Robbin

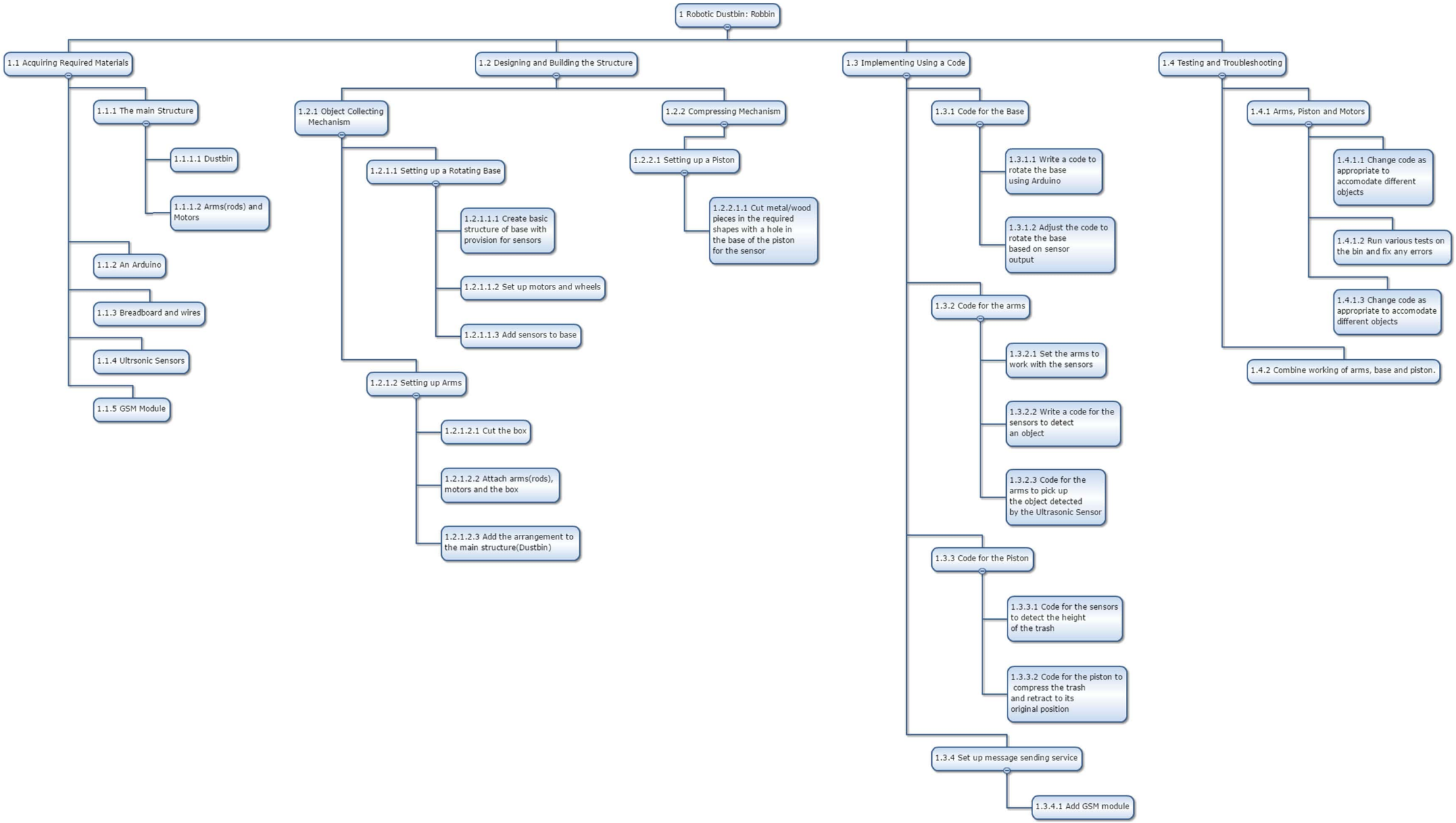
The robotic bin

PROJECT MANAGEMENT PLAN

Project costs and procurement strategy

Material	Approximate Cost	Procurement Strategy
Large dustbin	1200	Amazon
Ultrasonic sensor (4)	150*4 = 600	Amazon
Arduino Mega	nil	Lab
Motors for hands and base (7)	150*7= 1050	Ebay
Large box for grabbing	nil	will use an old box kept at home
Rods for arms (Curtain rods)	nil	will use old ones kept at home
Big Motor for piston	1000	Amazon
GSM Module	nil	Lab
Breadboard, connecting wires etc	nil	Lab
Materials for base and piston	400	Different Sources
Approximate Total Cost	*4250*	

Work Breakdown Structure (WBS)

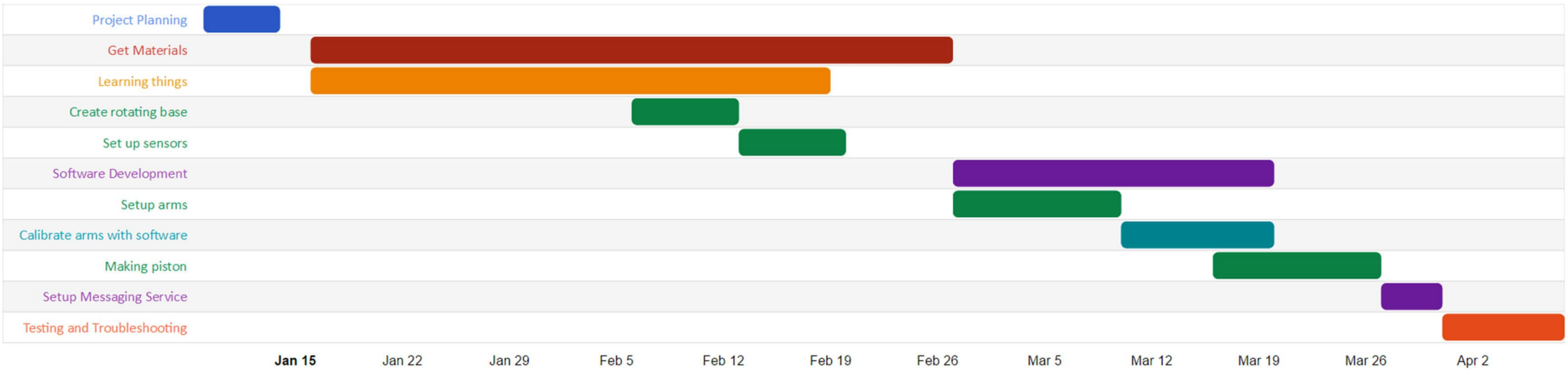


www.wbstool.com

Risk Management

Risk Identification	Risk Response	Risk Probability
A person might drop his/her valuables near the dustbin, which directly go inside the bin.	It is better that the valuables be hidden inside the bin than remaining on the floor where someone can just pick them up. The valuables can be recovered easily if they are secured in the bin through services like findmyphone for phones etc.	Medium
Worker may be absent at time of the bin is completely filled.	Initial messages will be sent to the centers when 50%,70% and 90% of the bin is filled.	Medium
There may be some malfunctioning in the parts of the system.	Checking the equipment carefully before buying so that we face no issues in the future.	Medium
The software and hardware platforms we are using may become obsolute.	Keeping a basic model of the entire project which can be applied to updated versions.	Low
There can be delays during implementation of a particular step in the Work Breakdown Structure.	The completion date has been set up 2 weeks before the deadline.	High
The base might not be able to hold the burden of the bin and its content	Stronger wheels and more powerful motors can be used.	Medium

Gantt Diagram



Deliverables

A robot that
-collects small scattered garbage around it
-prevents overspill of garbage and compresses its contents
-sends a signal to the authorities when the garbage exceeds a certain level

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