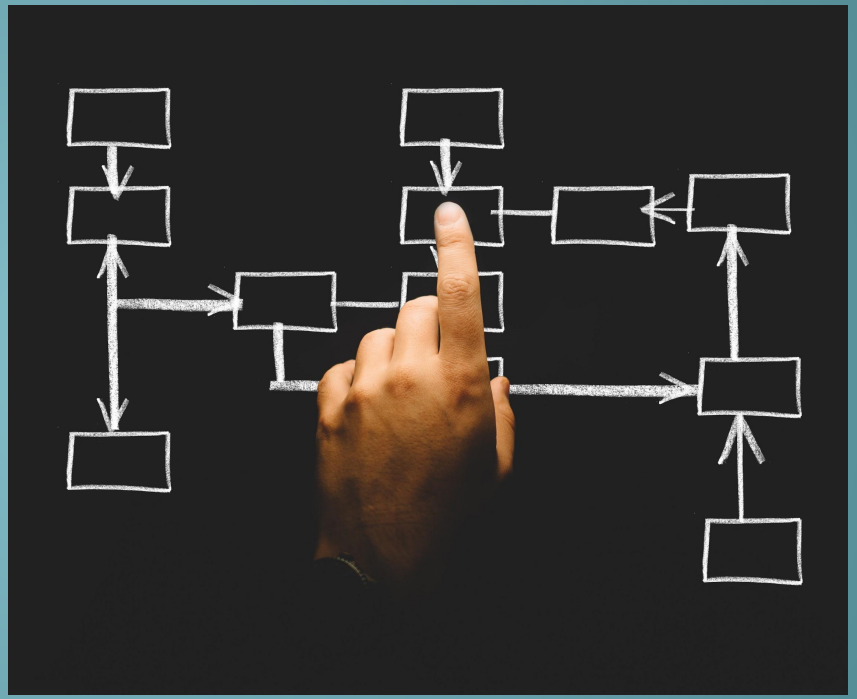
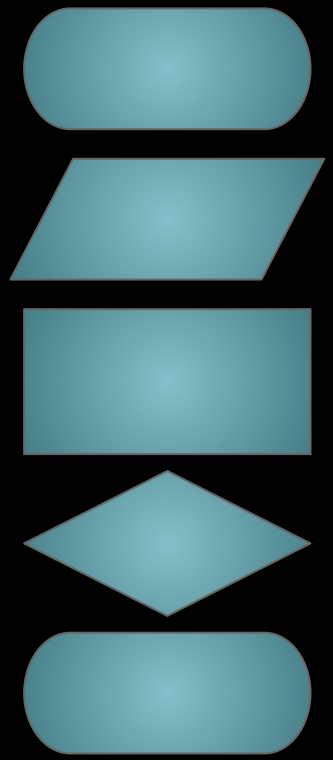
Responsive Workflow

For 3D print queue management



CC BY NC SA



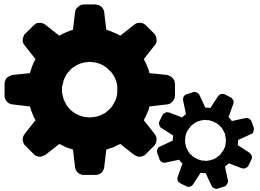
Where we Started

Demand

Workflow Adjustments

Lessons Learned

Where we’re going



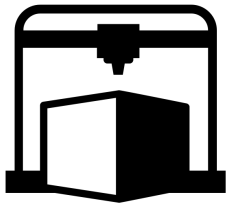
Mediated Access





4 FT staff, 2 IT

We later added 4 part time staff



3 Ultimaker printers

We immediately added a 4th



0 restrictions

We added some of these pretty quickly too

Our 3D Printers



Ultimaker 2
Sir Prints-A-Lot

Ultimaker 3
Maryam's Favourite

Ultimaker 2 Extended
Printcess Filamina

Ultimaker 3
***Fresh* Printz of Bel-Air**

Initial System Criteria

- Multiple technicians
- Track print process and conversations w/ users
- Easy for front desk staff to check status
- Customizable
- Reporting capability



Martina
@misping

Follow

We *quietly* went live with our 3D printing service today, recieved 6 print jobs in the first 20 minutes 😳

6:35 PM - 10 Sep 2018

System Limits

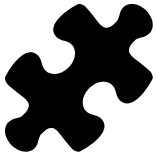
 1 print job at a time

 1 object/print job

 academic priority

Service Limits

 24 hrs

 10 pieces

 No multiples

Form

Martina King
kingm10@macewan.ca

Program / Faculty / School / Department

Course

Please provide if this print request is related to coursework.

