Report number (3) [W9- 12]

Annex. E

FOUR WEEKLY EXPECTED OUTCOMES FOLLOW-UP REPORT

#	PO Ref	LO Ref		Structured Training Program Items	Activity Carried Out Under *(You may generate a list of activities carried out and the list number can be mentioned here. A single activity can be considered for more than one learning outcome achievement)*
		No.	Scale (H.L,M or N/A)		
1	P01	LO2	H	Implementing ~~an~~ a backprojection algorithm to map image coordinates back to real world.	* Implemented a backprojection algorithm to map 2D image coordinates back to the real world, ~~to~~ so the robot knows where the object is w.r.t its coordinate system.
		LO3	L	Use object oriented programming techniques to restructure the source code to improve readability.	* Learnt about object oriented programming techniques in c++ programming to restructure my source code so the future employees can easily understand my work.
		LO4	L	~~Documenting of the~~ Documenting the implementation method of object detection model.	* Documented the required 3rd party software/package installations; of the object detection model. * Documented explanations of the algorithms for future use.
2	P02	LO1	L	Researched ~~about~~ various methods on backprojecting 2D image points to real world.	* Carried out a ~~little~~ research about various backprojection methods to be used in object detection framework. * Implemented a method found on one of the research papers. ~~for that.~~
		LO4	L	Demonstration of the object detection model with the added backprojection algorithm.	* Demonstrated the performance of object detection model with the added backprojection functionality. * Figured out some of the errors in the implemented method for further modification.
3	P03	LO4	L	Implementing backprojection functionality for the existing object detection framework.	* Implemented and demonstrated the ~~object detec~~ functionality of the backprojection algorithm inside the object detection framework. * Documented the functionality of the backprojection algorithm.
4	P05	LO2	H	Building software projects from source files using "CMake."	* Learnt about "cmake" a powerful, cross-platform build environment to ~~com~~ easily compile source codes and link them to generate ~~a~~ the final single executable file.
5	P06	LO3	H	Discussion on how to compose various documents targeting different users. (eng.s/ technicians)	* Learnt what ~~it~~ needs to be known in order to compose documentations for different users. (a technical engineer/ ~~a technicians~~ a technician without much knowledge/ etc.)
		LO4	M	Discussion on importance of well documented source code maintanance as a temporary employee.	* ~~Received~~ Discussed and received instructions on how to maintain a well documented source code of a software as a temporary employee.
		LO5	H	N/A	—

6	P07	LO5	L	Carryout a timing analysis to assess the eligibility of Raspberry Pi in further system implementation.	* Analyzed the timing requirement of the algorithm upto now to assess the eligibility of Raspberry Pi in further developments of the system. (As our final goal is to design a real time system.)
7	P08	LO3	M	Discussion on importance of well documented source code maintainance as a temporary engineering intern.	* Learnt how to ~~keep~~ maintain a well documented source code as an temporary engineering intern. (Because if someone wants to do any modification he may not be able to contact me.)
		LO4	L	Composing documentations of the same system by targetting different users.	* Discussed and learnt what to keep in mind when producing documents of a system for users with different skills sets. (Engineers / Technicians / Laymen.)
8	P09	LO4	H	Discussion with the team members to get to know ~~their~~ status of each other's ~~project~~ tasks.	* Discussed each other's progress of the allocated tasks inorder to understand the over all program of the project allocated to the intern students.
9	P10	LO1	L	Documenting the implementation method of the object detection framework. (with backprojection)	* Documented the required 3rd party software / package installation methods of the object detection framework. * Documented the explanation of the algorithm for future use.
		LO4	M	Demonstration ~~the~~ of the object detection model with the added backprojection algorithm.	* Demonstrated the performance of the object detection framework with newly added backprojection algorithm to the supervisor and received instructions for the next step of the task.
		LO5	H	Carry out a timing analysis of the system to check whether the Raspberry Pi is enough for further development.	* As the final target is implementing a real time system, timing requirements are in greater importance. They need to be checked at each stage to check whether the hardware platform that we use is enough for the job.
10	P11	LO1	L	Discussion on importance of well documented source code maintainance as a temporary employee.	* Discussed how to maintain a well documented source code, as an temporary engineering intern.
		LO4	M	Documenting the implementation method of the modal with newly added backprojection algorithm.	* Documented the methods of installing 3rd party softwares / packages required for proper working of the object detection model. * Documented the working principals of the algorithms.
		LO5	L	Carry out a timing analysis to assess the eligibility of the Raspberry Pi for further system implementation.	* Carried out a timing analysis of the complete system upto now to check whether time consumption of the algorithm is still within the limits.

11	P12	LO1	M	Research on various methods of backprojecting 2D image points to real world coordinate system.	* Carried out a research on various backprojection methods to be used inside an object detection framework. * Implemented an algorithm found on one of the research papers.
		LO3	M	Building software projects from source files using "CMake"	* Raspberry Pi is a linux based system and when it comes to build applications from source files "CMake" comes handy. * Learnt how to use CMake to build the executable file related to the object detection model.
		LO4	H	Compose Documentations of the same system targetting different users.	* Discussed and learnt what to keep in mind when producing documentation of a system for different users.
		LO5	H	Carry out a timing analysis to assess the eligibility of the Raspberry Pi for further system implementation.	* Measured and analysed the time consumption of the complete algorithm upto now, to assess the eligibility of Raspberry Pi for further implementation.

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