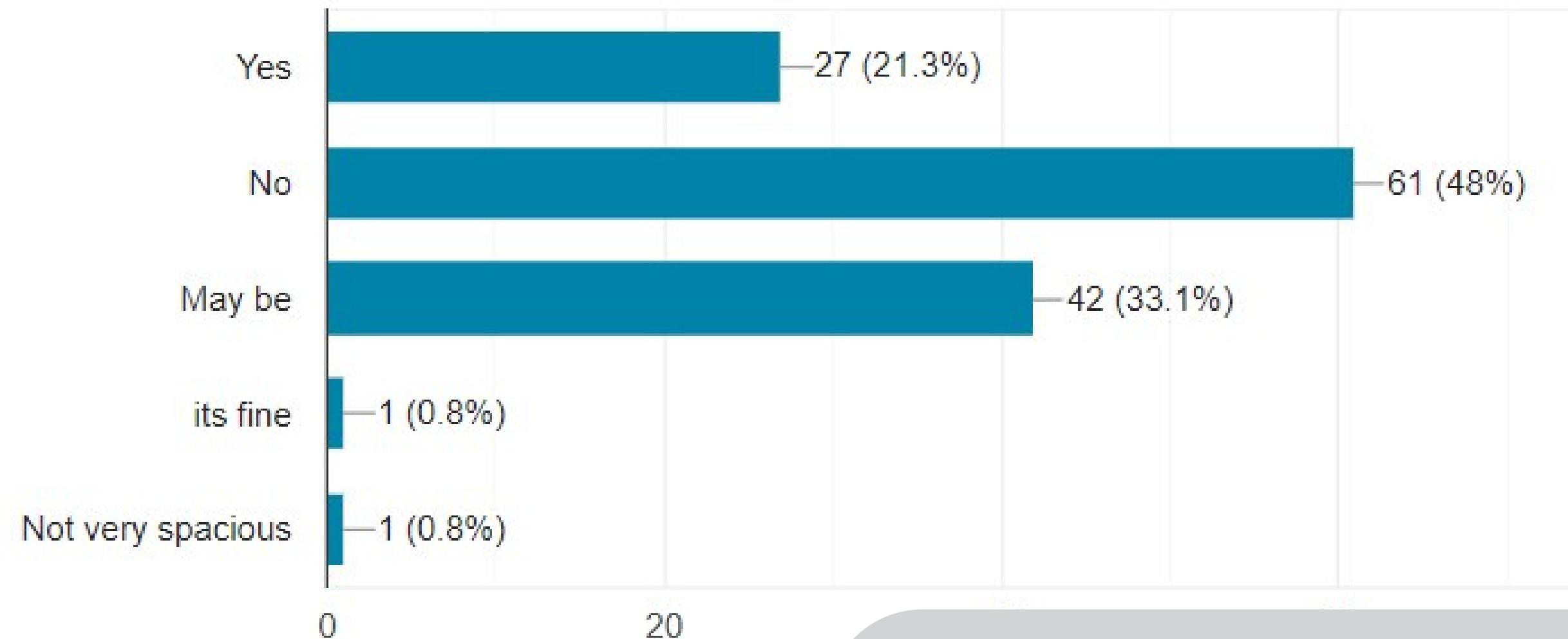
**Analysis:** It is important to note that around 24.4% percent of the students rarely go to the library and 44.1 % of the students go to the library between 2-4 days a week and 77.3% of the students go to the library at least once a week.

**Note-** Library needs to give attention to the 24.4 % students who are rarely using the resources centre and know the reasons behind it.

# Q2

Do you like the physical layout of the library?

127 responses

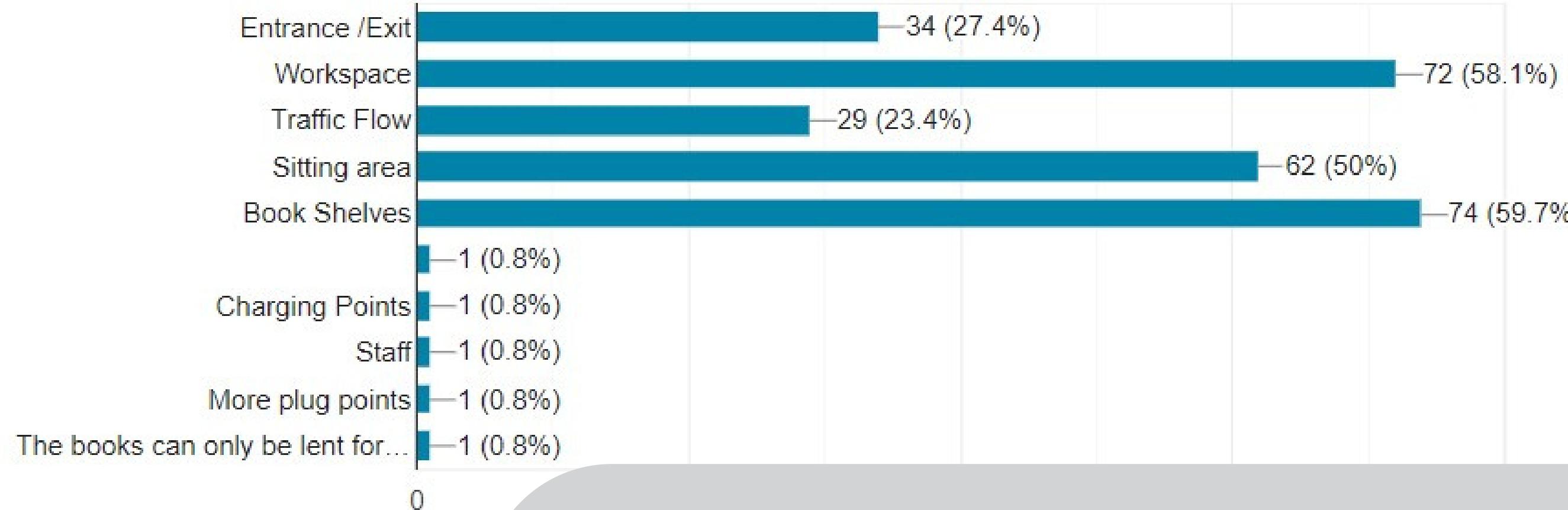


**Analysis:** Majority of students, that is around 49%, does not like the physical layout of the library and 33.1% students are unsure about it.

# Q3

Do you need changes in any of the following areas of library? ( you can select multiple options)

124 responses

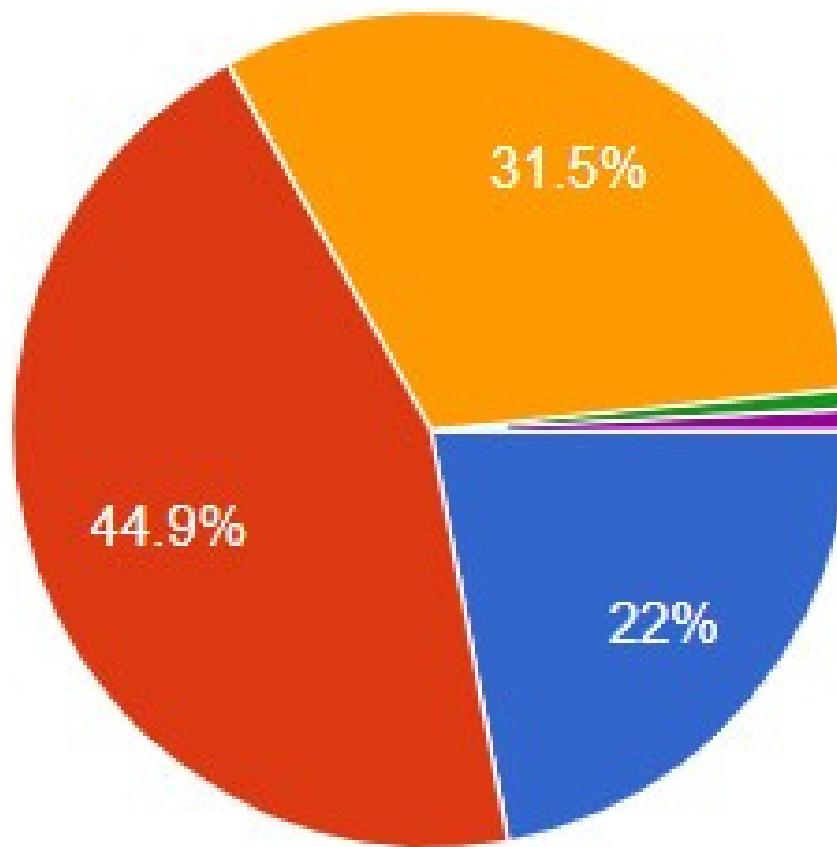


**Analysis:** Almost all of the students chose all the options, that is they need changes in all the sections mentioned above. Around 60% of the students chose book shelves, 58% chose workspace, 50% sitting area , 27% Entrance/ Exit and 23% Traffic flow. From the above results, we can see that students are having problems finding books and even the workspace and sitting area is causing problems for students to spend more hours in the library. The other noticeable answers were the lack of charging points and its placement in the library. One of the answers states that the duration of borrowing books is less as the book cannot be finished in a week and issuing just one book when you need multiple books to make a project is not justified.

# Q4

Are you satisfied by the collection of books in the library?

127 responses



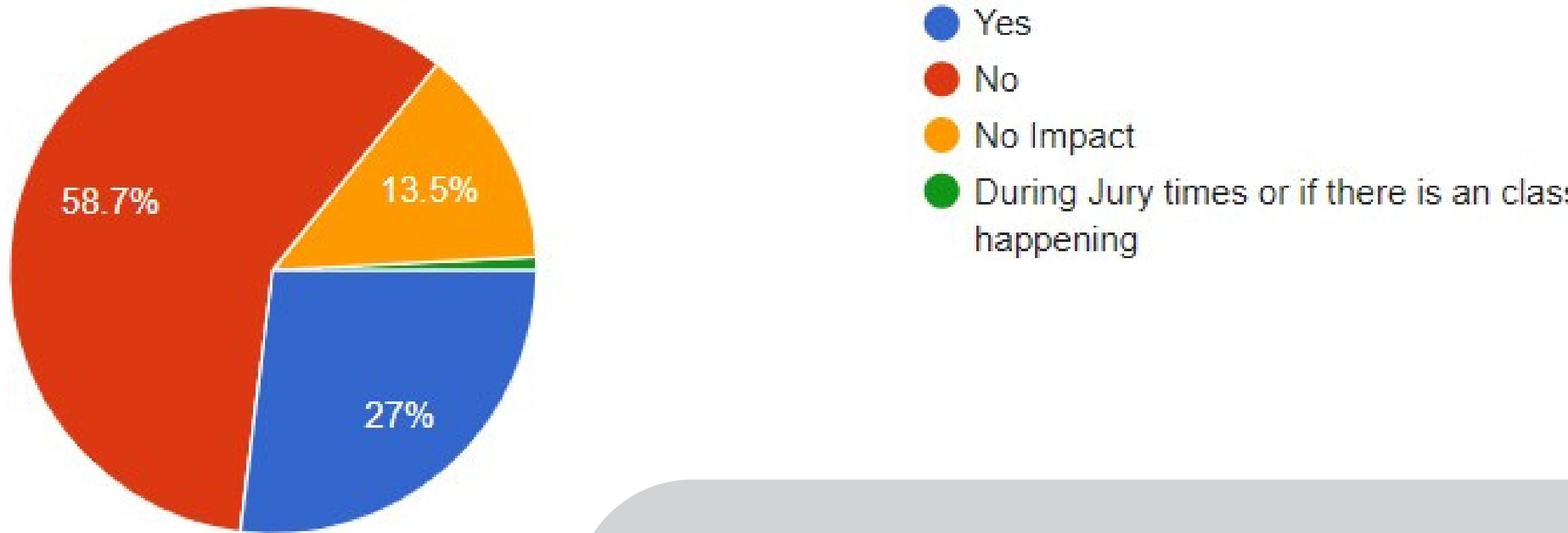
- Yes
- No
- May be
- Never experienced
- There should be books for issue

**Analysis:** From the above results, 22% of the students are satisfied, 44.9% of the students are not satisfied and 31.5% are not sure. One of the responses states that some of the books are only for reference purposes and not for issuing.

# Q5

Have you ever experienced any noise or other disruptions in the library?

126 responses



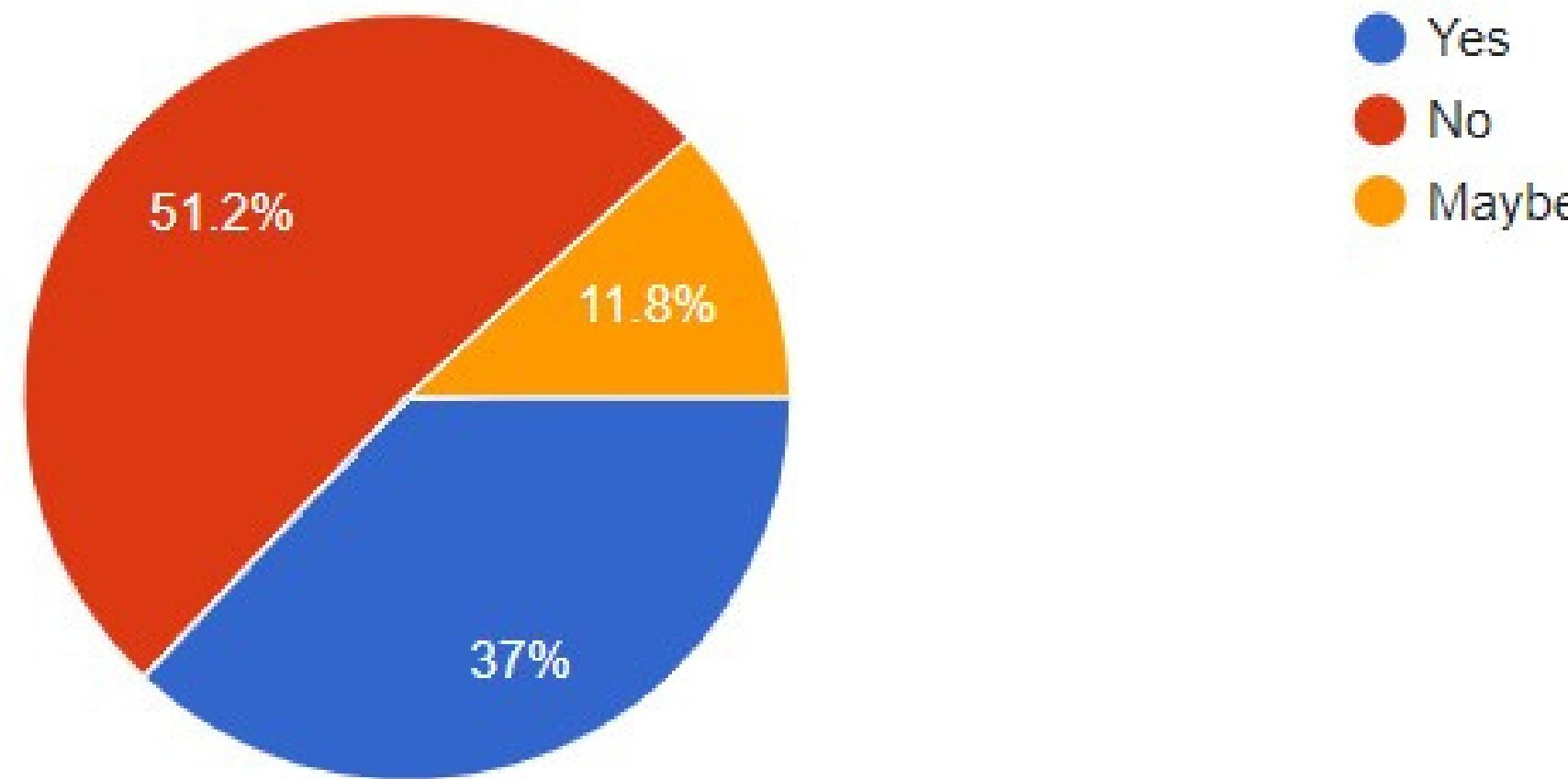
**Analysis:** 59.7 % of the students haven't experienced any disruption, 27 have faced disruption and 13.5% are not affected by these disruptions.

**Note-** One of the responses states that during jury time or classes held in the library, you can hear noises.

# Q6

Are you aware of the online resources and facilities provided by the library?

127 responses



**Analysis:** About half of students that are 51.2% students are unaware of the online resources, 37% are aware and 11.8% of the students are unsure about the online resources, either they don't know or they know partially about the resources provided online.

