SWAN Technology Users Group

September 24, 2020

Meeting Agenda

- Uptime Report
- New Hardware Recommendations
- Project Updates
  - SWAN Securities Initiative
- OHM Development
- Tips on Managing Technical Projects
- Discussion
  - IT & COVID-19
  - PC Reservation Authentication
  - Security in Your Library
- Open Forum

# Enterprise OPAC SaaS Server Downtime Tracking: April 1st through September 18th

Date	Approx Time	Time Elapsed (Min)	System	Planned?	Library Hours?	Reason
4/7/2020	17:05	5	Enterprise	No	Yes	Enterprise service outage and restart
4/7/2020	19:07	13	Enterprise	No	Yes	Enterprise service outage and restart
4/11/2020	9:15	75	Enterprise	No	Yes	Web Services outage due to Symphony server outage
4/20/2020	23:45	510	Enterprise	No	No	Web Services outage due to Tomcat service restart
5/11/2020	23:45	480	Enterprise	No	No	Web Services outage due to Tomcat service restart
5/19/2020	23:45	300	Enterprise	No	No	Web Services outage due to Tomcat service restart
5/26/2020	3:00	60	Enterprise	Yes	No	Planned Enterprise SaaS maintenance
6/30/2020	3:00	60	Enterprise	Yes	No	Planned Enterprise SaaS maintenance
7/5/2020	20:07	70	Enterprise	No	No	Enterprise SaaS server outage and services restart

# WorkFlows/Symphony Server Downtime Tracking:
April 1st through September 18th

Date	Approx Time	Time Elapsed (Min)	System	Planned?	Library Hours?	Reason
4/11/2020	9:15	75	Symphony	No	Yes	Database log size exceeded allocated storage requiring correction
7/8/2020	8:53	5	Symphony	Yes	Yes	WorkFlows/Symphony restart to correct circ map error
7/17/2020	21:05	5	Symphony	Yes	No	WorkFlows/Symphony server planned patching

Downtime Tracking: Apr 1ˢᵗ through Sept 18ᵗʰ

Enterprise OPAC Server

- Uptime 99.99
- All Downtime (P/U) < 1%

WorkFlows / Symphony Server

- Uptime 99.99
- All Downtime (P/U) < 1%
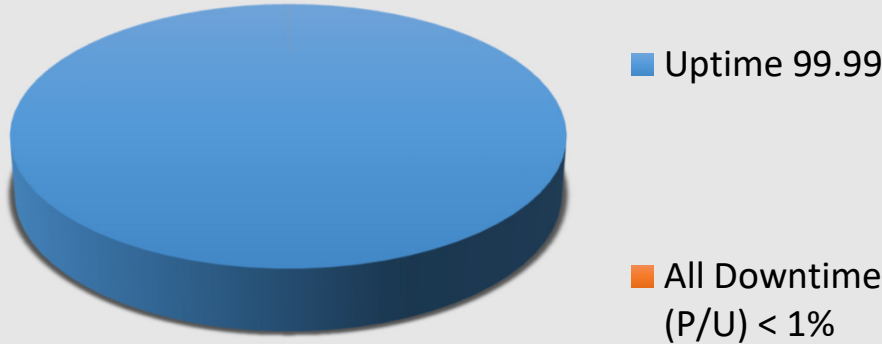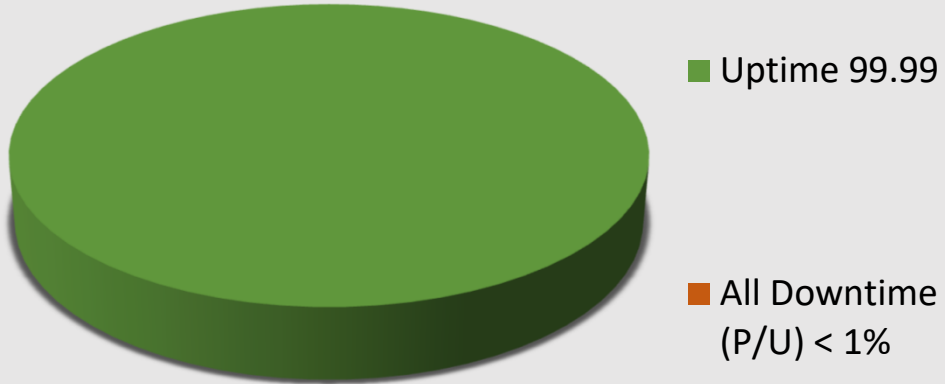
System Upgrades and Maintenance

