

FOUR - WEEKLY CONTINUOUS ASSESSMENT REPORT

(Please Refer Section 9, page 5 of Training Guideline Book for details)

#	Report Details							
1	Report Number	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input checked="" type="checkbox"/>	6 <input type="checkbox"/>	
2	For the Duration	From	25	04	2022	To	22	05

#	Undergraduate's Details											
1	Name as per Register	Mr. / Ms. THALAGALA B.P.										
2	Index Number	180631J										
3	Discipline	BM <input type="checkbox"/>	CH <input type="checkbox"/>	CE <input type="checkbox"/>	CS <input type="checkbox"/>	EE <input type="checkbox"/>	EN <input checked="" type="checkbox"/>	ER <input type="checkbox"/>	ME <input type="checkbox"/>	MT <input type="checkbox"/>	TL <input type="checkbox"/>	TT <input type="checkbox"/>
4	Contact Phone Number	0750296594										
5	Email	180631j@uom.lk.										
6	Personal Address During	326/2, Kandahena, Tedigamawwa.										

#	Training Provider Details	
1	Training Provider's Name	
2	LE Robotics (Pvt) Ltd.	
3	Address of Corporate Office	
4	100/4, Divulapitiya Rd, Minuwangoda.	
5	Address of Worksite	
6	100/4, Divulapitiya Rd, Minuwangoda.	
7	Nearest City to Worksite	
8	Minuwangoda	
9	Name of Supervisor	
10	J.A.L. Jayasinghe	
11	Supervisor Position	
12	Engineer In-charge	
13	Supervisor Phone No.	
14	077-2716181	
15	Email	
16	laknijej@lerobotics.lk	

Important Note!	
A summary of undergraduate's work experience during the considered four (04) weeks period to be attached along with this duly filled Annex. Highlight any shortcomings, problems that the undergraduate experienced, if there were any, for the purpose of improving. Finally, make sure to attach completed assessment by the Supervisor (see overleaf).	

Endorsement by the Undergraduate			
Signature of Undergraduate	pijarum	Date	12/06/2022

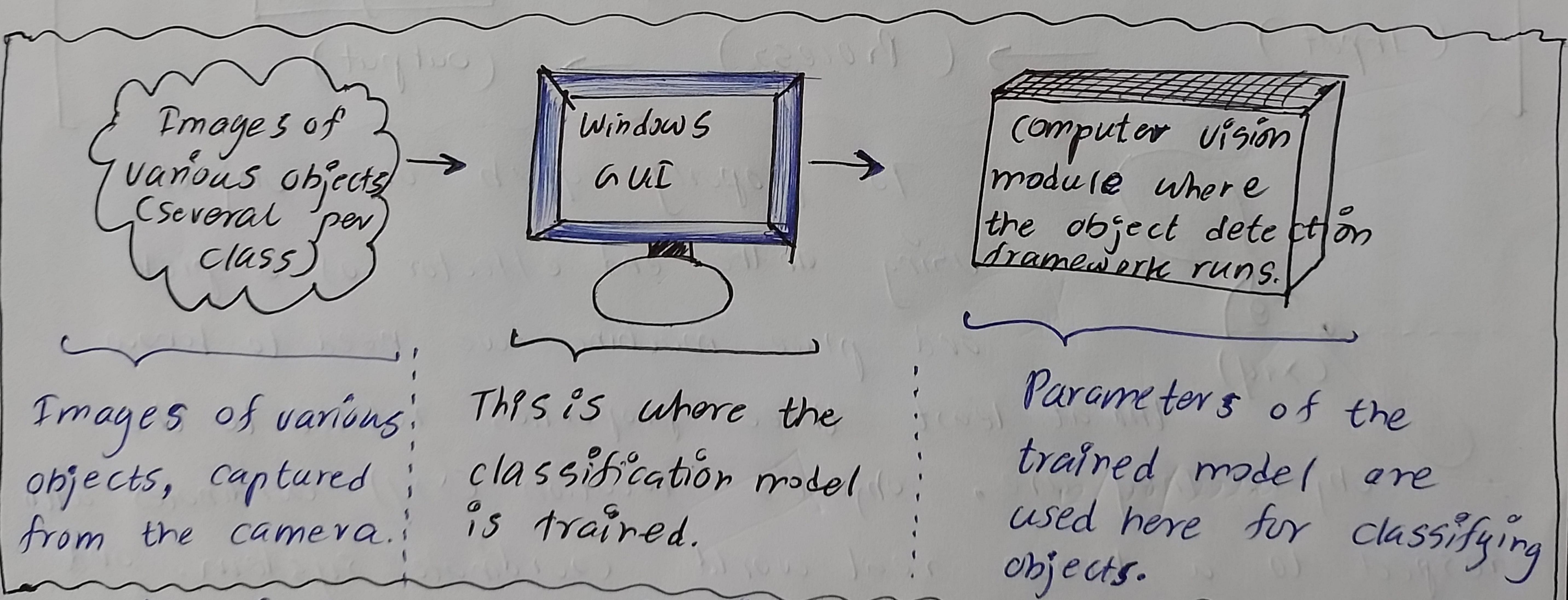
Annex. D (contd.)

