OBJECT DRIENTED ANALYSIS AND DESIGN

DE-ORBITING ACTIVE DEBRIS BY DUAL-ARM SPACE ROBOT
PROBLEM STATEMENT:

Active delives numoual (ADR) technology is an effective approach to numediate the Proliferation of Space delives, which Seriously threatens the operational soluty of orbital spaceoralts. By using the Dual-Arm Space robot in the Artificial inteligence the Robot will capture the delives data their analysing the deliver orbits will help to de-orbite the active deliver.

Speak delicar 10. promote delicar informations.

Stillet projete 11. Telpon Perties veritiones.

Stillet projete 12. Address tolonis insure.

Spare Agence 18. Famt Satellets program

Portation 15 Edges Compliance

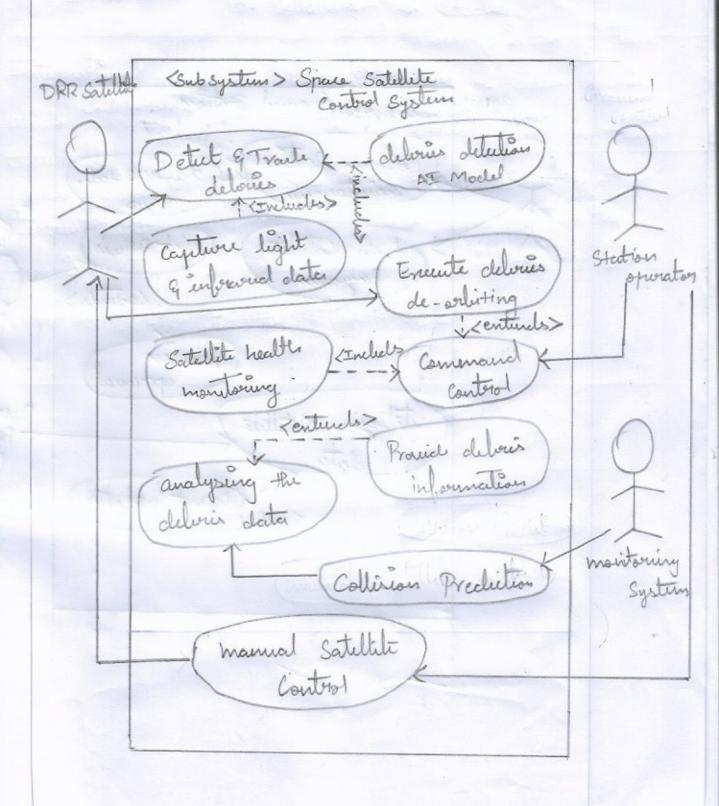
- Unit - April - Dan -	
PRIMARY ACTORS  Delvis Removal  Robotic Satellite	1. Détect 9 trails delons 2. Eneute delons Remond 3. Send delons data to Station
atales to git of loverter	4. Change the thoushould
Goraund Control Station operator	5. Satellite Command 6. Satellite Control 7. monton Satellite health 8. analysing the deliver data.
Space delvis monitoring System	9. promote delvis information 10. Collison prudiction.
Satellite mainten -ann Technicians	11. Perform Routine maintenanne 12. Address technical irrues.
Span Agencus	13. Fund Satellite perograms
Regulatory. Authorities	16. Enforce Compliance 16. mission approval

DE-DEBTING ACTIVE DESKS BY

RIMARY ACTOR	USE CASES - JUSTICIA
Personal Little and	17. Utilize Satellite Data
Research	12. Collaborate on Studies
Collaborators	19. Data Shaving 20. Coordinate removal
Concessara	20. Coordinate Furnista
Communication	21. Ensure data Transmission
Service Promoters	the state of the s
Pulla melia	22. Report yestates
	the design of the second
ration show he	Piterice for to Whith there in fre
visition have	Landing tan " Laurence" -2
Ang po	18. Sotillite develop succes
the church for	Extendions 100 temperary in distance
	med do
	Paris To Almila of a character was a
Pur	to war a comment of address your of
Mr. Surviva s	Business BR-1  But the Local Statistic Constitution of the statist
Ale a suid final si	to war a comment of address your of

	ID & NAME:	UC-1 / Detect & track delivers
	Created By:	SRINIVASAN. J.P. Date Created 22/01/24
200	Primary	DRR Satellite Secondary Delvis detections
	Description	DRR Satellete Capture the lights send to the
		DRR Satellete Capture the lights send to the detection System will commend the Satellete to de ordint the deliver
	Trugger:	The deline detected in the System
	Precondition	RE-Batellita Should be Idle, PRE-2: System
•	Post condition	Post-1: Damage Chile
	Normal flow	1. Capiture lights
		2. détect délivier 30 mars tourands delivier
		40 want for an Command
		5. de-solutting delone
	nit to	6. Danage chele
0.00	Allerhale flow	1. no lights change informed mode continue Step 2
		2. Command not seewed diewed missions.
		2. Command not received dicard missions. 3. Satellite damage recovery mode
	Enleptions	4a. command is deseard the chule of.
		4a. command is deseard the chule for new
	0: 4	
	Priority	High
	of we	average of 2 delvies pur day
	Businers	BR-1
	Thornation	1. Satellite can descard the mission anytime the Satellite detect any damage
	Assumptions	Assume that average of 10 degree can be detected.

use care diagrams



(Sub Systems Ground Station Address tech. Program mission utilizing Satellite