Colour * - Select -

Second colour or material - Select -

How to set up your object with two colours.

Thingiverse link

File Upload

Views

Colour | Printer | Technician | Status

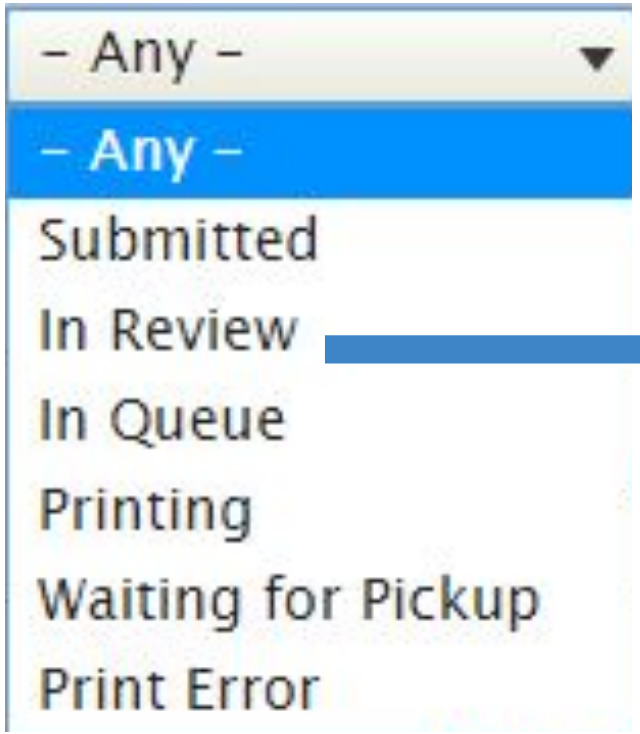
– Any – | – Any – | – Any –

Apply | Reset

ID	STATUS	SUBMITTED	REQUESTED BY	COLOUR 1	COLOUR 2	LINK	3D MODEL FILE(S)	NO.	PRINTER	TTP	TECH
1087	Waiting for Pickup	2019-06-03	@mymacewan.ca	Black (PLA)			•	1	Ultimaker 2+	• 1 hr 16 min	SM
1086	Waiting for Pickup	2019-06-03	@mymacewan.ca	Yellow (PLA)			•	1	Ultimaker 3+	• 1 hr 18 min	SM
1080	In Queue	2019-05-31	@macewan.ca	White (PLA)		Go		1	Ultimaker 2+	• 2 days 7 hr 54 min	SM
1067	Waiting for Pickup	2019-05-29*	@mymacewan.ca	Silver (PLA)	Yellow (PLA)		•	1	Ultimaker 2+	• 2 hr 34 min	MK

Status & Details

Status:



Date Submitted: Friday, May 10, 2019
Due Date: 2019-05-24
Date Completed: Tuesday, May 21, 2019
Print Status: Waiting for Pickup
Program/Faculty/School/Department
ITS
Number of Copies: 1
Colour: Black (PLA)
Thingiverse Link
https://www.thingiverse.com/thing:1031950
Notes
It says the hook is 19mm which I assume is the be fine for me, if that works for the printing.
Copyright: Yes
Reuse: No
Permission: Yes
Printer: Ultimaker 3+
Printing Time
7 hr
Gcode File(s)
UM3_Headphone_Hook_19mm (1).gcode
Technician: Martina King