Supervisor's Assessment on Undergraduate						
[rate on a scale from 1 (Disagree) to 5 (Agree)]						
A	Behavioral:	1	2	3	4	5
1	Thinks independently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Takes initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Organized and manages time well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Results oriented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Ability to learn from all levels of workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Adaptability to different environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Open to different opinions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Ready to seek assistance when necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Communicates well in all formats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B	Technical:	1	2	3	4	5
1	Knows fundamentals related to work assigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Able to apply fundamentals to practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Able to analyse and troubleshoot problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Engages modern tools and techniques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Develops related hands on skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Concerned with quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Performs work in a safe manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Develops skills in planning & implementation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Understands costs & benefits relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Understands business operations in local & global context	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any Other Remark:						
C	Satisfactory					
D	No. of Days of leave during 4-week period:	Authorized	1	Unauthorized	0	
E	Endorsement by the Supervisor:					
1	Name of the Supervisor	J.A. L. Jaysinghe		Official Stamp	L.E. ROBOTICS (PVT.) LTD.	
2	Position					
3	Signature			 Jainie Engineer - In - Charge	
4	Date	15/06/2022				

Summary of work experience - Report No: (5) - W17-20

From 25/04/2022 To 27/05/2022

When it comes to object detection, object classification of the detected object is a very basic task that every object detection framework must be capable of. In computer vision literature there are various methods to achieve for that. As a part of my allocated project, "Machine vision based Real Time Trajectory Planning", I also had to develop such an object classification model. It included developing the required algorithms and developing a windows graphical user interface for training the model.