# Q7

## Which category of books do you think are lacking?

**Analysis:** The following are the responses :

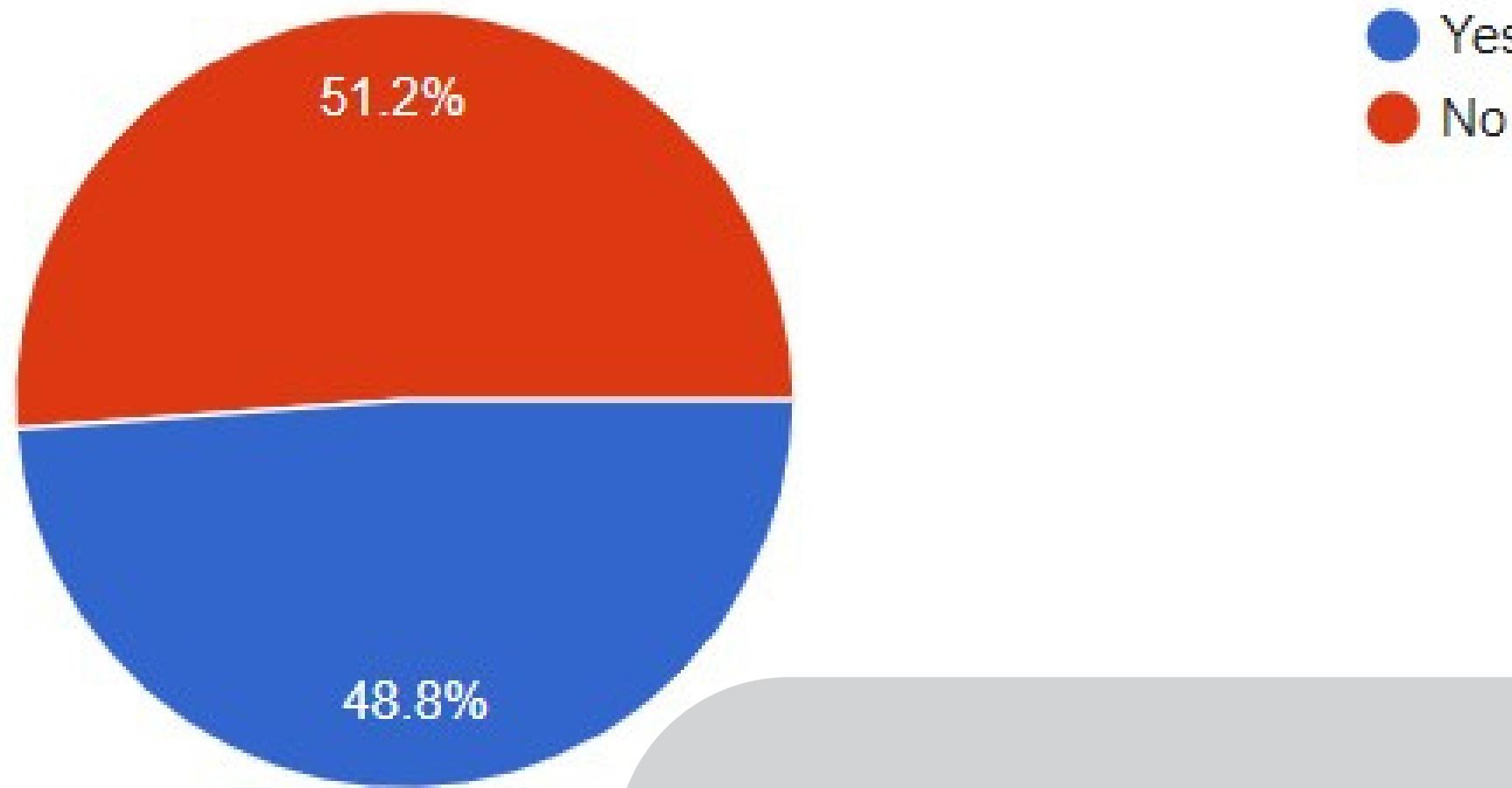
- Fashion (History, Encyclopedia, Pattern Making Books, Subculture)
- F&LA department (Jewelry Designing, Interior Designing)
- Graphic Design (layout design, magazine design, packaging design )
- Internship and graduation projects
- New Edition Magazine ( magazines on culture and tradition)
- Books based on product
- Book based on Craft
- Knitwear Department Books
- Anatomy
- Apparel Production
- Technology
- Marketing and Retailing
- Self Help books
- Books on how to approach for internship and job
- Design History
- Material Handling
- Books on different textiles from India and abroad
- Books related to Rhino and 3D software
- Leather design ( new edition books based on types and sources of Leather, Finishes, Bag designing)
- Film Studies
- Comic book making
- New edition books on coding
- Book based on Art and Design
- Books on time management, stress management and emotional intelligence
- Data Analytics
- FC department books( Illustration, Branding, Web design, UX/UI, 3D Modelling, Video graphy, Storyboarding, design Strategy and system thinking, mental models, Fashion Styling, graphic novel, ergonomics of graphic design, Intuitive design, CGI, VFX, AR/VR/MR, Motion Graphics, How to make CV and Portfolio)
- Science Fiction
- Geometry
- Fictional Novels
- Textile Department ( Dyeing, sustainable textiles)
- Fashion Forecasting

**Note-** More than category, proper organization of books is lacking, some of the books are only available as references, new editions of books required.

# Q8

Are the rules and regulations clearly communicated to you?

127 responses



**Analysis:** Majority (51.2%) students state that the rules and regulations are not clearly communicated to them and 48.8 % are aware of the rules and regulations.

**Note-** About half of the students are not clearly aware of the rules and regulations, although it is mentioned in the student rule book, that means the library should provide students with rules of the library separately.

# Q9

Is the library open in convenient hours for you?

127 responses



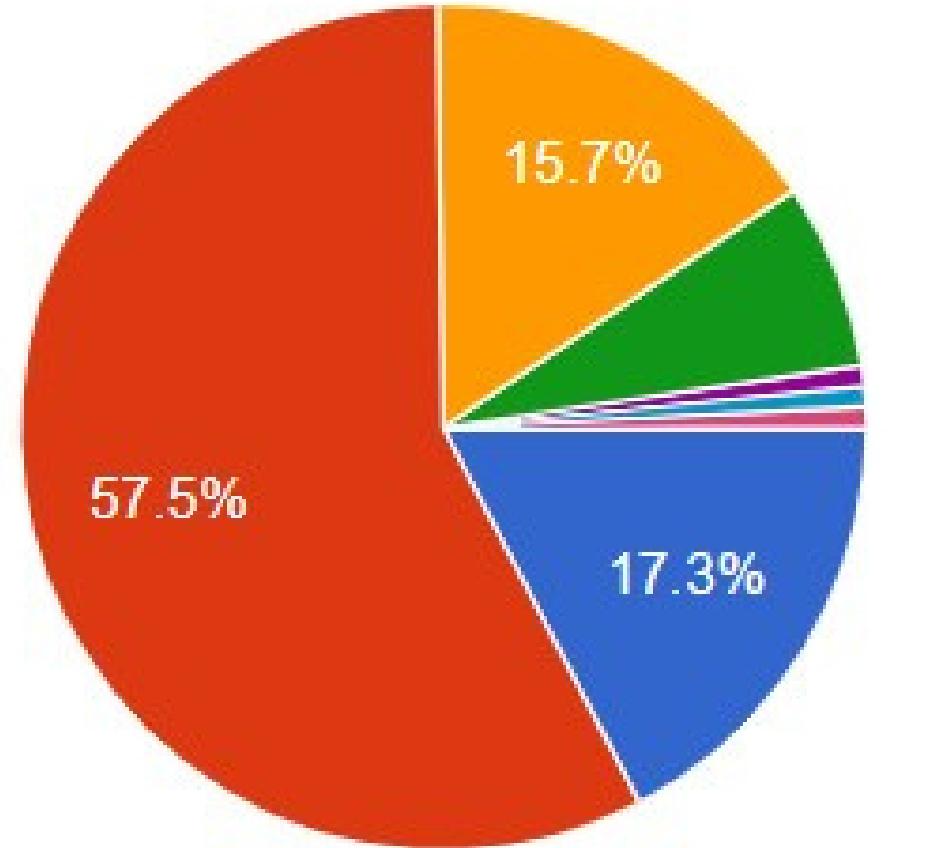
**Analysis:** About 71.7%(majority) of the students find the timing of the library is not convenient for them, 26.8% find it convenient.

**Note-** Classes get over till 6pm and the library gets closed at 5:30 pm.

# Q10

Choose one of the following options for alternate library hours?

127 responses



- 10 am- 8 pm ( Monday to Friday)
- 10 am- 8 pm ( Monday to Saturday)
- 10am- 5:30pm ( Monday to Friday) & 10 am- 8 pm ( Saturday)
- 10am- 5:30pm ( Monday to Saturday)
- 8am to 8pm daily (minimum)
- would want it to be open 24/7 like other institutions have or atleast till like 11 or 12 in the night especially in jury days
- 9 to 6

**Analysis:** Around 57.5% of the students want the timings to be 10am-8pm (Monday to Saturday), 17.3% students want the timings to be 10am-8pm (Monday to Friday)and 15.7% students want the timings to be 10am-5:30pm (Monday to Friday) & 10am- 8pm (Saturday). Only 7.1% of students want the timing to be the same as now.

**Note-** Some other timing responses: 8am-8pm daily, 24/7 or 10am- 11pm (especially in jury time) and 10am-8pm (Monday to Friday) & 10am- 5:30pm (Saturday)

# **Q11** What are the other alternative options you have when the library is closed?

**Analysis:** Most of the students said that the internet is the only option and some of them said that other Libraries and online resources provided by the college library are used. A large number of students state that they have no other options left.

**Note-** One of the responses states that the Internet is the only option left which often lacks validity to the resources that they provide.

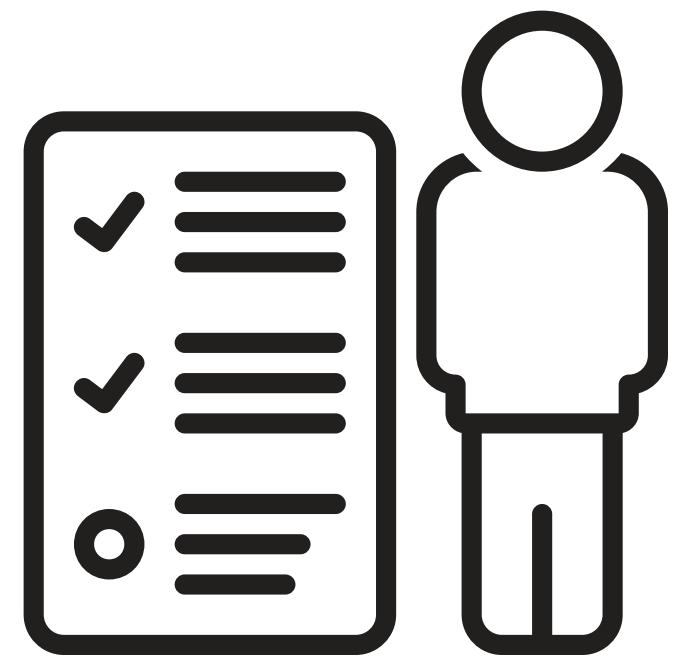
# Q12 Do you need any improvement in infrastructure or services provided by the library?

## **Analysis:**

- The above responses states the following:
- The library should reconsider their timing.
- Allow access of all books through online medium.
- Collection of books should be increased in length and breadth.
- The issue time period should be increased for more than 1 week.
- Issuing more than one book should be allowed.
- Distraction of people entering and leaving the library should be considered.
- Reorganization of book shelves.
- Charging point to be increased.
- The layout of the sitting area needed to be changed
- More spacious library



- A complete silence zone can be introduced
- Proper workspace for individual work or group project discussions.
- Sitting arrangement can be modified by creating a side lined sitting with all walls.
- Reading space can be more aesthetically pleasing
- Better wifi facilities
- Proper working Ac
- Different sections for new arrivals and bestsellers books
- More copies of books which is made for reference only
- Soundproof library
- Better and less congested entrance
- Entrying the name for printouts in library should be reconsidered
- Better printing services
- Printing area creates commotion
- Submitting late fine is a lengthy process
- Better and less congested entrance
- More personal working space

