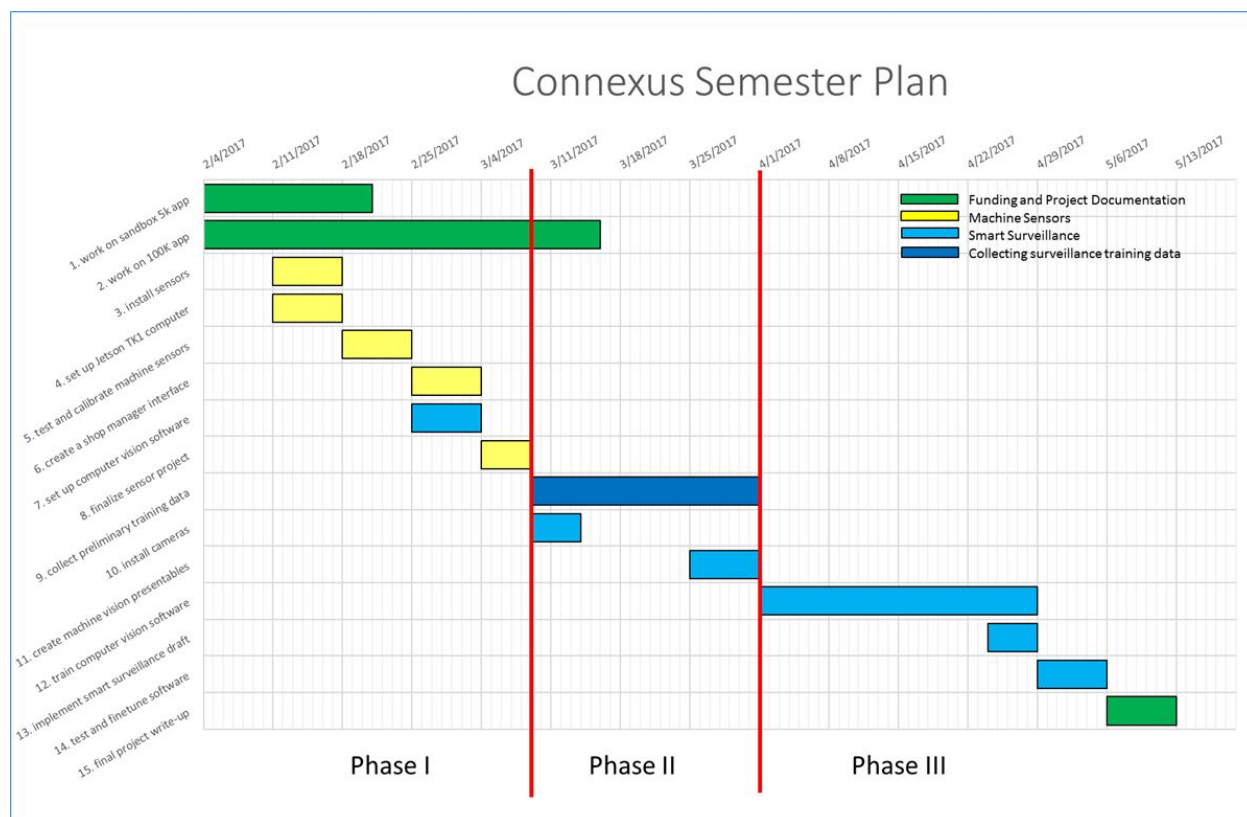


IDC Updated Plan

In the updated plan, we will focus on installing machine sensors and a shop manager interface before focusing on the computer vision. We expect that we can complete the machine sensor and interface in less than five weeks. The budget for these five weeks will include just the current clamp sensors and the Jetson TK1 computer. We see the user interface linking smoothly with the surveillance video. As a result, we think it is natural to create a user interface that reports data about machine usage and computer vision all in one. Pending Lennon's approval, we would create this user interface all at once in items 6 and 7. After finalizing the machine sensor phase in action item 8, we would install cameras and begin collecting data for the computer vision phase of the project. If we hit the desired goals for the first phase of the project, then we would have a second budget for the second phase that includes cameras, software subscription, and possibly a more powerful computer e.g. Jetson TX1 if the Jetson TK1 is not fast enough.



Phase I budget

category	type	price(estimateds)	quantity	total	links
machine sensors	Current Clamp	\$35	12	\$420	here
computer	NVIDIA Jetson TK1	\$200	1	\$200	here
			grand total	\$620	

Lennon most likely has more experience with current clamps than us, so the price and exact model would be subject to change. Current clamps range from \$30 to hundreds of dollars based on our brief research. Also, we are unsure of the exact number of machines in the shop. These uncertainties could drastically affect the grand total.

Phase II and III budget would include the following items and would hinge on the completion of Phase I

category	type	price(estimateds)	quantity	total	links
Cameras	Microsoft LifeCam Webcam	\$60	4	\$240	here
subscriptions	Windows 10 Pro	\$200	1	\$200	here
			grand total	\$440	

If we need a Jetson TX1, then that would be an additional \$435, subject to the performance power of the Jetson TK1.