Service Robot

Embedded System Configuration of Robot

System Architecture

Processor

Mini PC

Monitor

Keyboard/Mouse

USB

Navigation

Arduino

Motor Driver

Motor

Perception

Stereo Camera
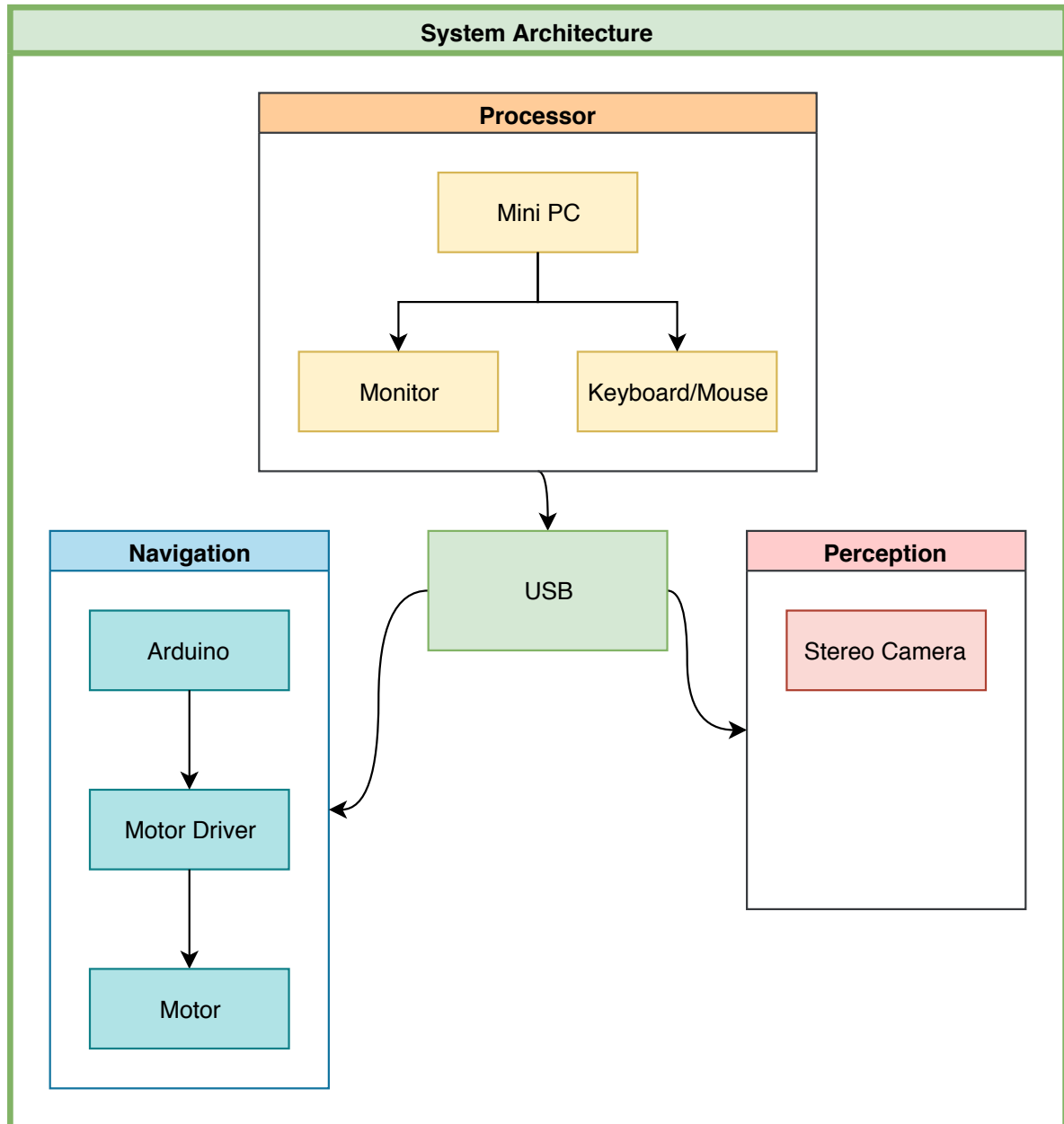
Project Proposal

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12 December 2019

Proposal number: 0002-DEC

BUDGET

**Required parts for Processor and Perception only

- Links provided for reference — price
- Additional portable power supply device may required — please notes