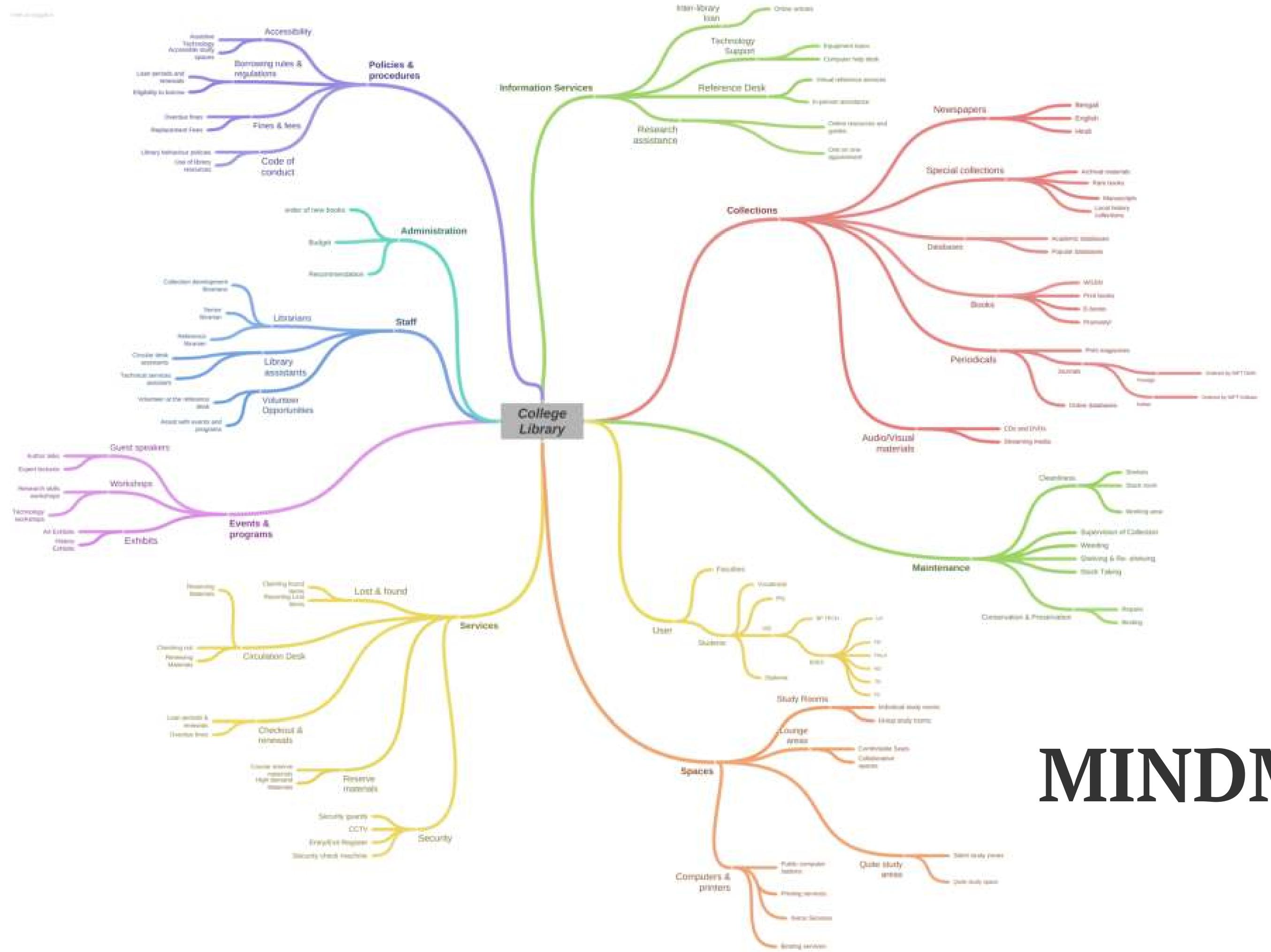


■ ■ ■ MORE  
RESPONSES

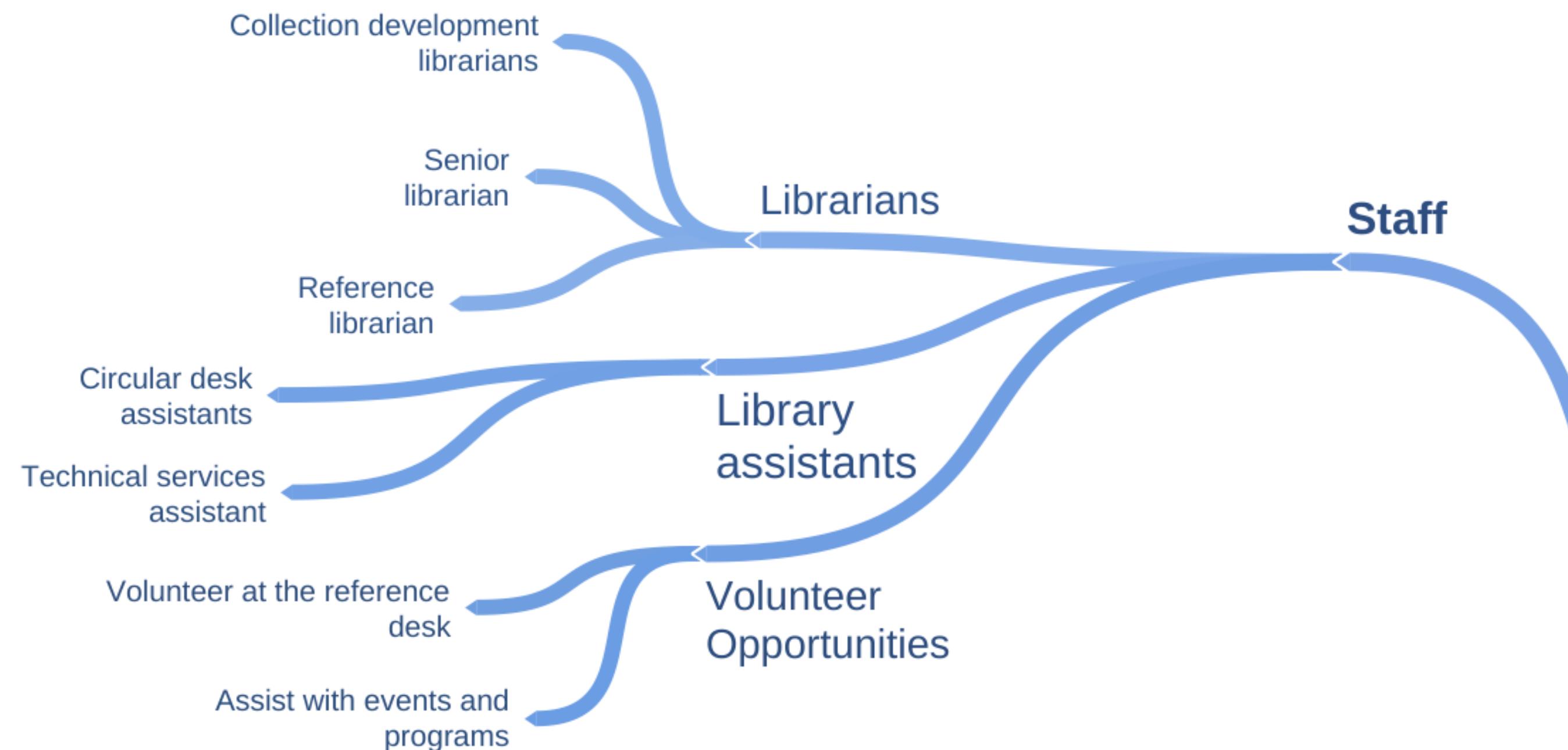
# Initial System Model

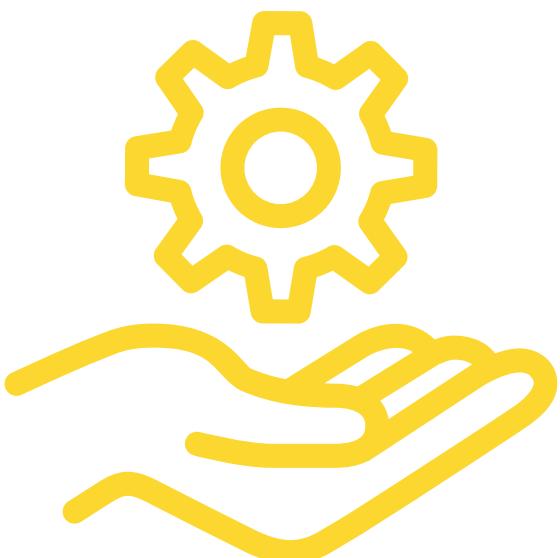
- Brainstorm
- Mind map
- SWOT
- Organisational Hierarchy chart
- Casual loop

				Inter-library loan		Security guards		Online articles
	Online resources and guides		Technical services assistants		Academic databases			
Exhibits				Operation Research	Circulation Desk		Binding services	
	Reference librarians							
Comfortable Seats	CDs	CCTV	Due date	Students	Entry	New arrival		Periodicals
	Academic databases	Promostyl		Subscription	Journals		rate quotation	
Eligibility to borrow		WGSN			Books	Exit		
	Overdue fines	Security					Department	
Computers & printers	Loan periods	Shelves		E-books	Magazine Stands			Print books
		ID Card	Wifi	User				
	Lounge areas				Faculty sitting area		Consumer Behaviour	
Security check machine		Newspaper	Magazines			Photography	Timings	Reference desk
Quite study space	Workshops	Librarians	Trails	Merchandising		photocopy	Filmfare	
				Spiral Binding				
	Claiming found items					Due date	Issue date	
Entry/Exit Register	trails	Buget		Replacement fees		Late fine		Faculty sitting area
Supervision of Collection				*Policies & procedures*			Silent study zones	

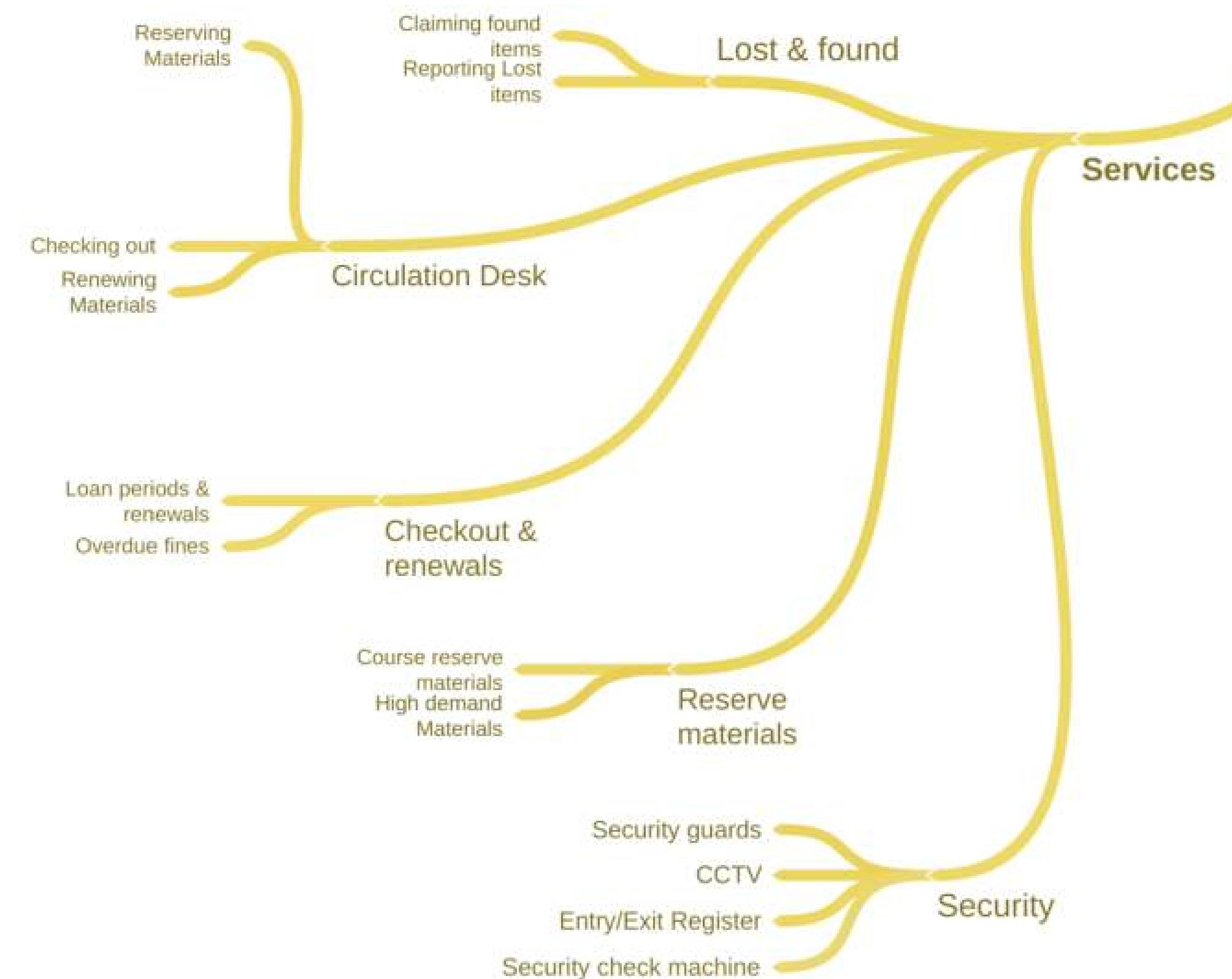


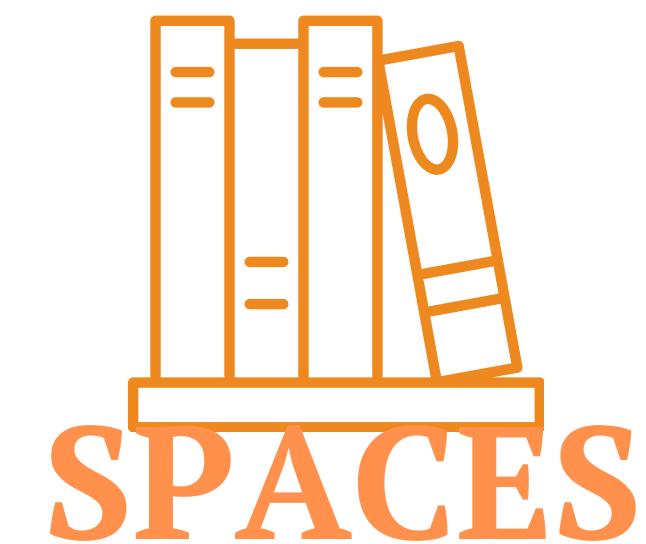
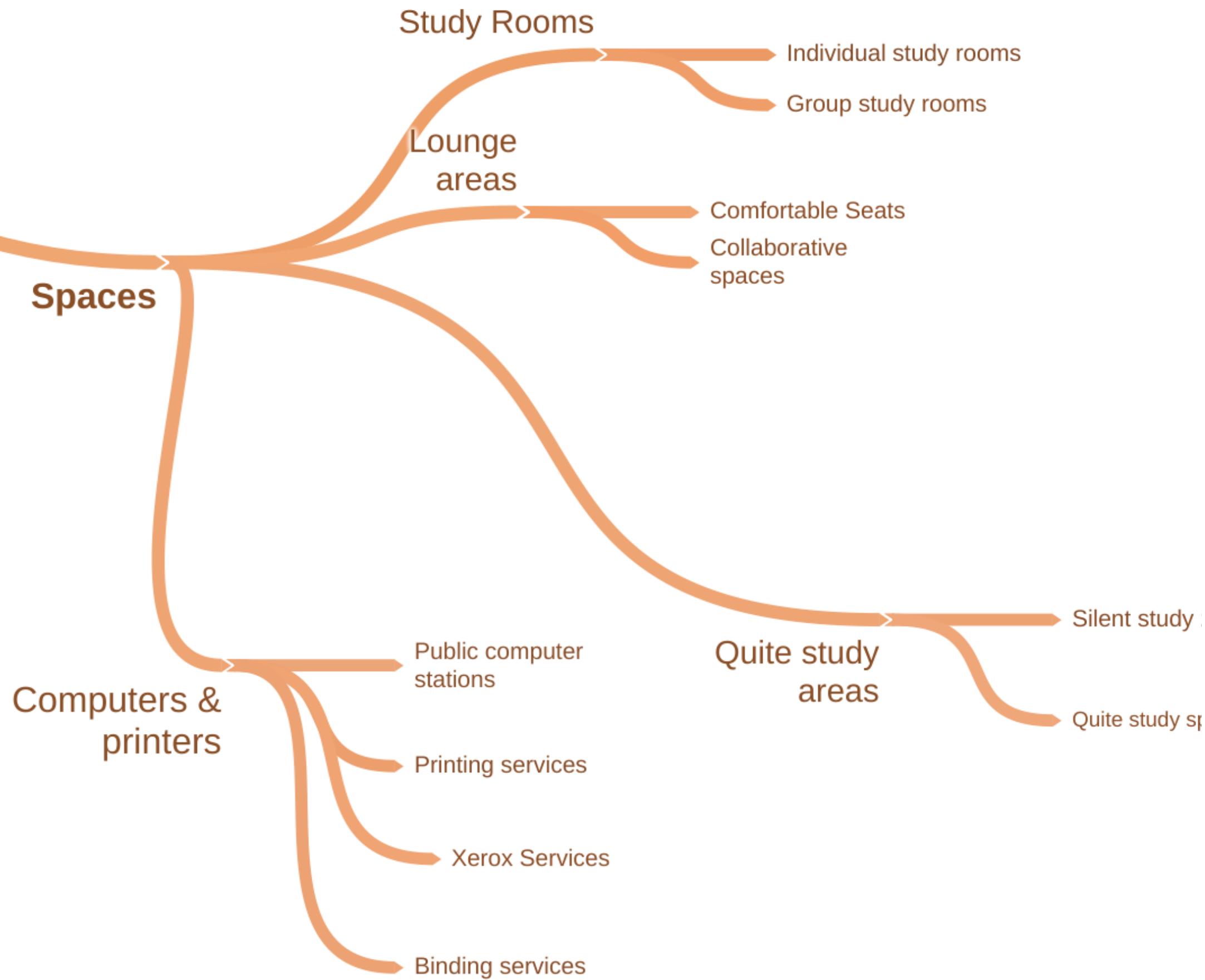
# MINDMAPPING