❏ Web Services 6.0.3 Upgrade (October 2020, tentative)
  ❏ Requires overnight downtime of core Enterprise functions

❏ Database Rebuild for SWAN100 (December 5/6)
  ❏ Requires Symphony downtime and use of Offline

❏ Symphony 3.7.1 (February 2021, tentative)
  ❏ Requires overnight downtime of Symphony server

❏ *Enterprise 5.0.2 Upgrade*

New Hardware Recommendations

- Restick/Delivery Label Printer
  - Epson TM-T88IV is no longer sold
  - **Epson TM-L90 Plus, Liner-free Compatible Label Printer** (Model C31C412A7991)

- Patron Card Printer*
  - Fargo DTC1250e Card Printer (color) - $2,204 via Barcodes Inc
  - Fargo 53200 Card Printer (black and white) - $1,599 via Barcodes Inc

Current SWAN/IT Project Updates

- SWAN 100
  - The addition of Glenside, Roselle, and Warrenville libraries to SWAN's membership.
- Aspen Discovery
  - The investigation of the Aspen OPAC as a potential alternative to Enterprise.
- Staff Equipment Refresh (internal)
  - The 4-year hardware cycle of SWAN staff workstations
- Securities Initiative / Disaster Recovery
  - The investigation and implementation of security/disaster recovery protocols to ensure the integrity of SWAN systems and networks.
- OHM Development (OCLC Holdings Manager)
  - The in-house development to replace TMQ's OSMOSIS for maintaining the consortium's OCLC holdings

Upcoming SWAN/IT Projects for 2021

- SonicWall EOL (End of Life) Upgrades
  - Coordination of the replacement of out-of-support SonicWall firewalls under SWAN maintenance.
  - Does not affect Self-Maintainer libraries.
  - Projected Q2/Q3 2021
- SVA (SirsiDynix Voice Automation) Notice System Replacement
  - Migration to an alternate service to handle phone notices.
  - Projected Q2, 2021
- Annual Patron Database Cleanup, NCOA (National Change of Address)
  - Annual cleanup of expired and inactive patron records.
  - Projected Q2, 2021
- Support, Ticketing, and Membership Email Server Migrations
  - Currently shared with RAILS, these systems will be migrated exclusively to SWAN servers.
  - Projected Q1 2021
- Directory Services
  - Investigation of an integrated directory services utility to handle future BLUEcloud and WorkFlows integration.
  - Projected Q4 2021

SWAN Securities Initiative

Identifying and evaluating security/privacy vulnerabilities	Advocating security and privacy within our libraries	Advocating security and privacy with our vendors	Ensuring our development follows industry standards
• Within our libraries • Within the ILS • Internal to SWAN • Interfacing with 3rd party vendors	• Use a PIN on self-checkout • Limit handling and storing of patron data • Protect personally identifiable information • For more examples, watch the SWANx Web Series – Security & Patron Privacy Tips	• Ensuring 3rd parties are transmitting data and authenticating in a secure manner, following current standards and acceptable protocols	• Use of SSL certificates to ensure proper form encryption • Reducing the "hops" of PII (Personally Identifiable Information) • Encrypting transmission of this data

