

ENG 4000
Weekly Meeting Minutes



Every week, this document should be presented to the supervisor, as this will be the basis for grading.

Project Name	Satellite Operations Services Optimizer
Date & Time of Meeting	2023/11/24 (2:30 PM)

Attendees			
#	Name	Student ID	Username (email)
1	Youssef Hany	216885766	youssef8@my.yorku.ca
2	Rafael Dolores	216142069	rafd47@my.yorku.ca
3	James Le	217270943	jamesmql@my.yorku.ca
4	Walid Al Dari	218375162	walidald@my.yorku.ca
5	Ruth Bezabeh	216171795	ruttkas@my.yorku.ca
6	Stanley Ihesiulo	216985236	ihesiulo@my.yorku.ca
7	Hashir Jamil	217452954	hashirj@my.yorku.ca

Decision Made / Agenda / Objectives / Plan for the Coming Week
<p>- Image Orders Formatting Issue?</p> <p>Format for images needs to be fixed and we will update the image orders and send them to you.</p> <p>Format:</p> <pre>"Latitude": -88.9937301167224, "Longitude": 134.33181236948036, "Priority": 3, "ImageType": "Medium", "ImageStartTime": "2023-11-18T02:54:16", "ImageEndTime": "2023-11-18T05:59:12", "DeliveryTime": "2023-11-18T09:59:12", "Recurrence": { "Revisit": "True", "NumberOfRevisits": 6, "RevisitFrequency": 12, "RevisitFrequencyUnits": "Hours" } }</pre> <p>Parent Child Relationship: 1 Parent, 1 Child + 12 hours, 1 child + 24 hours, ..., 1 child + 72 hours (6 image orders for Order above)</p>

Should handle cases for hours or days for revisitsfrequencyunits. - Story Point

- Schedule Generation Method?

Look at the best method used with the least amount of diminishing returns (i.e., not extensive on the system and accomplishes the goal in reasonable time). Doesn't need to be novel, use existing algorithms.

- Three optimization categories:

- Use assets (Satellites & Ground Stations) as much as possible to fulfil orders.
AND
- Load balancing between assets and orders sent out (maintenance and outage order consideration).
AND
- Fulfil as many orders as possible (image, maintenance, and outage orders).

- Optimization Strategy:

- global vs. local maxima.
- Coarse grain vs. fine grain optimization.
- Different algorithms for different states (maybe possible?).

Team Responsibilities for the Coming Week

#	Name	Responsibility
1	Youssef Hany	
2	Rafael Dolores	
3	James Le	
4	Walid Al Dari	
5	Ruth Bezabeh	
6	Stanley Ihesiulo	
7	Hashir Jamil	

Progress Report on Last Week's Activities

#	Name	% Completed	Comment (provide the reasoning only if 100% is not completed)
1	Youssef Hany		
2	Rafael Dolores		
3	James Le		
4	Walid Al Dari		
5	Ruth Bezabeh		
6	Stanley Ihesiulo		

7	Hashir Jamil		
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