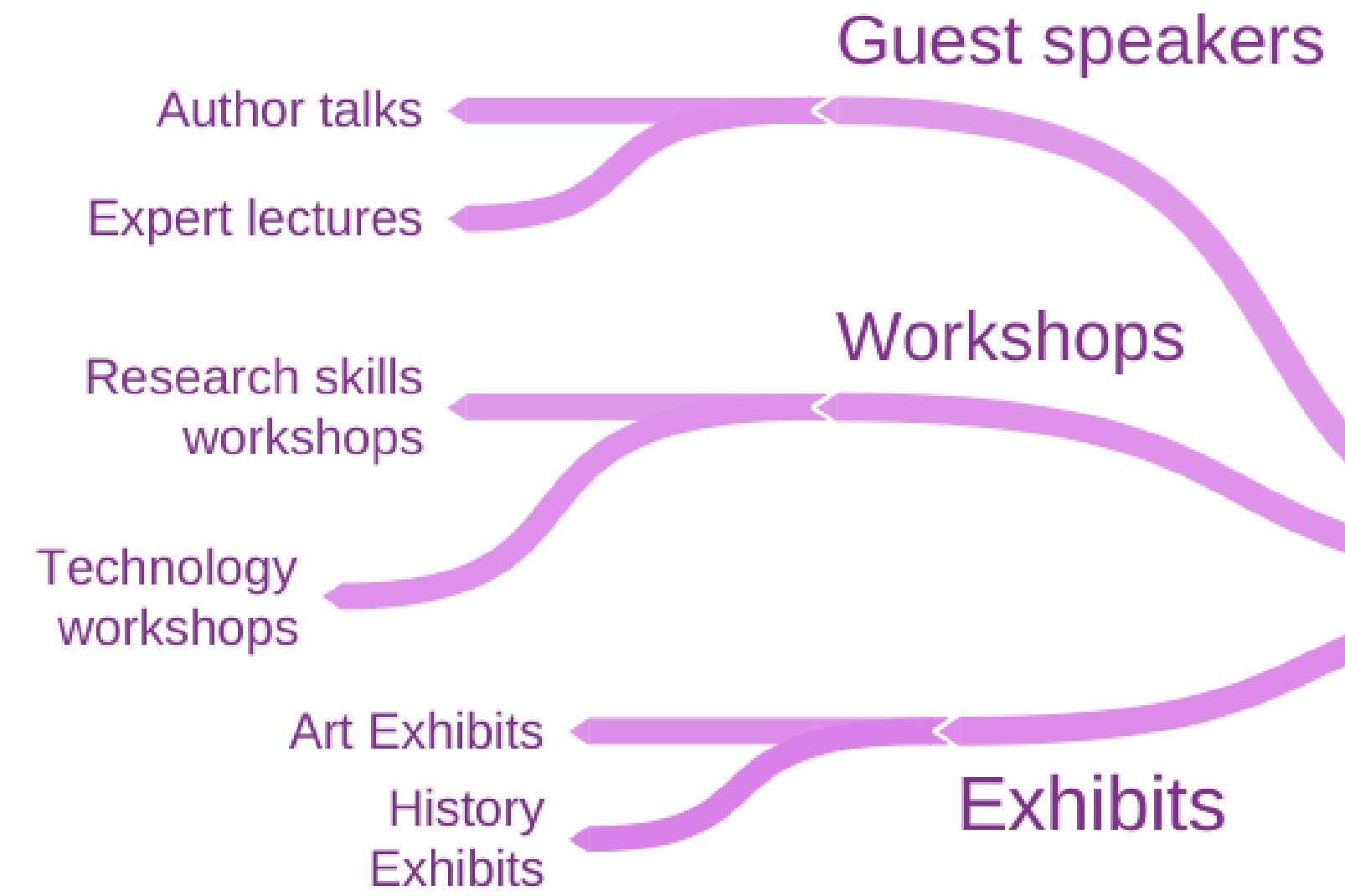




# SERVICES

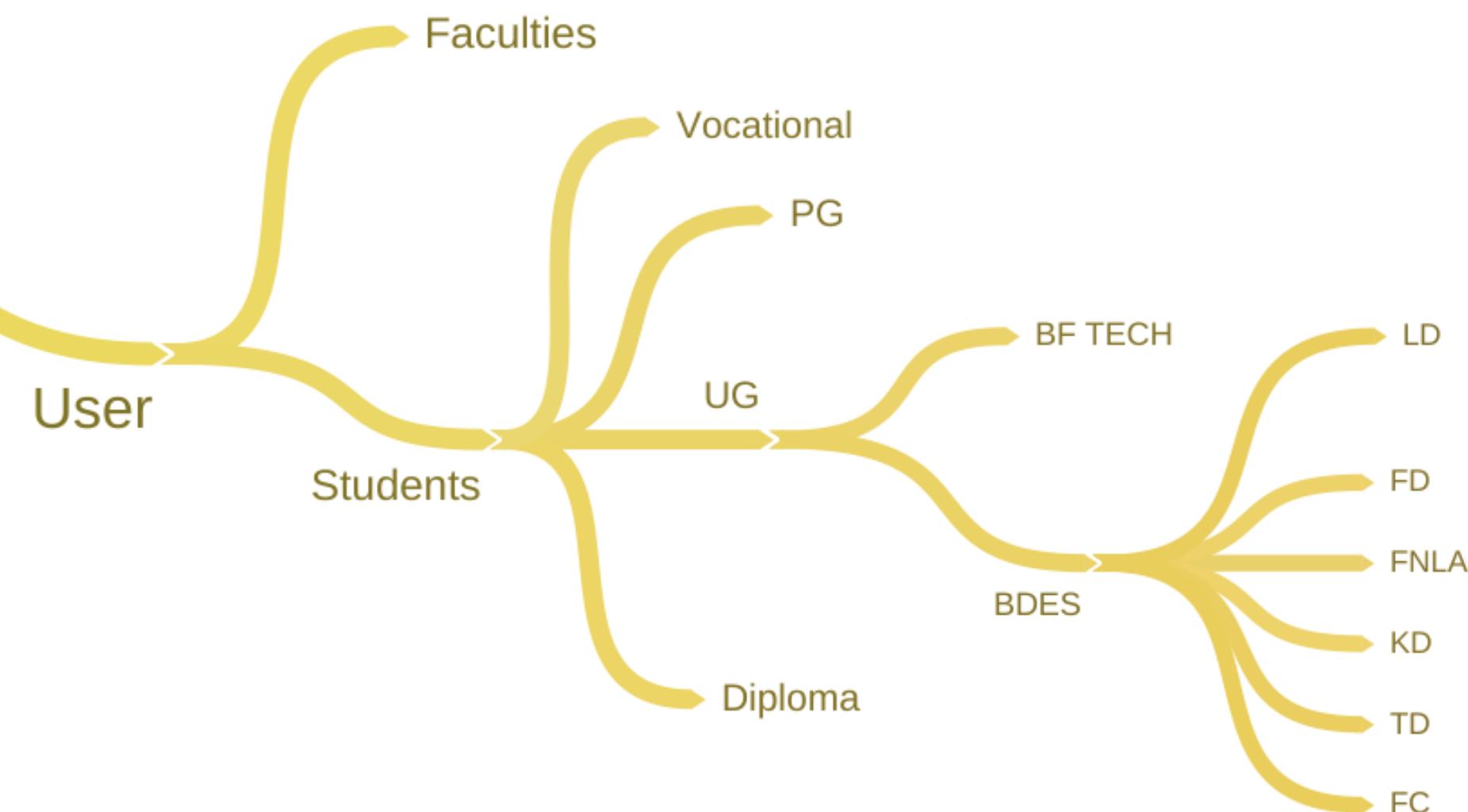


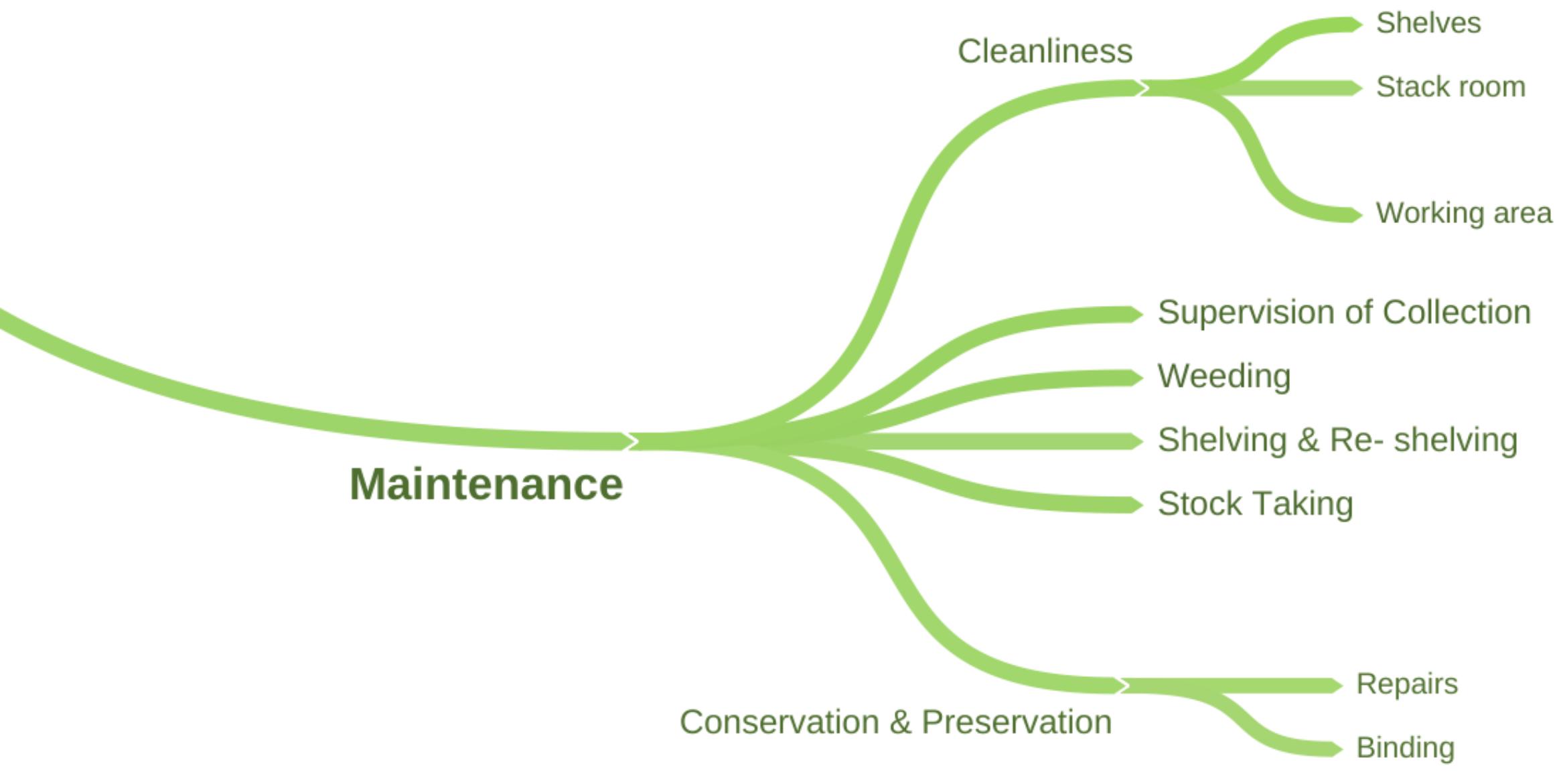




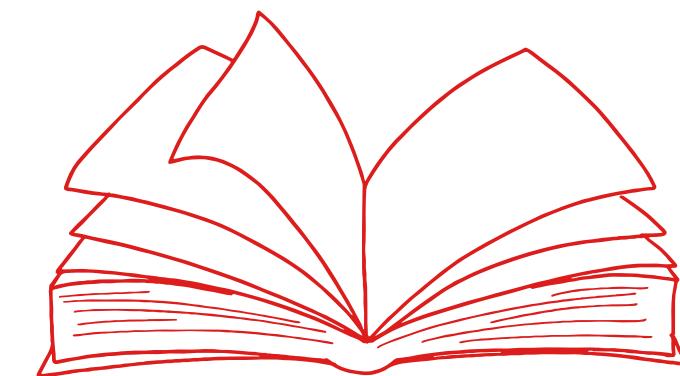
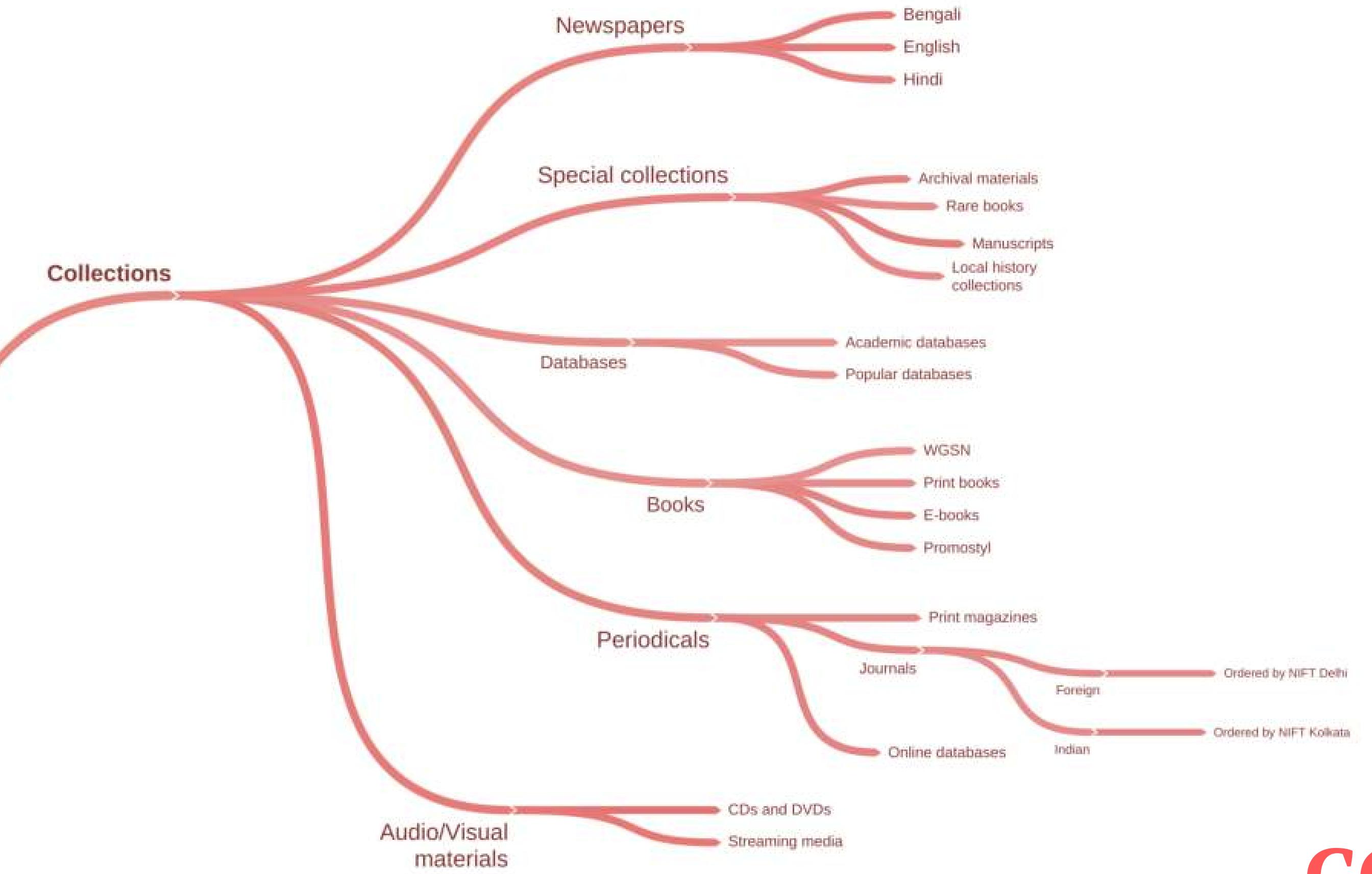
**EVENTS &  
PROGRAMS**