Example: Online Patron Registration

1. SSL encrypted sites ensure patron data is securely entered and transmitted

2. Age verification for Children's Online Privacy Protection Rule (COPPA) compliance
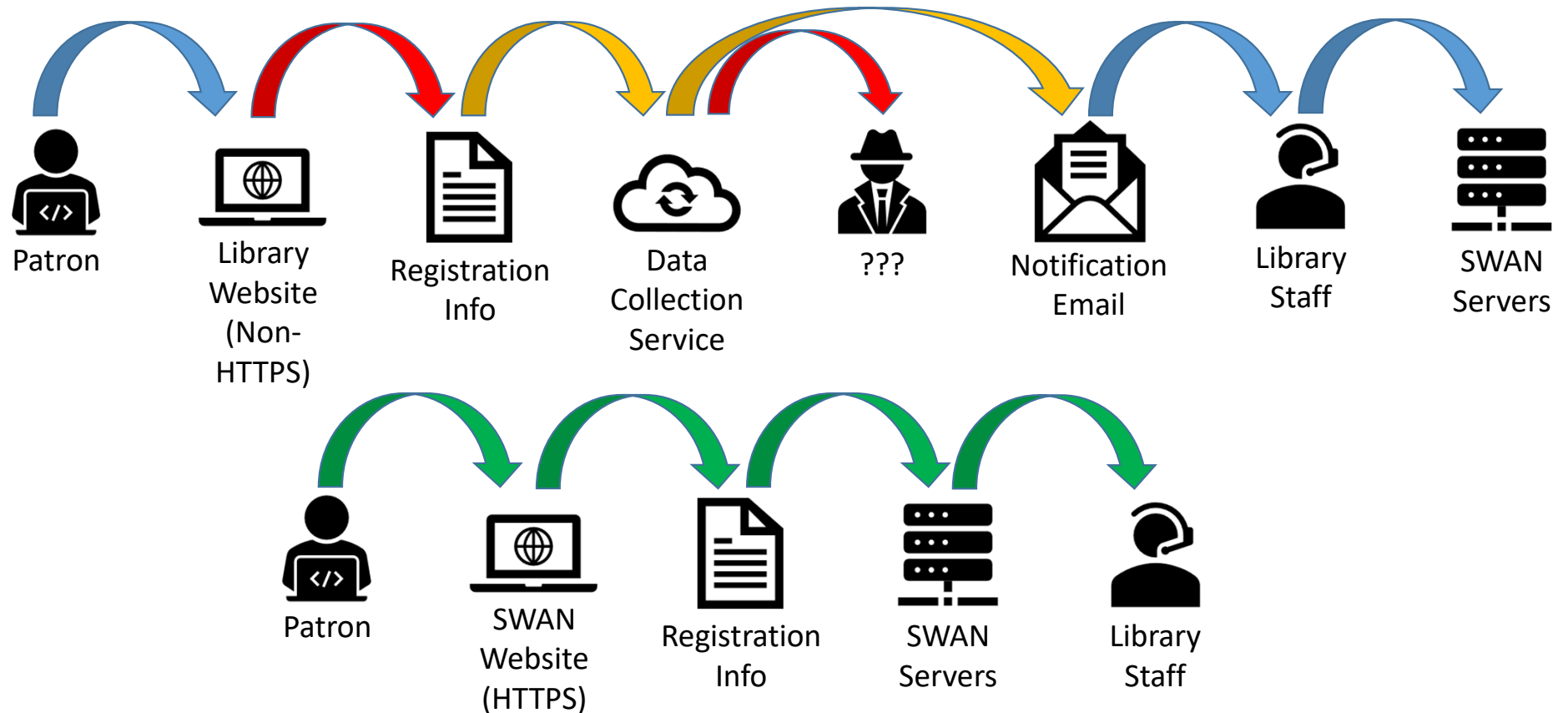
3. Privacy policy for further web compliance

4. Duplicate patron checking, based on name and birth date

5. Birth date does not permit underaged user entry, following COPPA

6. Submission transmits directly to Symphony server, avoiding mishandling of data

Reducing the Hops

Patron → Library Website (Non-HTTPS) → Registration Info → Data Collection Service → ??? → Notification Email → Library Staff → SWAN Servers

Patron → SWAN Website (HTTPS) → Registration Info → SWAN Servers → Library Staff

SWAN Securities Initiative

- Associated Projects:
  - Sunsetting of external SIP2 connectivity by end of 2021, transition vendors to:
    - TLS-wrapped SIP2 OR
    - Web Services OR
    - OpenAthens
  - Exploration of TLS-wrapped (encrypted) internal WorkFlows and SIP2 connections
  - SonicWall End of Life (EOL) hardware upgrades for SWAN-managed libraries
    - Prices range from $500 (smaller installations) to $2,000 (high-end installations)
    - We will reach out to affected libraries directly to plan/budget

These vendors have already made the switch!
- Demco
- Kanopy
- CenTec
- Midwest Tape
- Plymouth Rocket
- Patron Point
- MeeScan (TLS-SIP2)
- Library Market (TLS-SIP2)

Disaster Recovery / ILS Platform Reliability

- Associated Projects:
  - Scheduled Disaster Recovery tests
  - Review of security/data breach plan
  - Scheduling of Annual Rebuild
    - Completed February 23rd
    - Additional rebuild for SWAN100 in December (more info coming soon!)
  - Audit/Review of Symphony and User Access policies
  - Annual/monthly record purging and cleanup

OHM (OCLC Holdings Manager)

- (Soon to be) Open-source project for importing MARC21 data and calculating changes to update OCLC WorldCat holdings

- In use by SWAN and other Illinois consortia

15

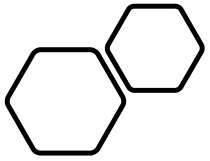# OHM - Determining Requirements

CORE FUNCTIONALITY

PRODUCTION ENVIRONMENT CONSTRAINTS

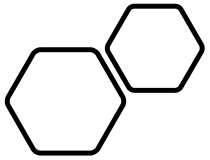**PROGRAMMING LANGUAGE CONSIDERATIONS**

OHM - Prototyping

Has anyone done this before?