2018/19

424 print jobs

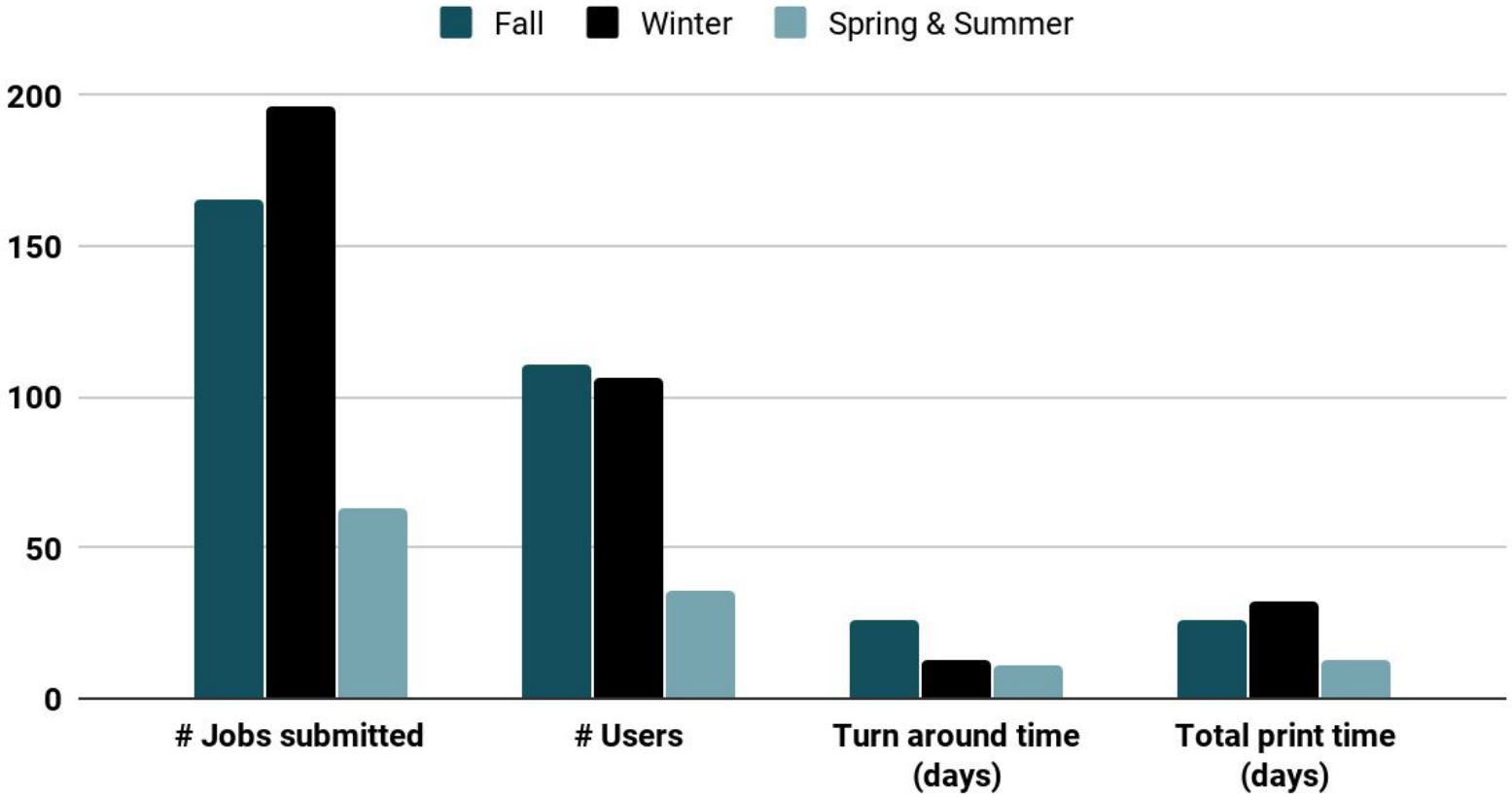


Top 5 users submit
7-16 print jobs/semester

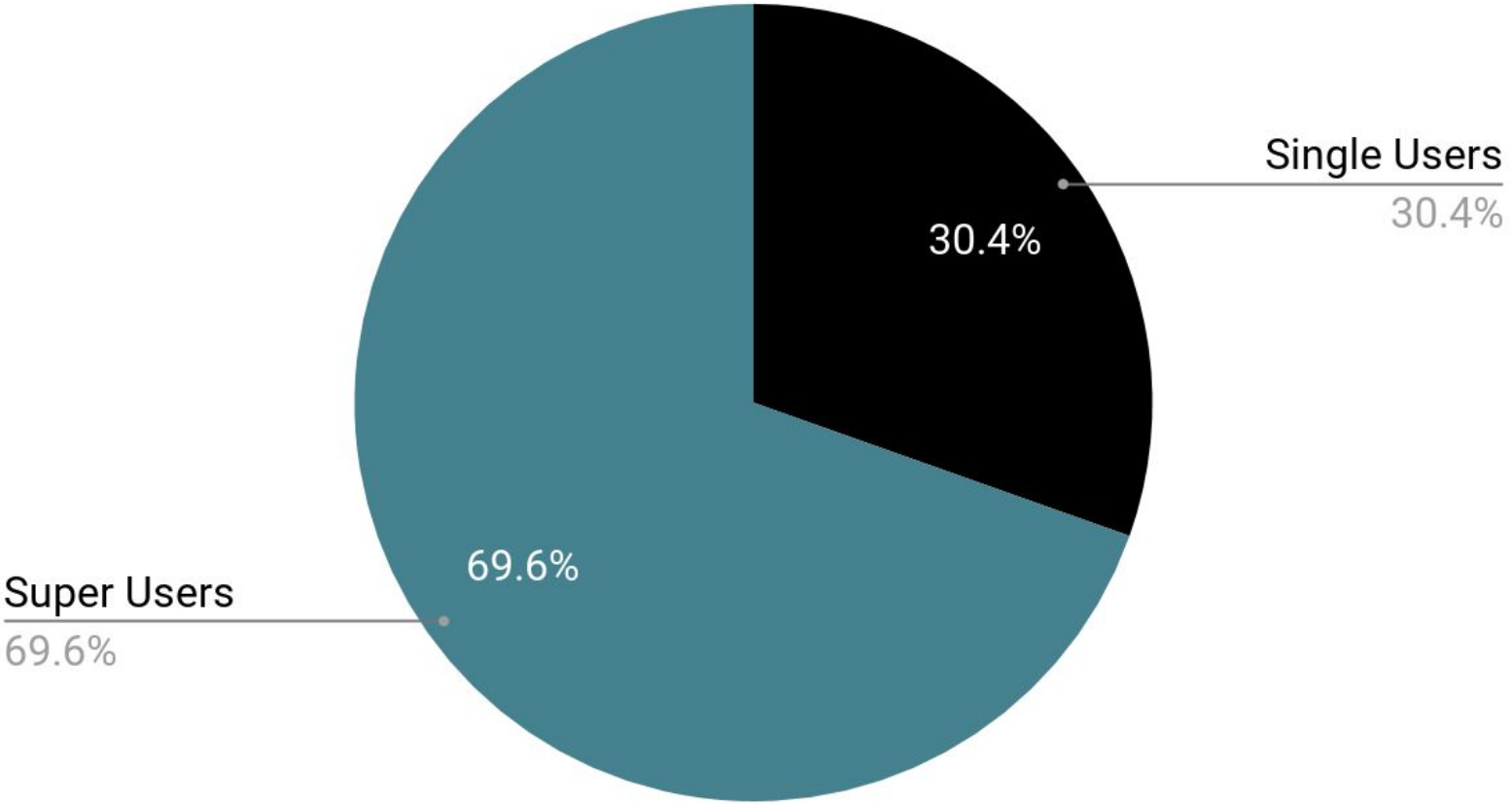


Approx. 74 days of printing time
4h 46 min avg/job