# MAINTENANCE

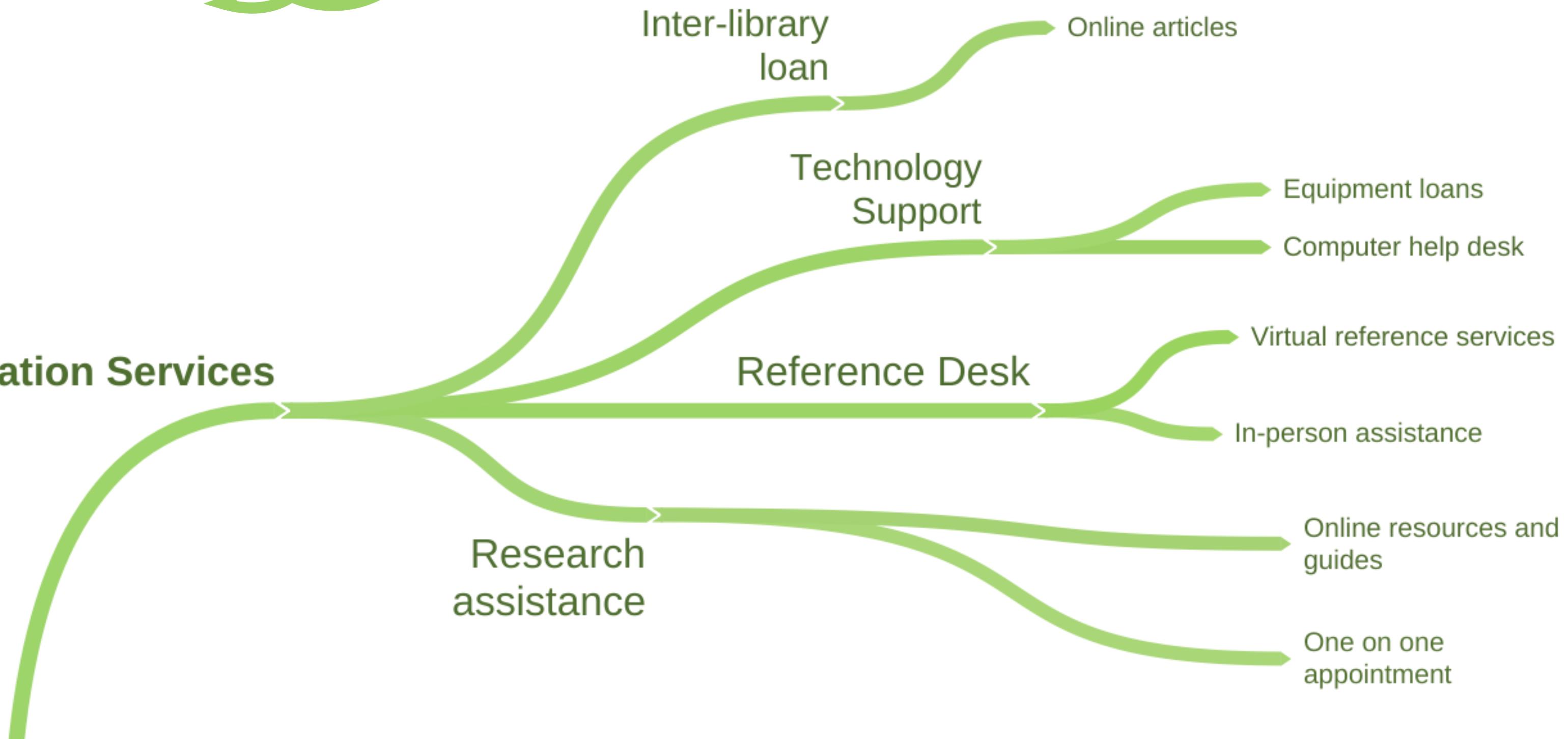


# COLLECTIONS

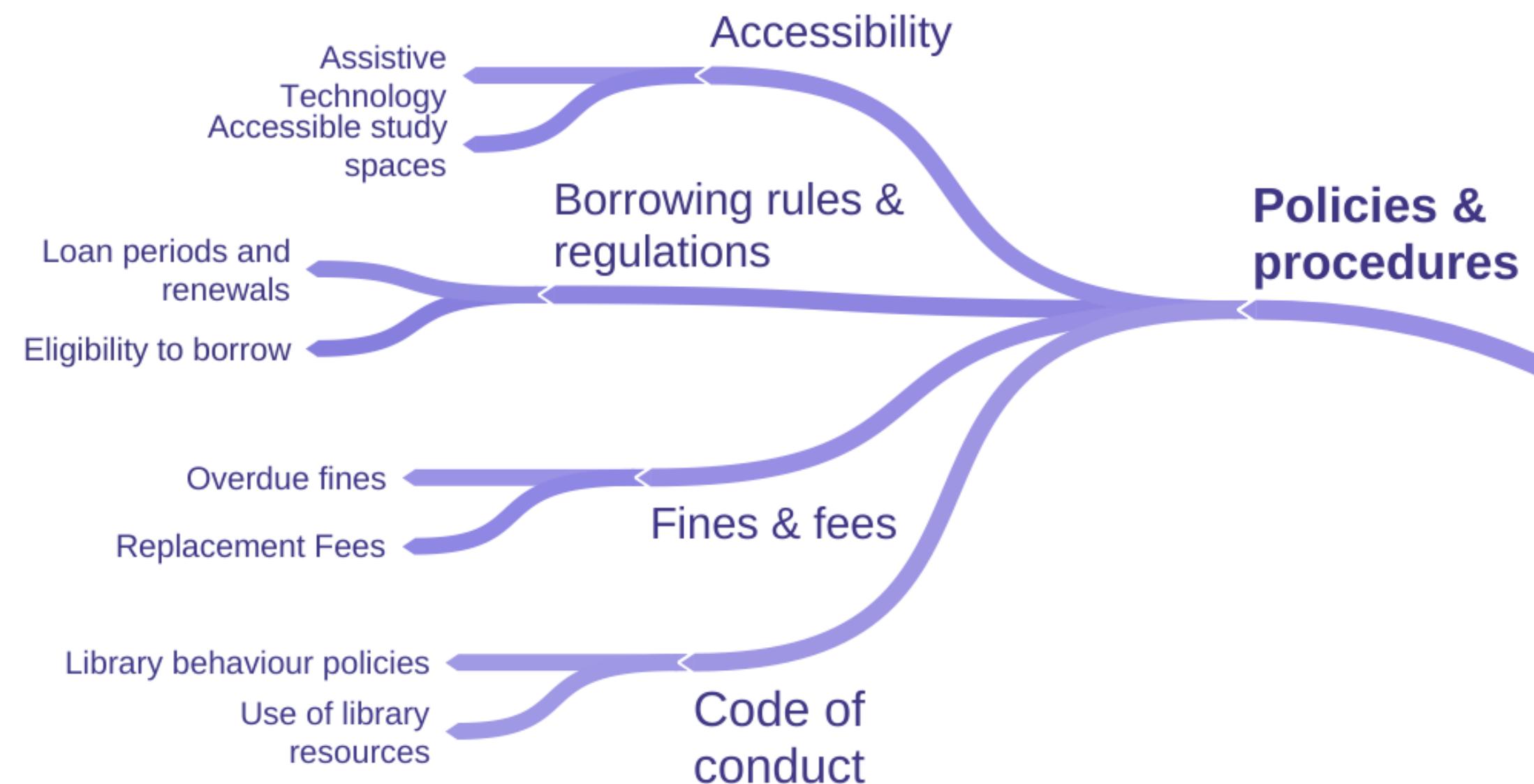
# INFORMATION SERVICES



## Information Services

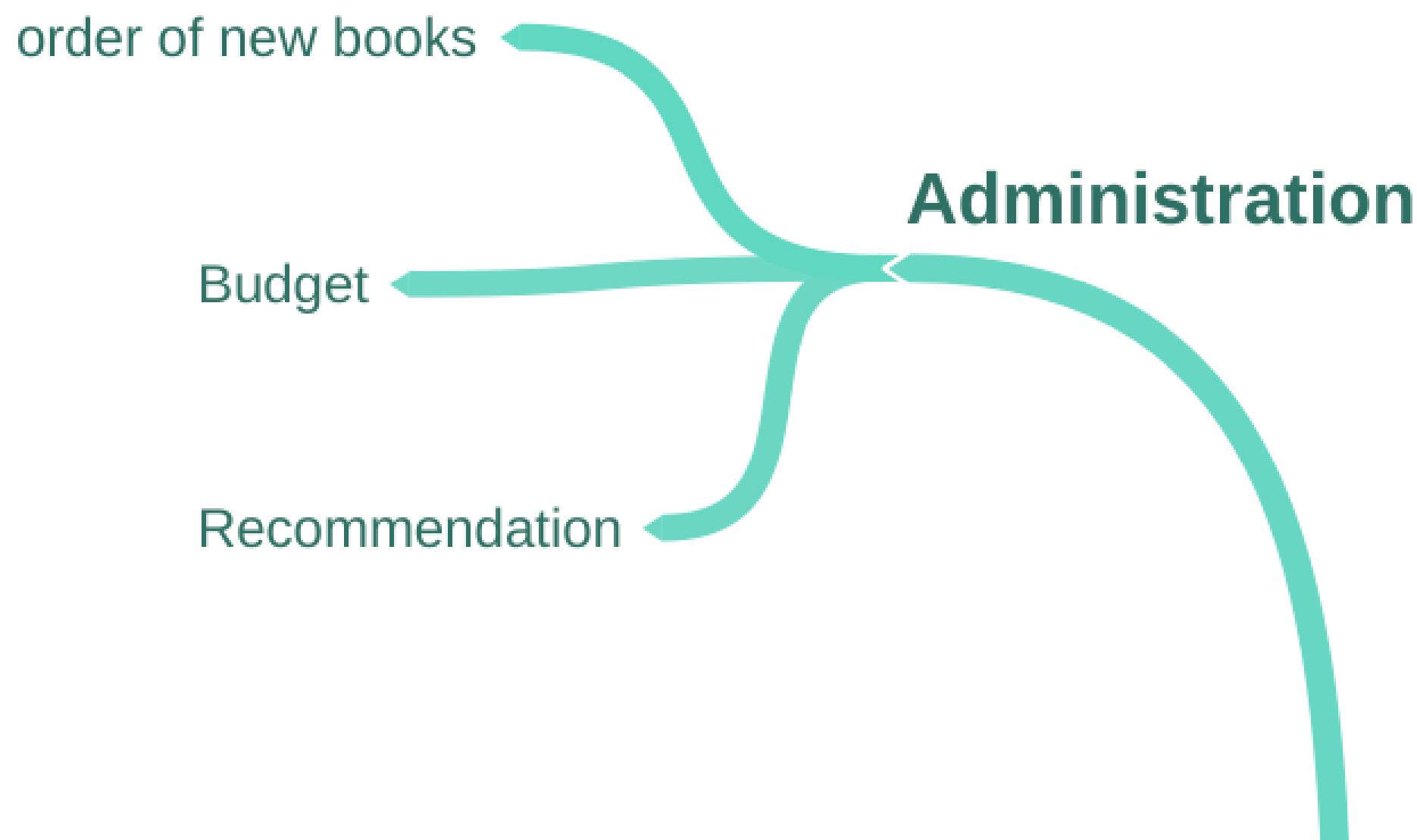


# POLICIES & PROCEDURES



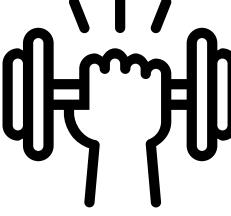
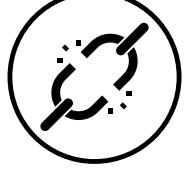


# ADMINISTRATION



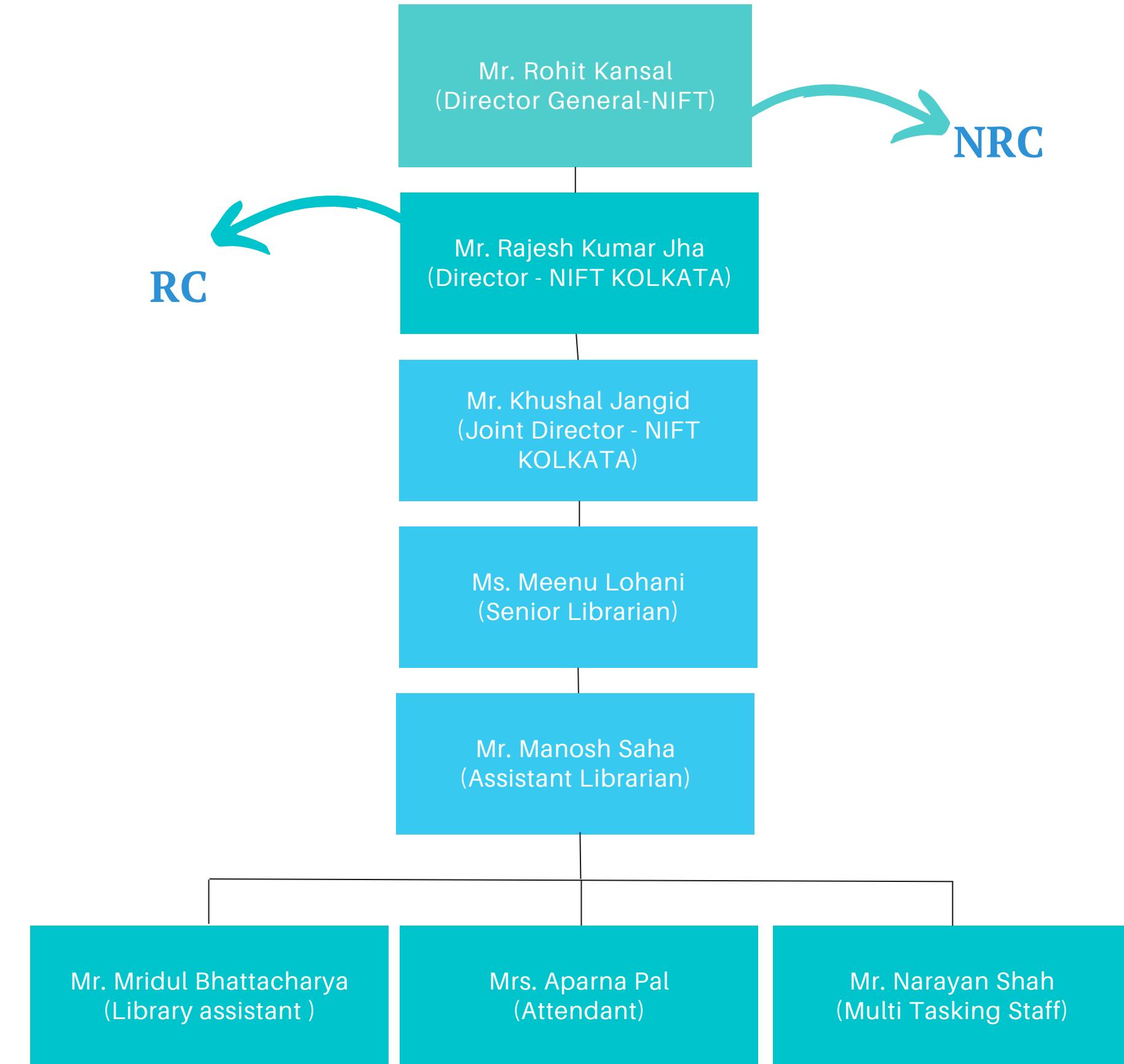
# NIFT LIBRARY

## SWOT Analysis

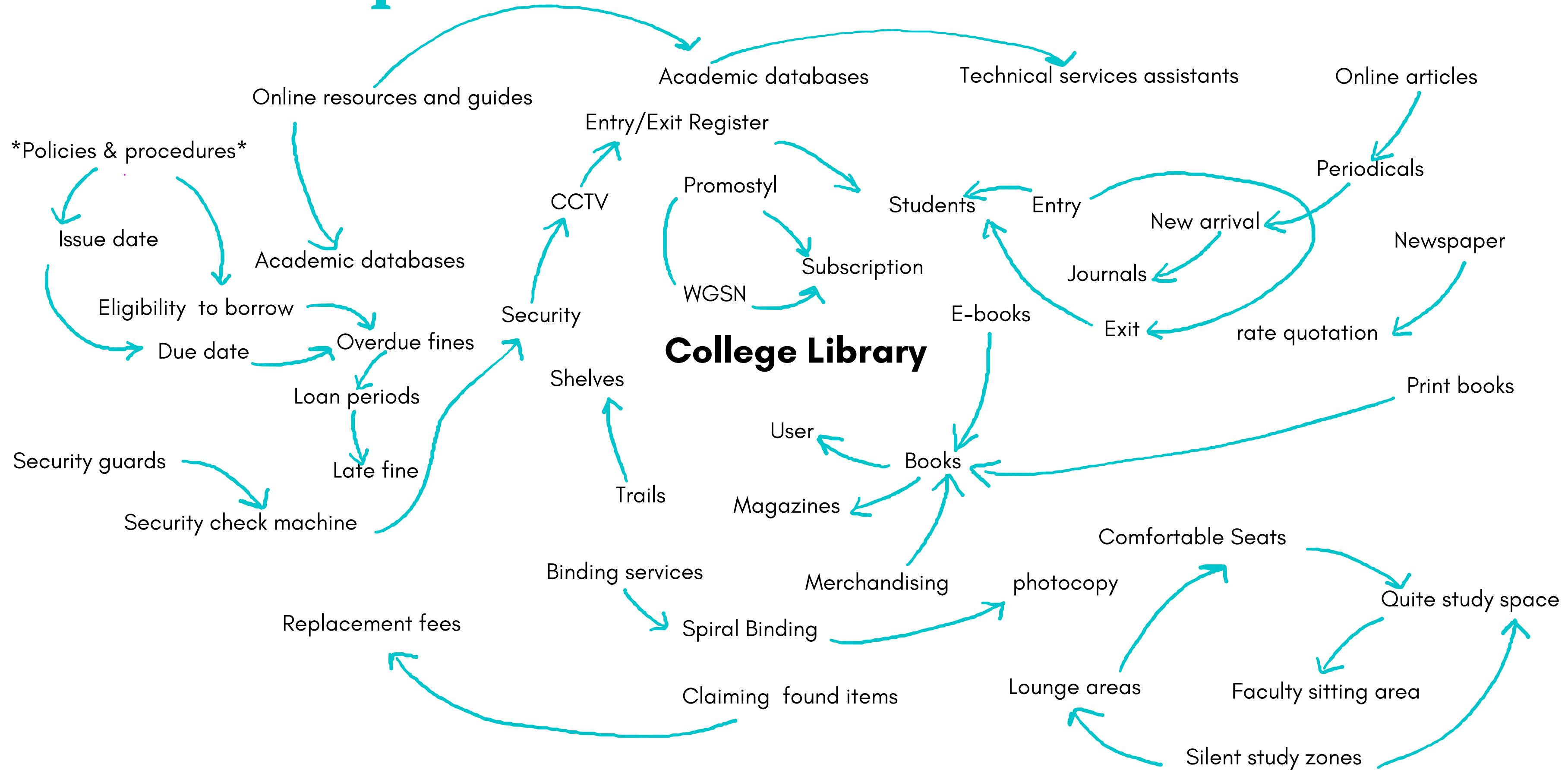
<b>Strengths</b>  <ul style="list-style-type: none"><li>Collection of trend related resources. (Promostyl, WGSN, etc.)</li><li>Vast collection of books, journals, periodicals.</li><li>Experienced Staff</li><li>Availability of Xerox and printing facility</li><li>Online resources available (300 approx.)</li></ul>	<b>S</b>	<b>W</b>	<b>Weaknesses</b>  <ul style="list-style-type: none"><li>Limited Space</li><li>Limited Access</li><li>Limited Budget</li><li>Limited Operating Hours</li><li>Limited copies of a book</li></ul>
<b>Opportunities</b>  <ul style="list-style-type: none"><li>Collaboration with other libraries</li><li>Expansion of Digital Resources</li><li>Partnerships with Publishers</li><li>Offering Services Beyond Campus</li><li>Extension of working hours</li></ul>	<b>O</b>	<b>T</b>	<b>Threats</b>  <ul style="list-style-type: none"><li>Availability of other academic and public libraries</li><li>New technologies and online resources can reduce the demand for physical resources</li><li>Less funds provided to the library</li><li>Changes in user behavior, such as a shift towards online resources</li></ul>