Test existing code libraries and projects

Break out functionality to individual pieces and get those working

Bring in real SWAN data

OHM – Expanded Testing

1 Design a configuration model

2 Modify code to reflect model

3 Bring in other consortia data

OHM – Code Cleanup and Documentation

Organize	Organize code into logical structure
Follow	Follow consistent coding style
Consolidate	Consolidate reused code
Document	Document so others can replicate process

19
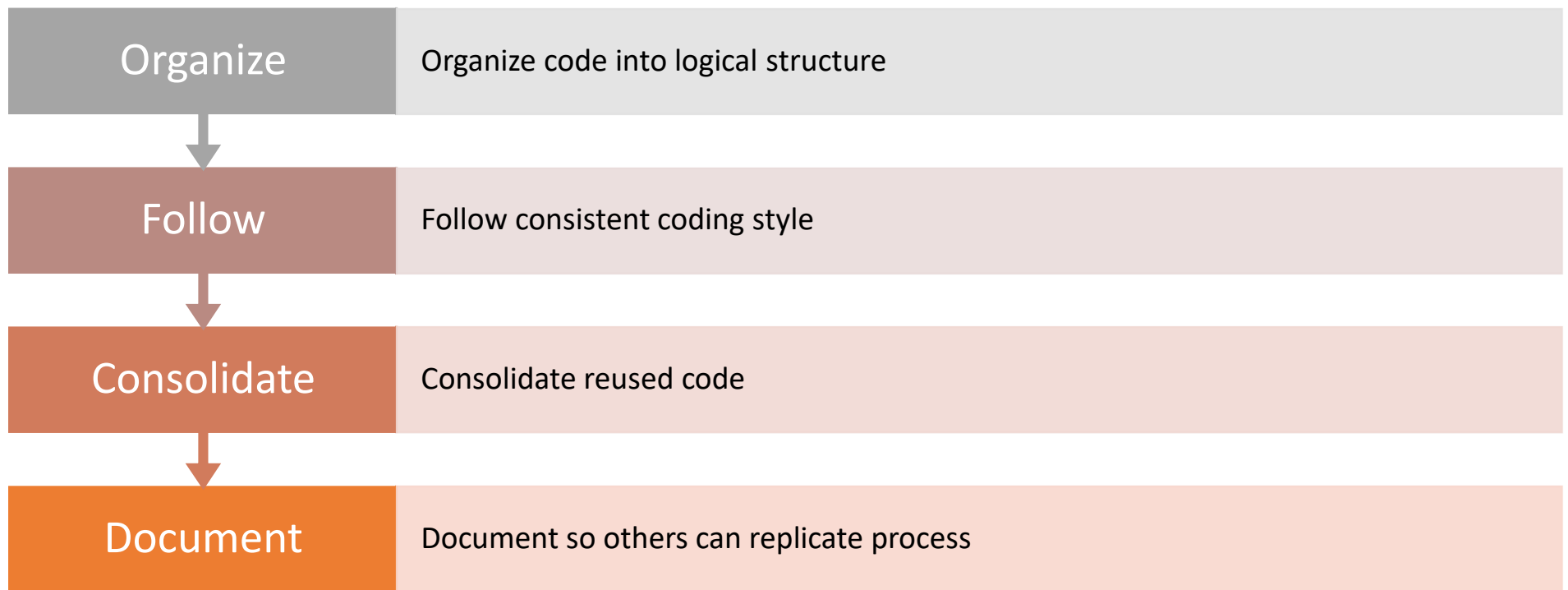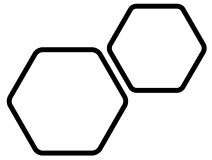
OHM – Publishing Code

ENSURE PROPERLY
LICENSED

PREVENT LEAKING
SENSITIVE DATA

Tips on Managing Technical Projects

- The Scrum framework
    - Product (or Project) Backlog
    - Sprint Planning
    - Sprint Backlog ("To Do")
    - Sprint ("Working On It")
    - Output/Completed Iteration ("Done")
    - Sprint Review/Retrospective
- Iterative implementation
    - Plan, Build, Test, Review

Tips on Managing Technical Projects

- In practice:
  - Serves to create "stakes in the ground"
  - Divides the project into bite-sized pieces
  - Defined Sprint sessions help to guide work estimates
 - Continuous feedback throughout guides schedule and workflow