Option A

No	Description	Quantity	Unit Price		Cost	
1	**Processor**					
	# INTEL 8th Gen i7 NUC BOXNUC8I7BEH3 Barebone Mini PC Kit #	1	RM	1,998.00	RM	1,998.00
	10.1" HD Monitor for Mini TV & Computer Display TFT LCD Color Screen Built in Speaker Support BNC / AVI / VGA / HDMI	1	RM	153.00	RM	153.00
	LOGITECH K400 PLUS WIRELESS TOUCH KEYBOARD -WHITE	1	RM	103.00	RM	103.00
	BELKIN 4-PORT HI-SPEED USB 2.0 HUB WITH POWER ADAPTER (F4U040AK)	1	RM	98.00	RM	98.00
2	**Perception**					
	Astra Pro	1	RM	835.26	RM	835.26
3	**Workmanship**	1	RM	3,000.00	RM	3,000.00
	Total				**RM**	**6,187.26**

** Links provided for reference — price

- https://shopee.com.my/-INTEL-8th-Gen-i7-NUC-BOXNUC8I7BEH3-Barebone-Mini-PC-Kit--i.59277182.1730350371
- https://shopee.com.my/10.1%E2%80%9D-HD-Monitor-for-Mini-TV-Computer-Display-TFT-LCD-Color-Screen-Built-in-Speaker-Support-BNC-AVI-VGA-HDMI-i.45710215.2480050819
- https://shopee.com.my/LOGITECH-K400-PLUS-WIRELESS-TOUCH-KEYBOARD-WHITE-i.43829688.1298349533
- https://shopee.com.my/BELKIN-4-PORT-HI-SPEED-USB-2.0-HUB-WITH-POWER-ADAPTER-(F4U040AK)-i.44569675.2379582067
- http://shop.orbbec3d.com/Astra-Pro_p_35.html

No	Description	Quantity	Unit Price		Cost	
1	**Processor**					
	NVIDIA Jetson Nano Developer Kit	1	RM	550.00	RM	550.00
	7 Inch 1024*600 LCD Touch Screen Display	1	RM	119.00	RM	119.00
	LOGITECH K400 PLUS WIRELESS TOUCH KEYBOARD -WHITE	1	RM	103.00	RM	103.00
	BELKIN 4-PORT HI-SPEED USB 2.0 HUB WITH POWER ADAPTER (F4U040AK)	1	RM	98.00	RM	98.00
2	**Perception**					
	Astra Pro	1	RM	835.26	RM	835.26
3	**Workmanship**	1	RM	3,000.00	RM	3,000.00
	Total				**RM**	**4,705.26**

** Links provided for reference — price

- https://my.cytron.io/p-nvidia-jetson-nano-developer-kit?search=jetson%20nano&description=1&src=search.list
- https://shopee.com.my/LANDZO-7-Inch-1024*600-LCD-Touch-Screen-Display-for-Raspberry-Pi-4B-3B-3B-2B-i.161649908.2514194855
- https://shopee.com.my/LOGITECH-K400-PLUS-WIRELESS-TOUCH-KEYBOARD-WHITE-i.43829688.1298349533
- https://shopee.com.my/BELKIN-4-PORT-HI-SPEED-USB-2.0-HUB-WITH-POWER-ADAPTER-(F4U040AK)-i.44569675.2379582067
- http://shop.orbbec3d.com/Astra-Pro_p_35.html