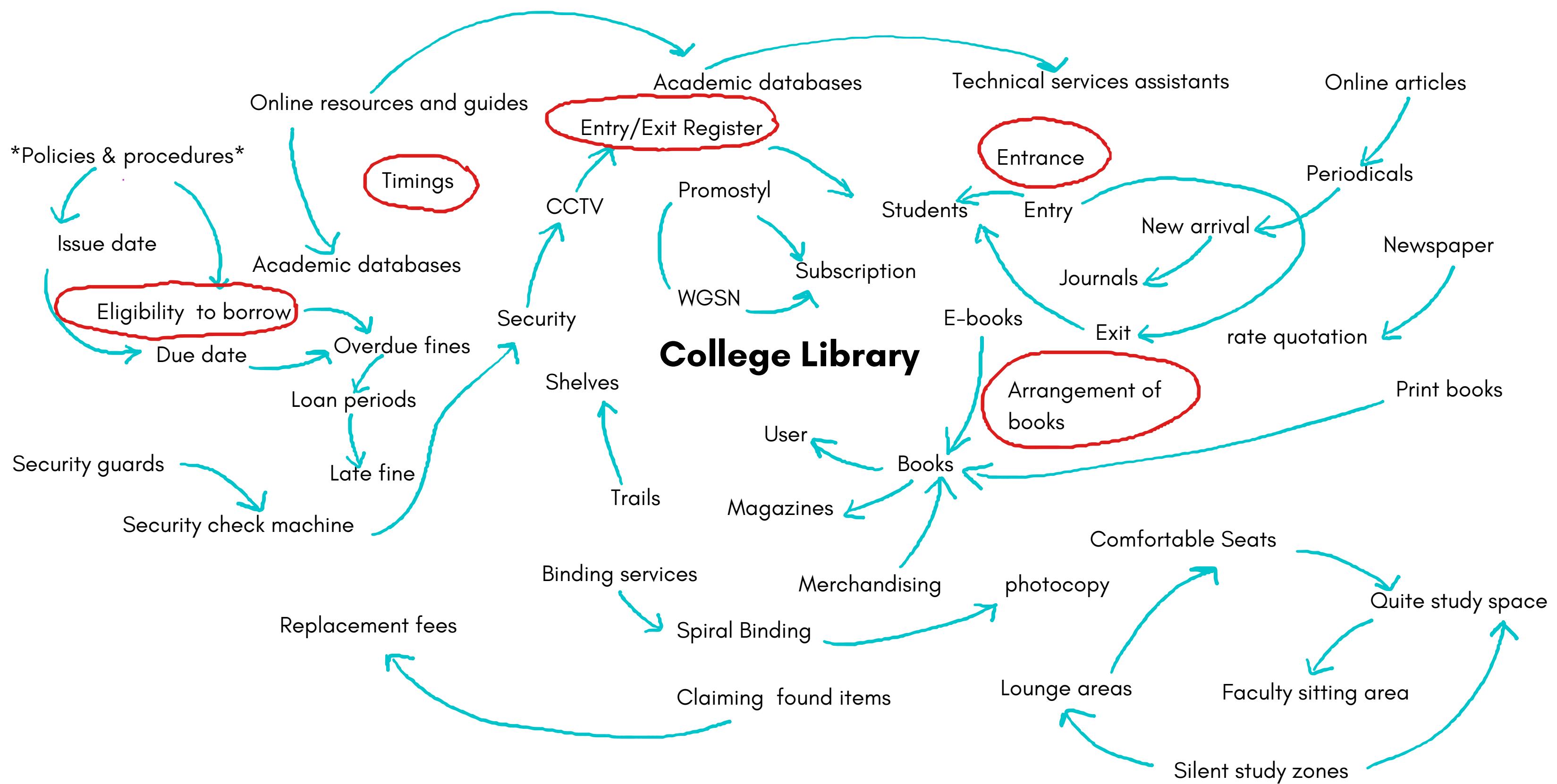
# Organisational Hierarchy chart

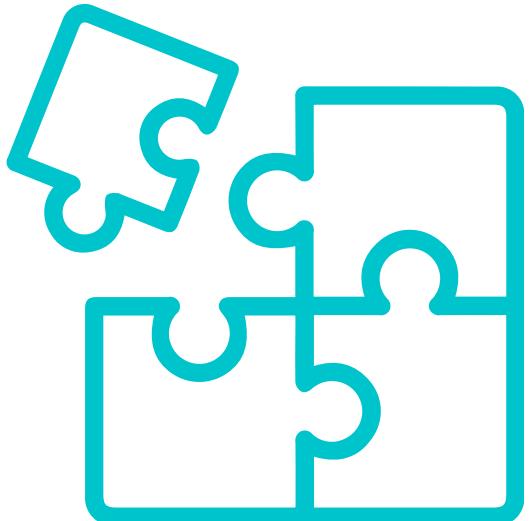


# Causal Loop



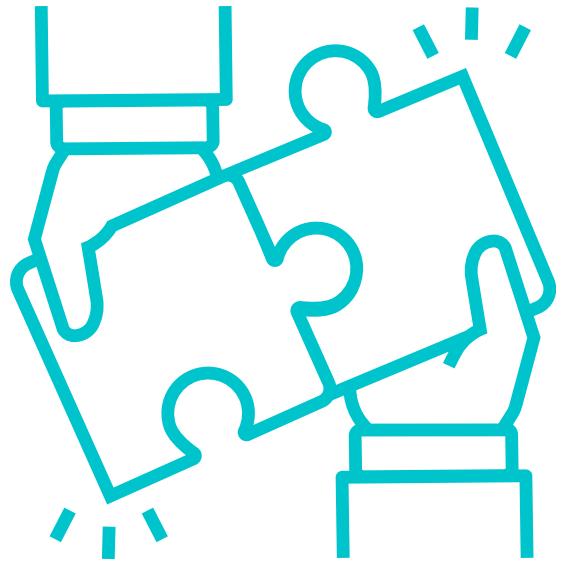
# Finding Correlations





## Gap Areas

- Name entry before and after every visit to library.
- Book returning is a very lengthy process
- Chaotic arrangements of books.
- Limited charging points.
- No personalised workspace
- Timing of the library
- Lack of books in various categories
- Rules and regulations are not communicated to the students clearly.
- Limited space
- Poor Wifi Connection
- Not at all inviting and aesthetically pleasing
- Congested entrance/exit
- Lack of maintenance of the infrastructure on regular basis.



# Solutions

**Lack of books in various categories:** Increase the diversity of the library's collection by investing in books in various categories and conducting regular reviews to ensure that the collection is up-to-date and relevant.

**Name entry before and after every visit to library:** Implement a library card system or other automated system that allows students to check in and out of the library without having to manually enter their names.

**Limited charging points:** Increase the number of charging points available to students by adding more outlets, providing charging stations or portable power banks.

**Book returning is a very lengthy process:** Streamline the book return process by implementing self-checkout machines, increasing staff availability, or allowing for remote returns via book drop boxes.

**No personalised workspace:** Provide designated study areas or workstations that students can reserve or use on a first-come, first-served basis.

**Chaotic arrangements of books:** Improve the organization of the library by implementing a clear shelving system, creating digital catalogs or maps of the library, and ensuring that staff are available to assist with locating books.

**Timing of the library:** Consider adjusting the library's hours to better accommodate student schedules, or provide additional options for remote access to library resources.





**Rules and regulations are not communicated to the students clearly:** Implement clear and accessible communication channels for library policies and regulations, such as through signage, social media, or email updates.

**Limited space:** Consider expanding the library's physical space or reconfiguring existing space to better accommodate student needs.

**Congested entrance/exit:** Consider redesigning the entrance and exit to improve traffic flow, such as through the use of additional doors, directional signage, or designated waiting areas.

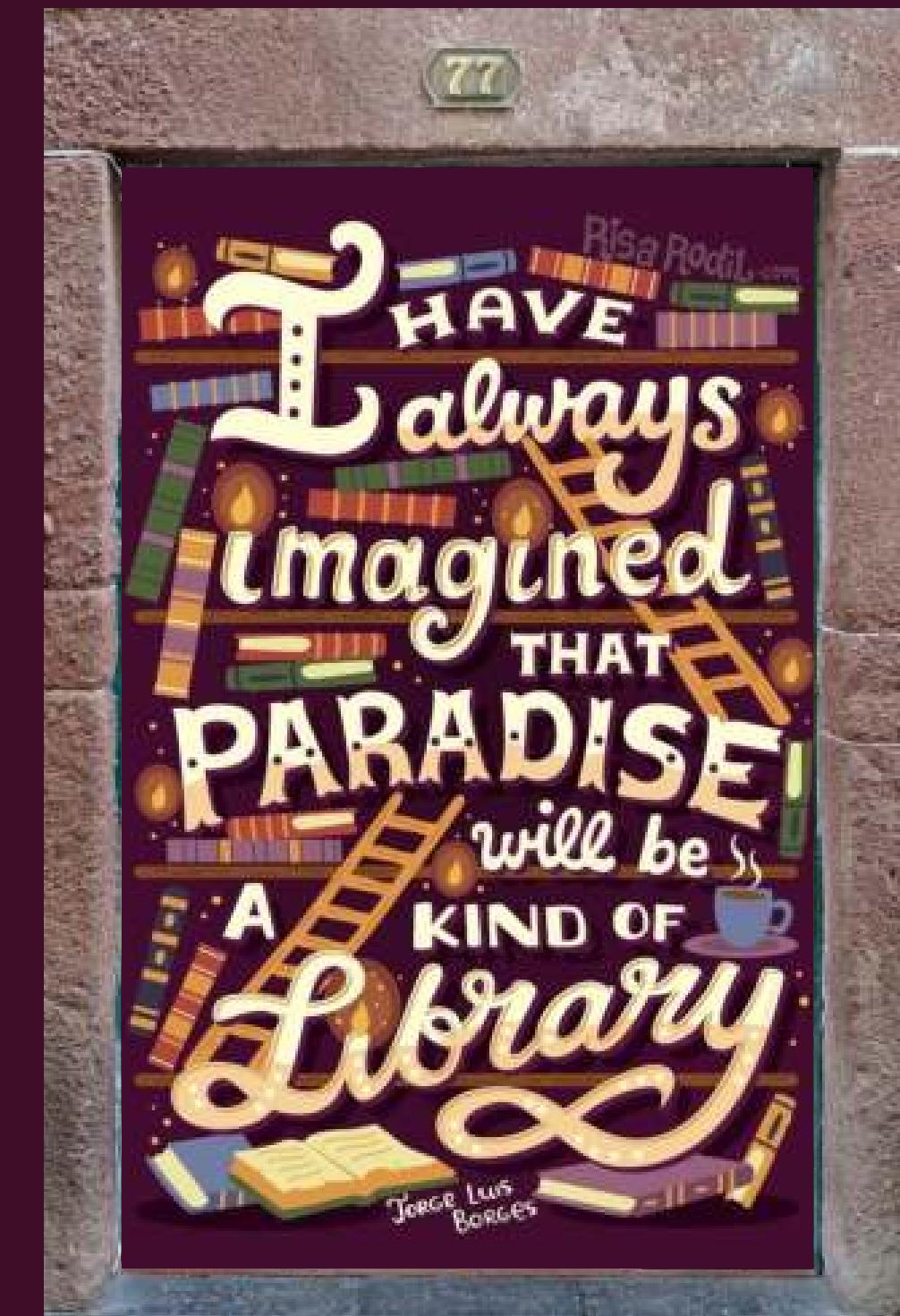
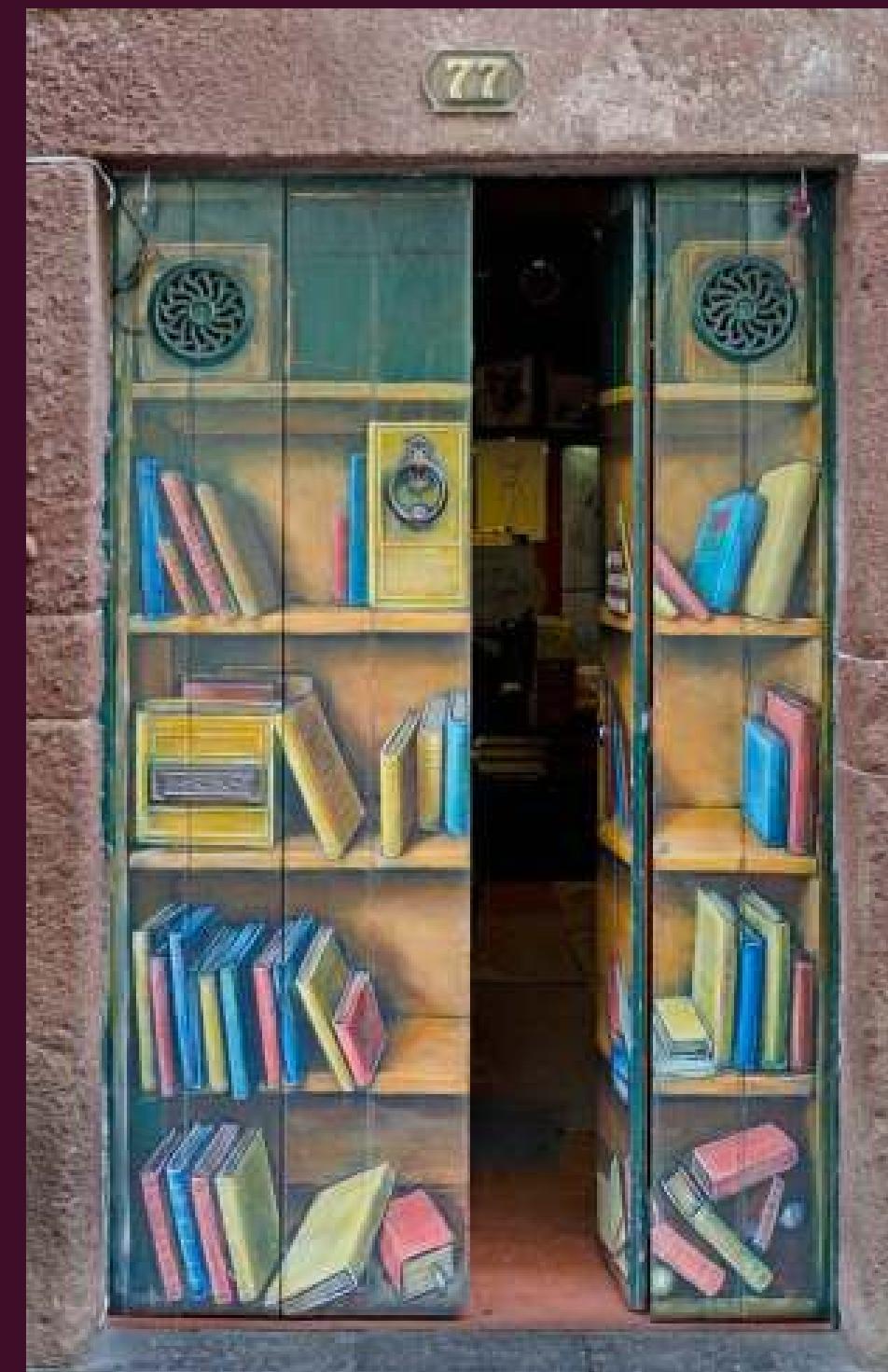
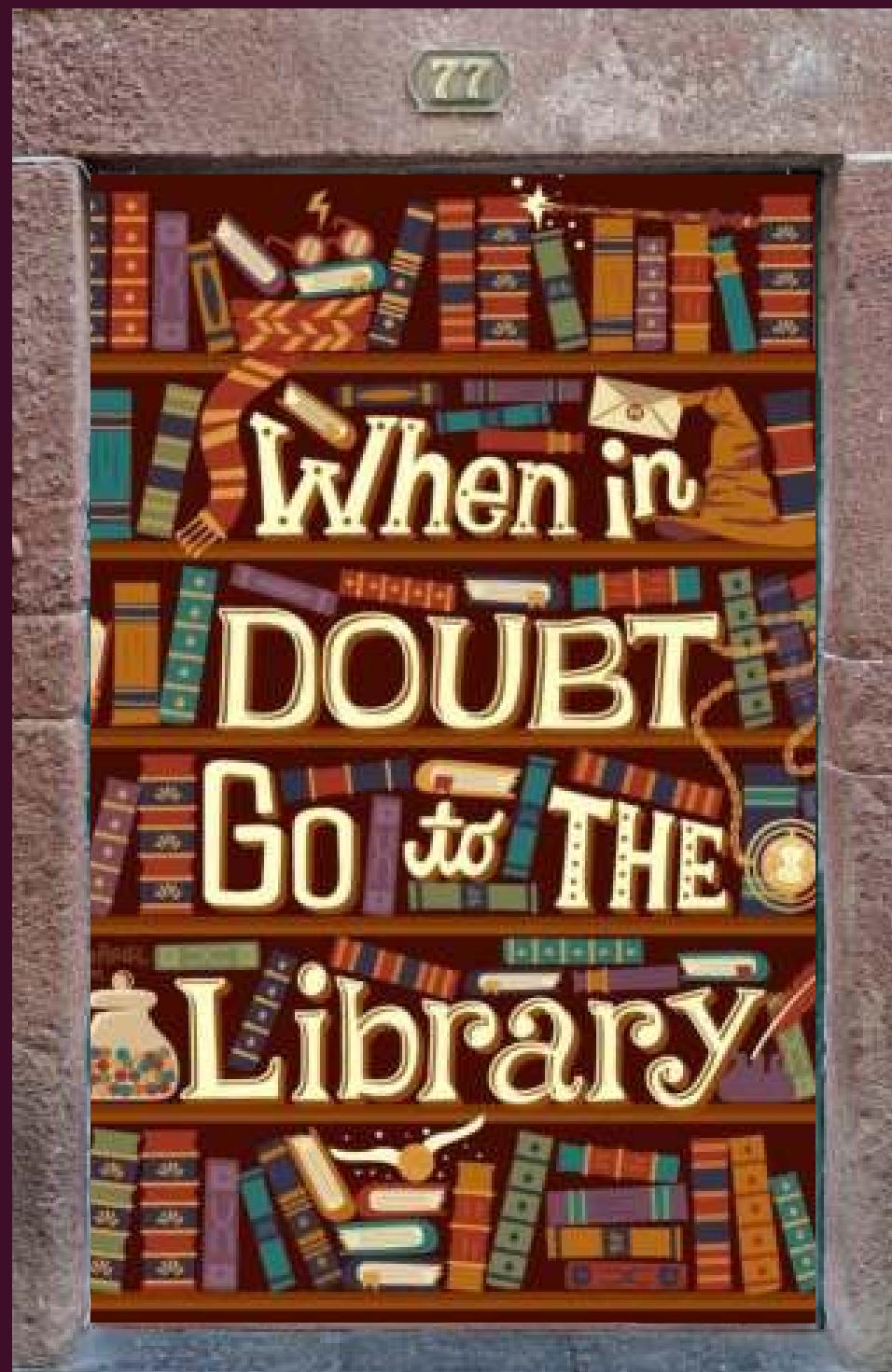
**Poor Wifi Connection:** Invest in improving the library's network infrastructure or providing alternative options for students to access online resources.