Discussion Topic: Library Reopening

- How has your IT workflow changed as a result of COVID-19?
  - Are your staff continuing to work remotely?
  - Are you managing more workstations using automations and remote tools?
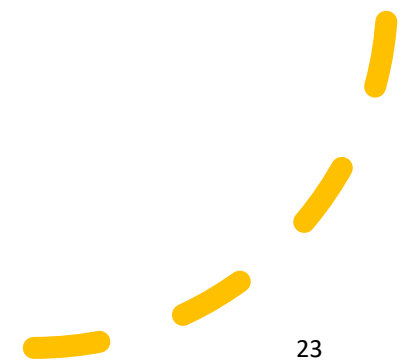
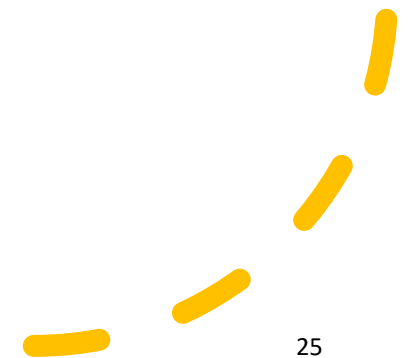# Discussion Topic: Library Reopening

- How have your services for patrons changed as a result of COVID?
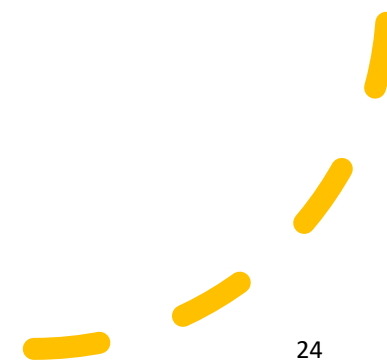
Discussion Topic: Library Reopening

- Has COVID afforded your department other project opportunities?

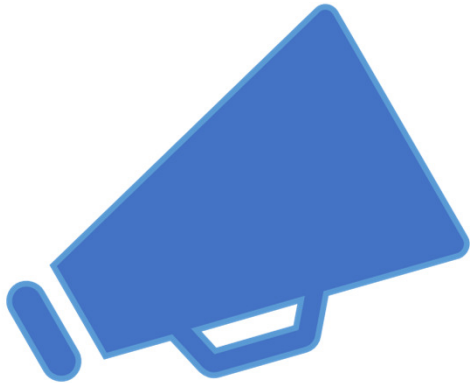# Discussion Topic: PC Reservation Authentication

- Is your library using User Category 4 (Internet Y/N) in conjunction with birthdate for PC Reservation/MyPC?

- What other data does your library track via User Category 4?

Open Forum: Security in Your Library

- Has your library moved forward on any projects to further secure your network?

Open Forum

- Future RFID implementations?
- New installations of Self-Checkout or AMH?
- System upgrades?

Upcoming SWAN Technology Events

- SWAN RFID Users Group
  - Thursday, October 22nd, 10AM – 12PM
  - Online via GoToMeeting

- SWAN Technology Users Group
  - Thursday, March 25th 2021
  - Location TBD

How to Contact Us

- SWAN Support
  - Email: help@swanlibraries.net
  - Phone: 844-SWANLIB (ext. 0)

- Steven Schlewitt, IT & Systems Support Manager
  - Email: steven@swanlibraries.net
  - Phone: 630.326.5993

- Ian Nosek, Systems Administrator
  - Email: ian@swanlibraries.net
  - Phone: 630.326.5887

- Rudy Host, Systems Engineer
  - Email: rudy@swanlibraries.net
  - Phone: 630.326.5775

- Michael Szarmach, Systems Administrator
  - Email: michael@swanlibraries.net
  - Phone: 630.326.8929

- Vickie Totton, Systems & Support Consultant
  - Email: vickie@swanlibraries.net
  - Phone: 630.326.8714

- Dave Pacin, Systems Administrator
  - Email: dave@swanlibraries.net
  - Phone: 630.326.8360

Questions & Follow-up

Send questions to our online ticketing system at help@swanlibraries.net

Visit the SWAN Support Site for access to recorded sessions.
https://support.swanlibraries.net

Submit a request for additional training topics.
Help > Request Forms > Request Training or Consultation

Check the SWAN training calendar for upcoming trainings. If you don't see what you're looking for, request a training or an onsite consultation for an in depth review of your library's work processes.

Name *
Mary Smith

Email address

Library

I'd like to request ... *
○ Training
○ Consultation

Training details
Describe what you topics you would like to learn about.

Submit