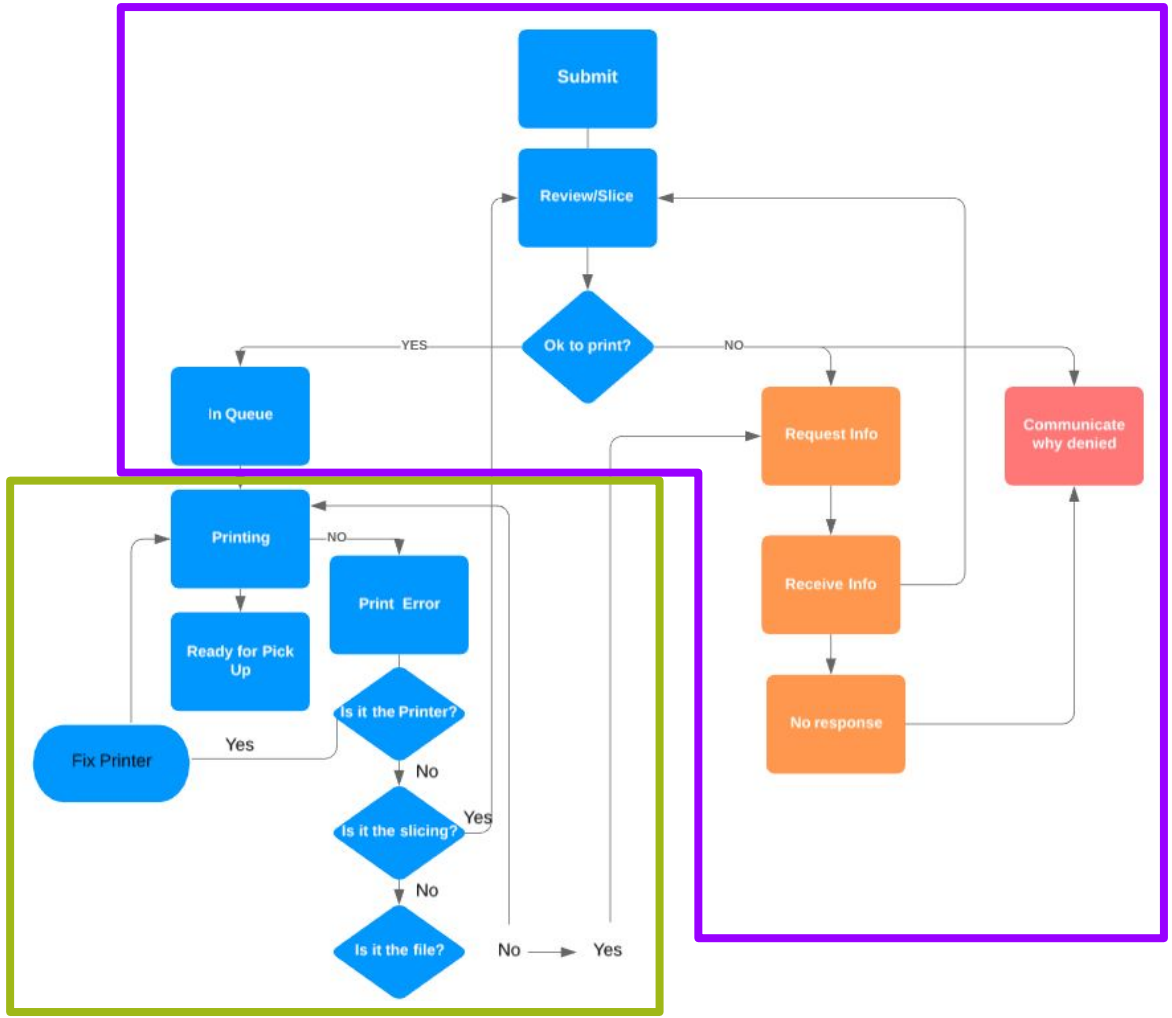
2018/19 By Semester



% of print jobs in 2018/2019 submitted by single vs. super users



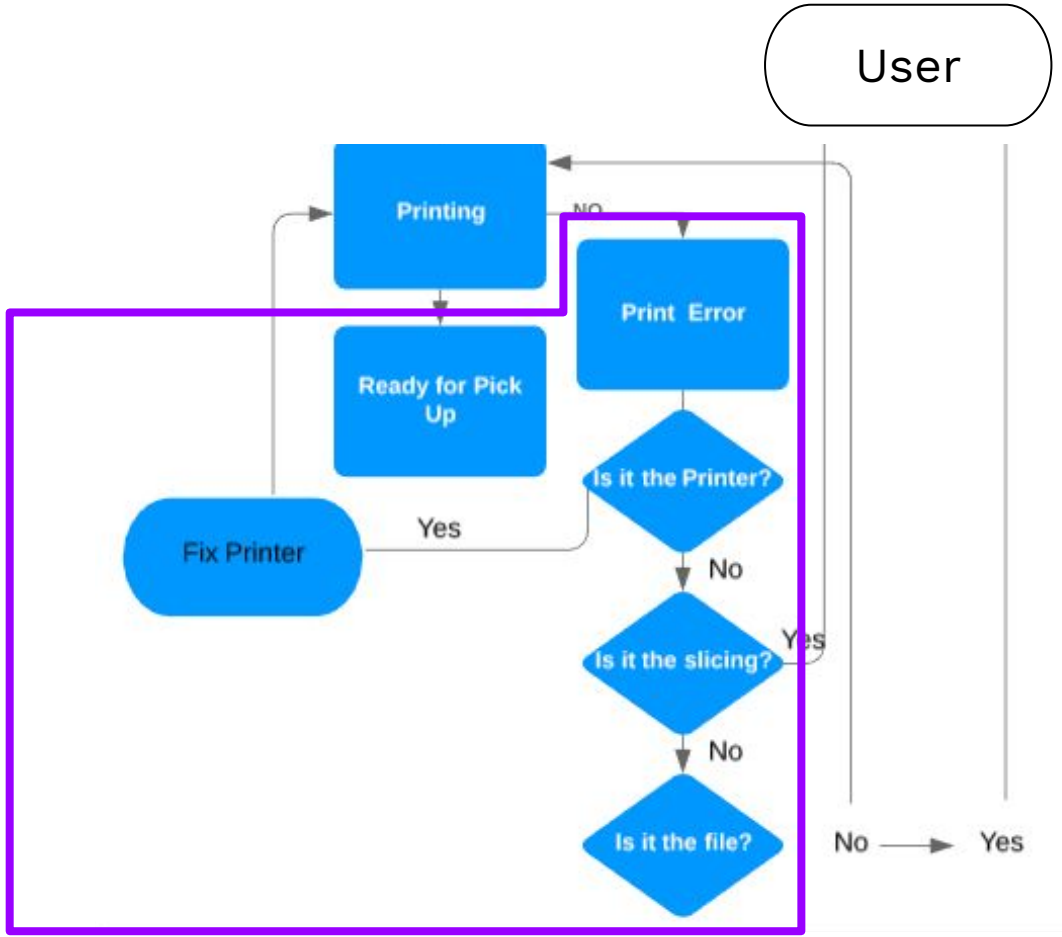
Specialization In Workflow



Direct Access



Self Serve Pilot



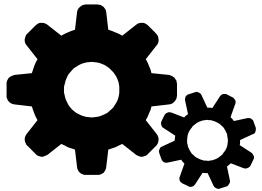
Lessons Learned



IF WE HAD TO DO IT AGAIN...

Where we're going





Resources

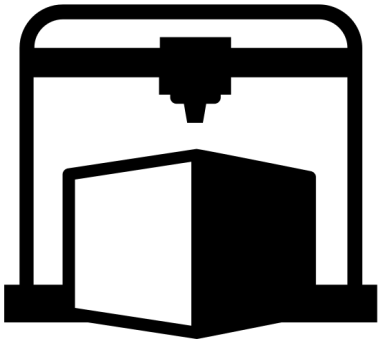
https://github.com/macewanulib/emerging_technology

Thanks!

Any questions?

You can find us at

- Martina King, kingm10@macewan.ca
- Dave Pearson, pearsond@macewan.ca





3D printer: Andrew Cameron, Noun Project

SlidesCarnival - Jacquenetta