**Lack of maintenance of the infrastructure on regular basis:** Conduct regular maintenance and cleaning of the library's infrastructure and facilities to ensure that they are safe, functional, and attractive for students.

**Not at all inviting and aesthetically pleasing:** Redesign the library's interior and exterior to create a more welcoming and aesthetically pleasing environment, such as through the use of natural light, comfortable seating, and attractive decor. Artwork can help create a more visually interesting and engaging space. Consider adding artwork throughout the library, including on walls, in display cases, and on bookshelves.

**...Few More**

Door can more inviting with art work, quotes and new arrivals.



# WINNERS

Bookmark making competition to get personalized book marks.

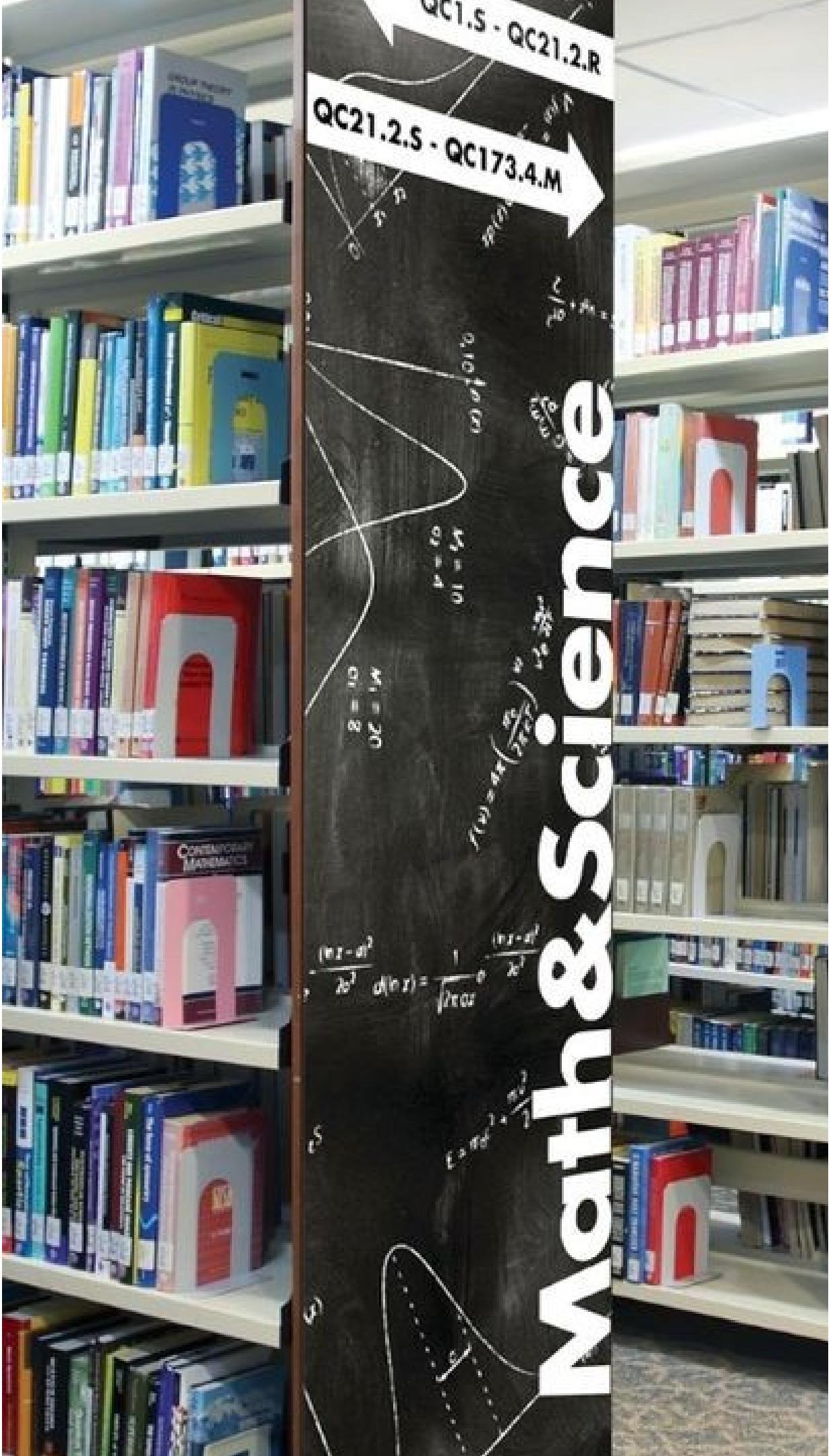




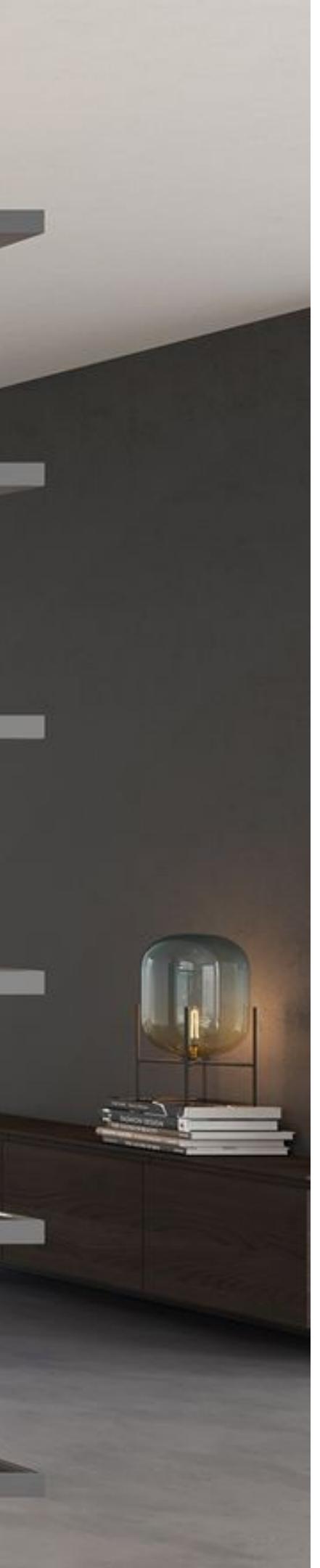
## Stained Glass Art



## Categories with visuals



## Modular Shelves

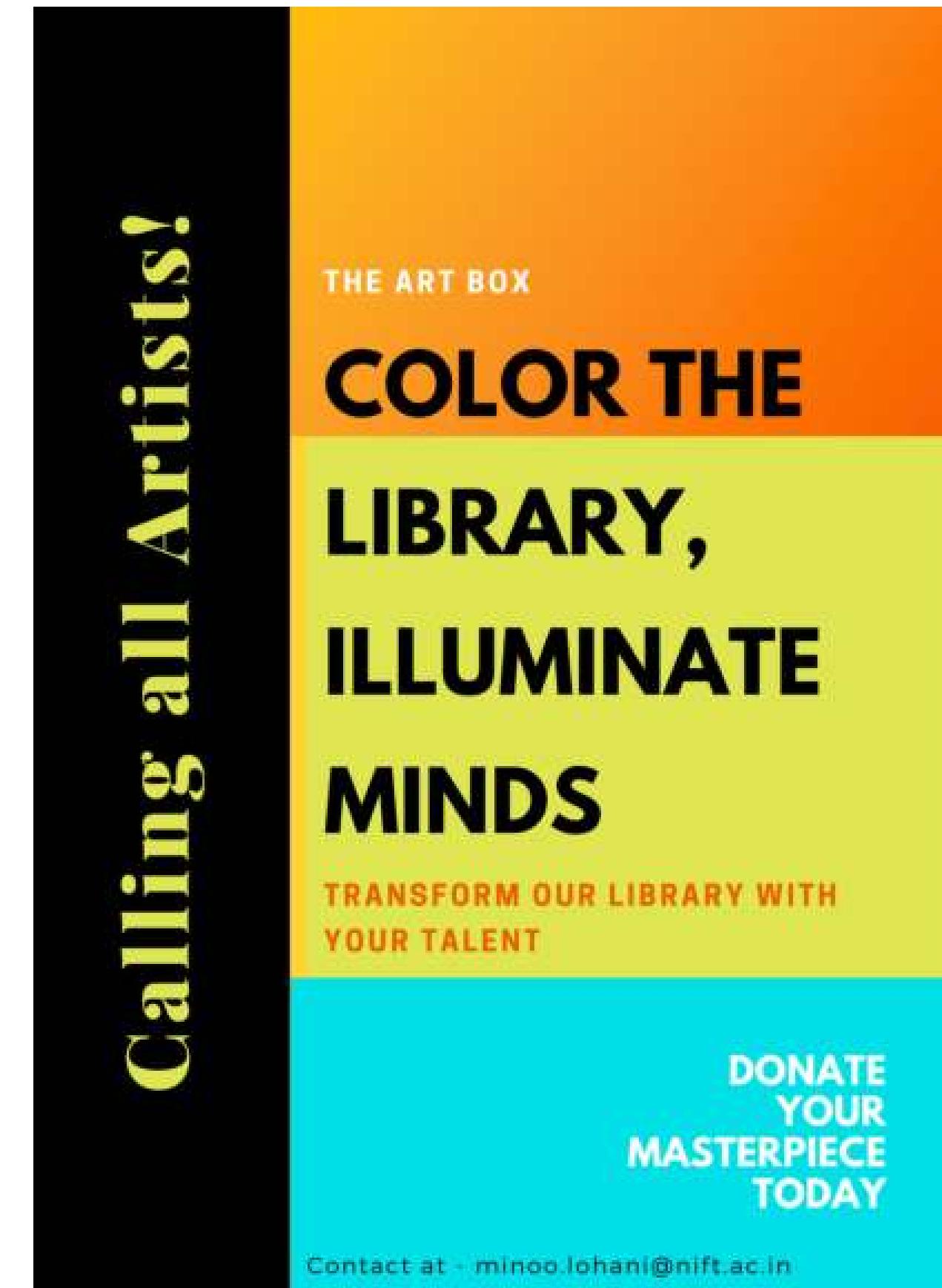




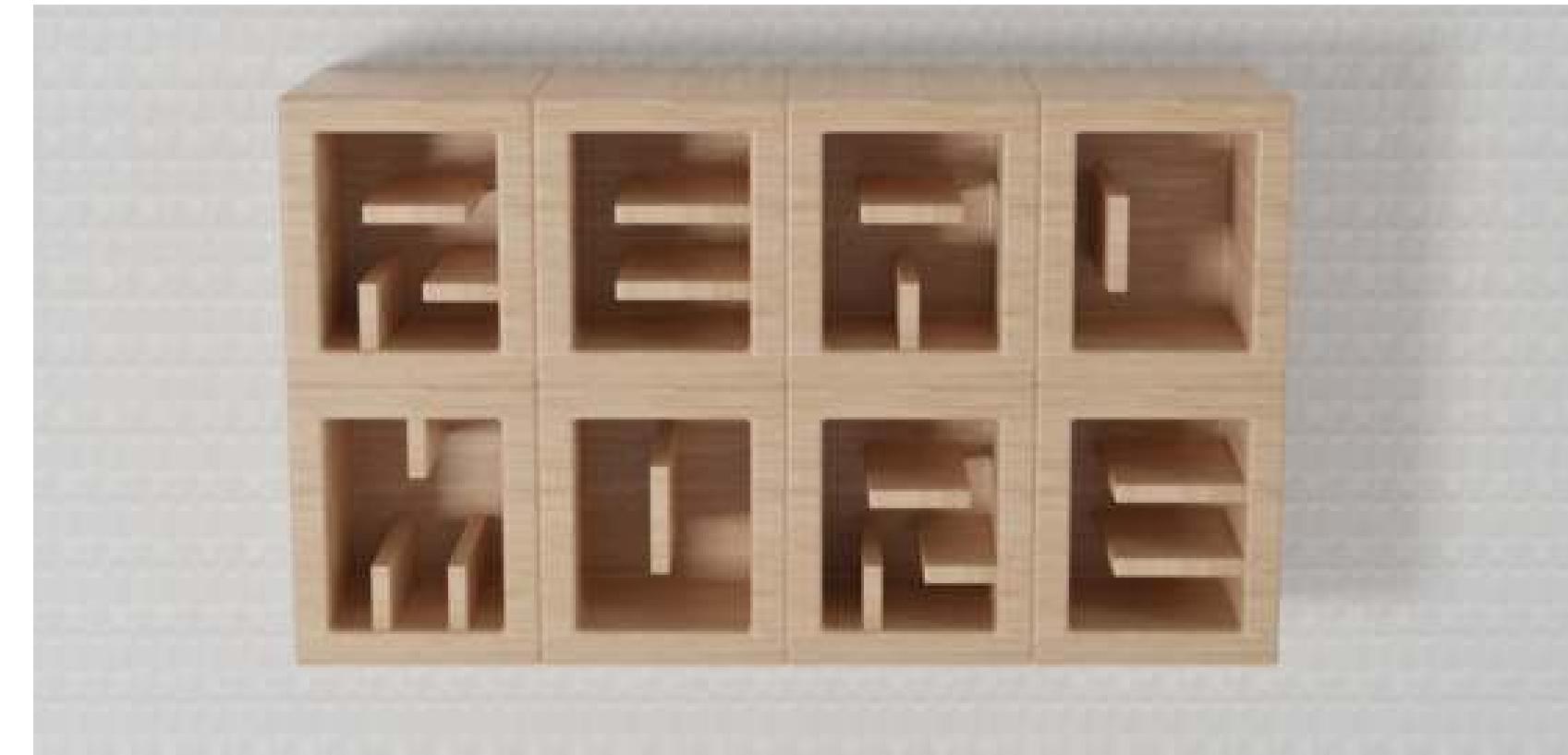
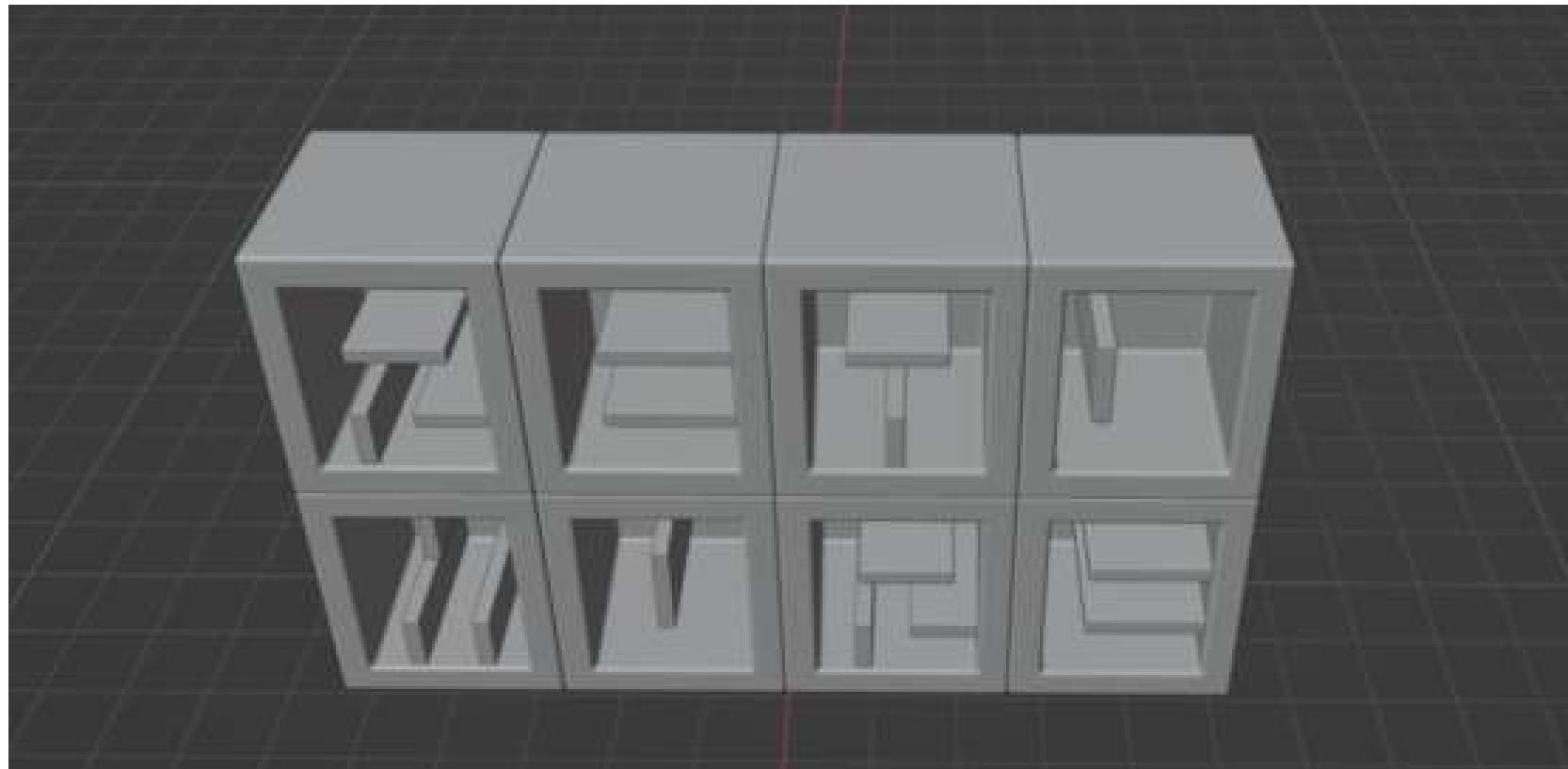
**Painted Shelves**



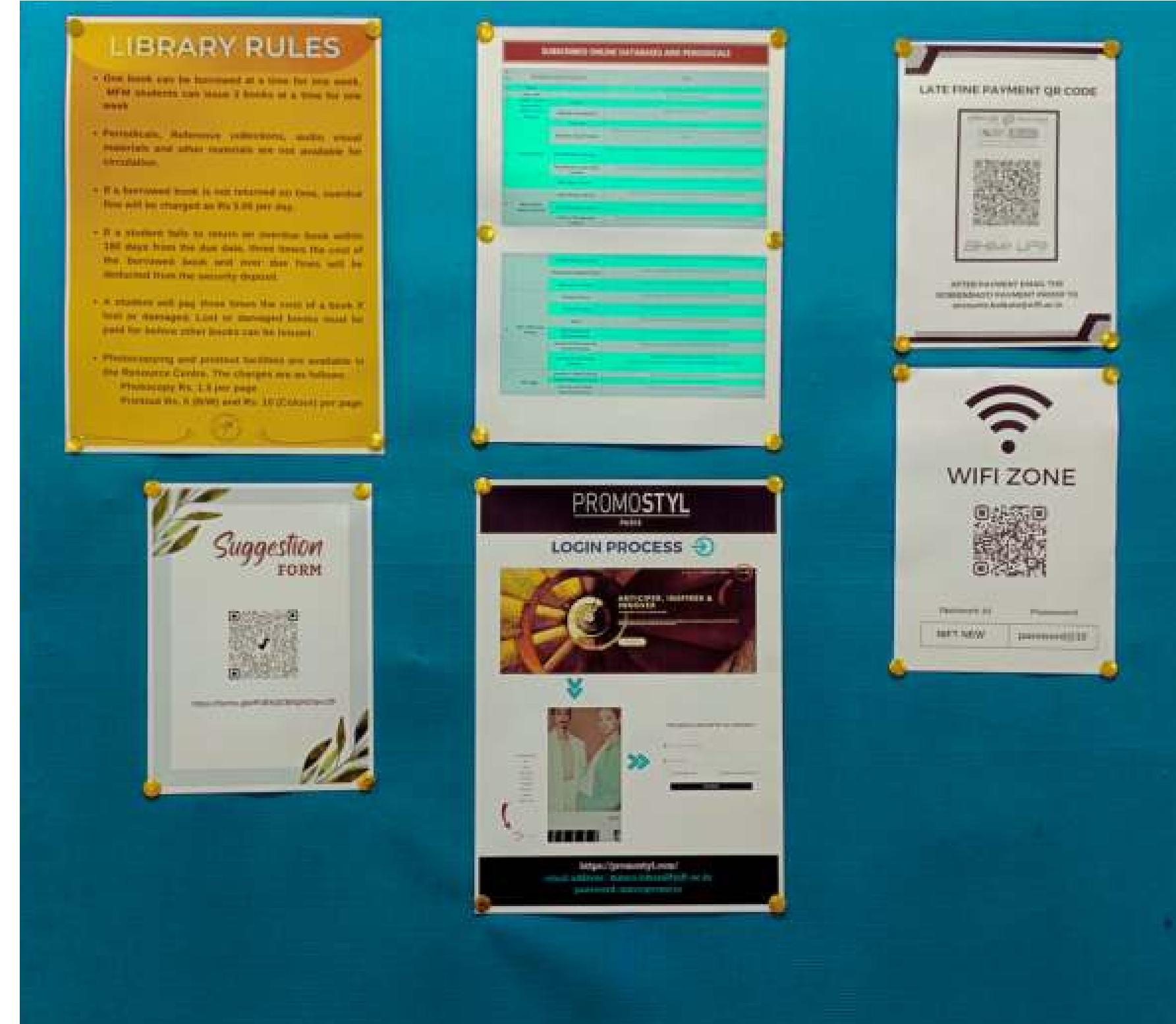
Poster for gifting art work that can enhance the aesthetics of library.



## Designed furniture with quote



# Changes Implemented after our Interview



# ZOOM IN





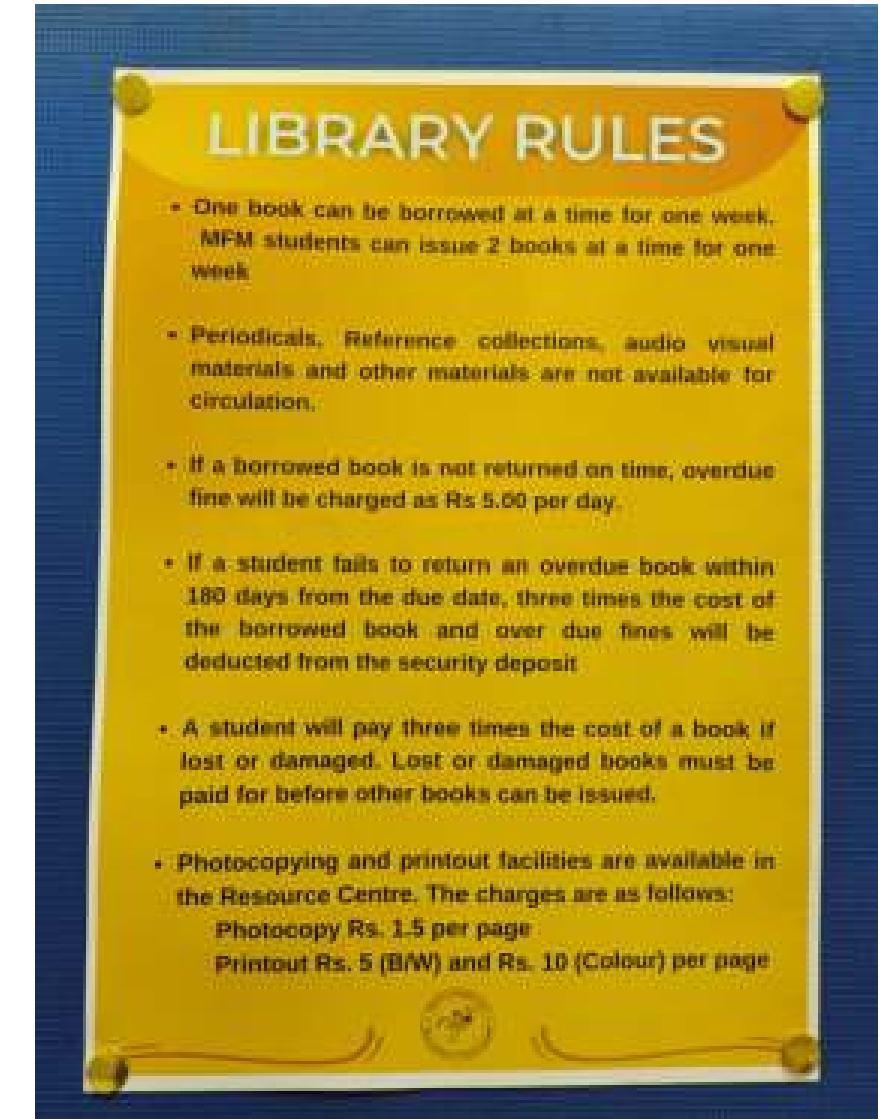
## QR-Scan Feedback Form



## Online Study Materials

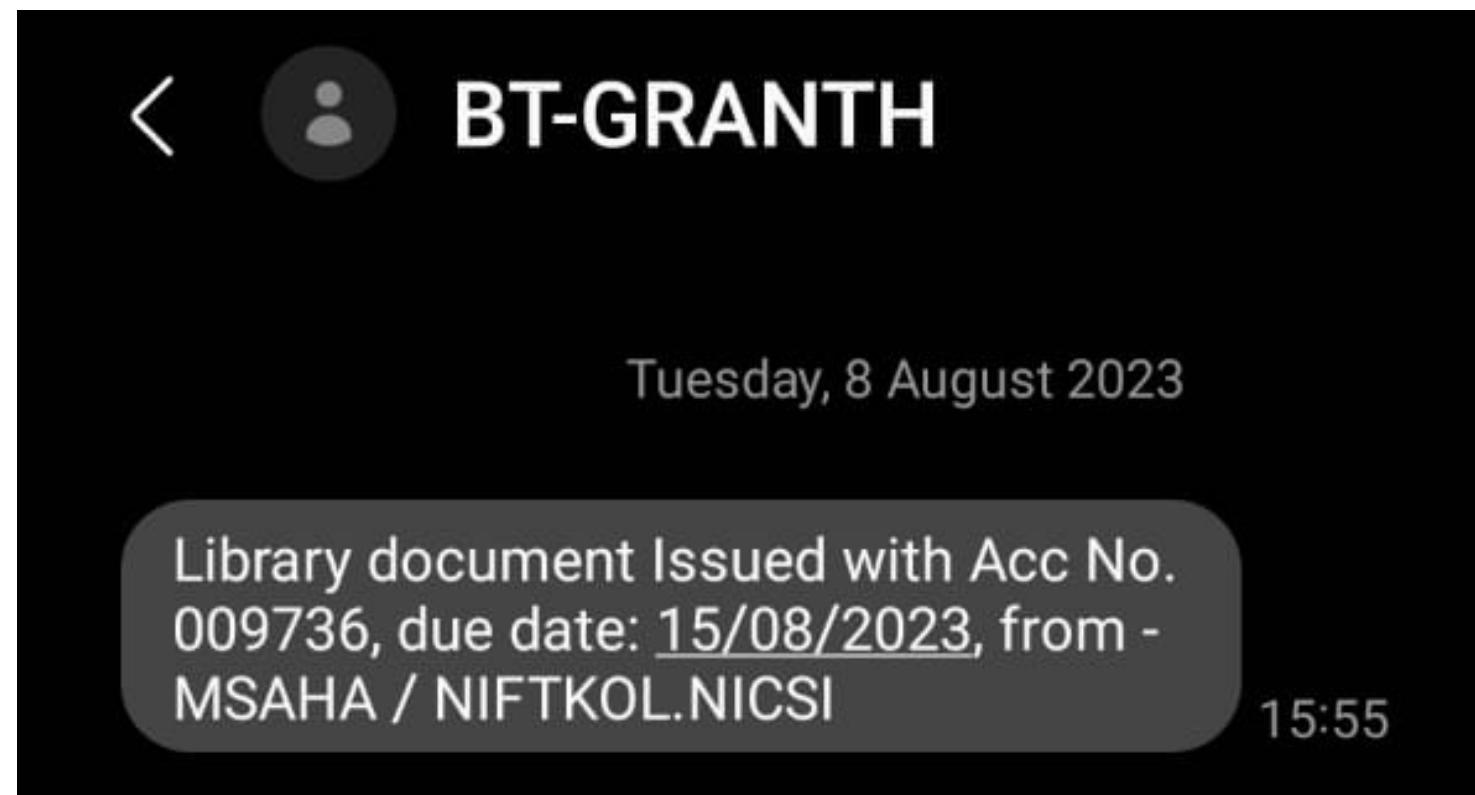


## New Arrivals



## Rules & Regulations

# VIEW



We receive a confirmation of our book issue on our phone, which was missing earlier

Library hours got extended for the convenience of students and faculties.

**Operating Hours.** To start with, the library and all labs will be kept opened till 10:00 PM on all weekdays and till 5.00 PM on Saturdays. The Sundays will be observed as holidays and facilities will be kept closed. This arrangement should be revisited by the campuses during peak times of submissions, Spectrum or any other competitive activities, as and when the requests from students are received.

...SOME MORE  
IMPROVEMENTS

# Key Learnings

- The initial perception of the library as a small part of the college changed as the research progressed, revealing its complexity and numerous entities and nodes.
- A small change in any element of the library can have a significant impact on the overall system.
- Continuous testing and evaluation of the system are necessary to ensure its proper functioning, as the library needs to adapt to changing factors such as time, needs, and users.
- The system's suitability at the time of establishment may not remain optimal over time, necessitating adjustments and improvements.
- To conduct effective research, it is essential to approach the study with an open mind and overcome preconceptions or biases.
- A multidimensional perspective is necessary to understand the library system fully and propose the most suitable solutions.

**Thank you!**

**See you watching my other works too...**