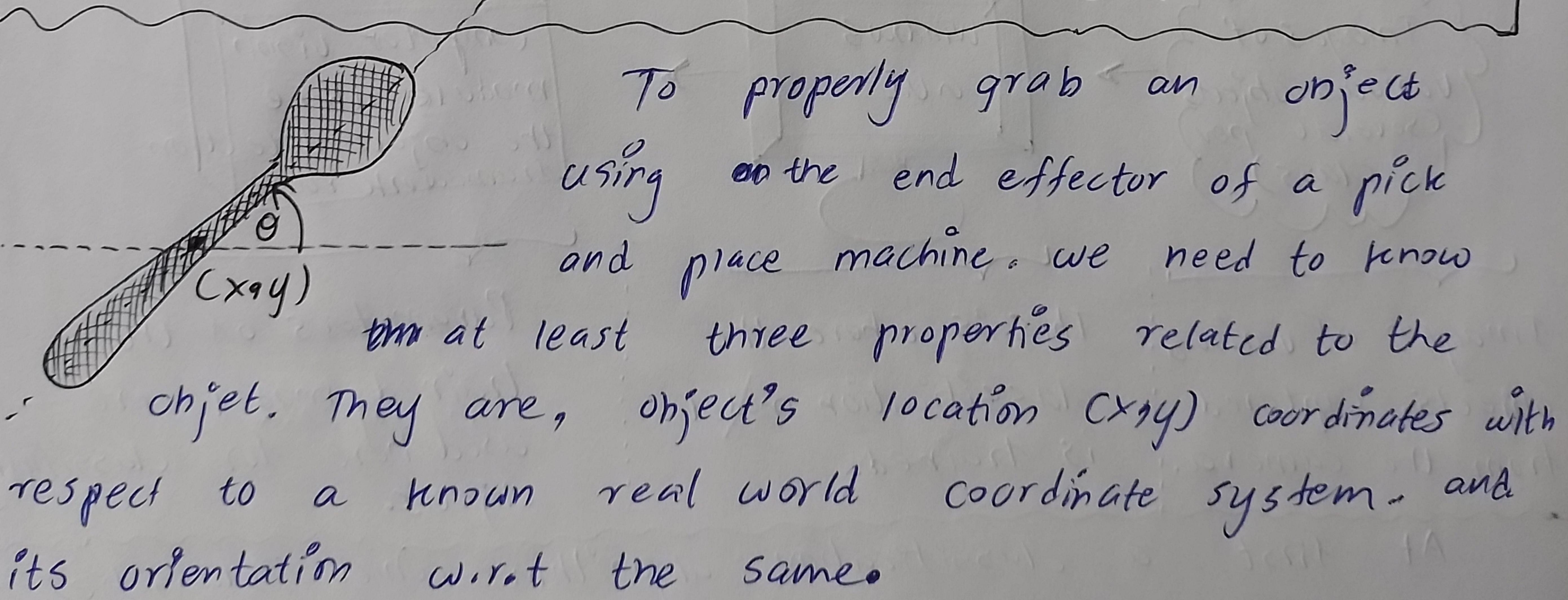
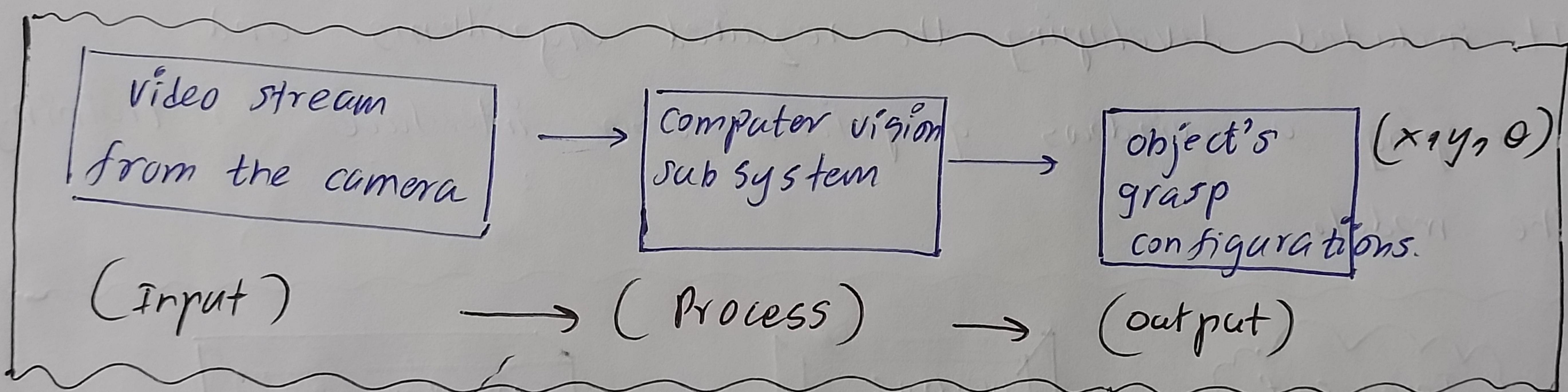
Images of various objects, captured from the camera.

This is where the classification model is trained.

Parameters of the trained model are used here for classifying objects.

At first a classification algorithm, which classifies objects depending on "object's shape" was developed. However, at the demonstration stage the model did not perform well and a lot of drawbacks were identified. Therefore, I had to investigate alternative methods for classifying objects.

As a result of that investigation, I could find an efficient and accurate classification model. It is based simply a Machine Learning algorithm and based on SIFT (scale invariant feature transform) and SVM (Support Vector Machines). This method yielded more accurate and more robust results. ~~This~~ It gave me some exposure to the world of Machine Learning. ~~and~~ I learnt a lot about ~~build~~ various steps in building Machine learning models and deploying them in real world applications.



In the last week of the 5th four weeks period, I worked on various methods for identifying and implementing various "grasping configurations" detection methods.