SAIRA

PREPARED FOR

Dr. Wesley Schultz

Keep America Beautiful

PREPARED BY SAIRA

Ray Thomas Cruz

Angelica Olmedo

Stephen Palumbo

Isaiah Martin

Andre Castillo

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i. Cover Letter

To: Dr. Wesley Schultz, Advisor to Keep America Beautiful

CC: Dr. Shaun-inn Wu, Director of Projects

Going into the Prototype I phase of the project we had to revise a significant portion of the list of tasks we had planned originally after collaborating with the machine learning team and discussing the feasibility of some of our original goals. After reorganizing our efforts, we were able to create a working user interface that queries the user for certain locational data inputs, such as an address, and converts it into a JSON file which we will send over to the Automated Image Retrieval Program created by Cougar Student Technologies. We had also reconfigured this program to pull a certain number of points to satisfy a 95% confidence interval with a 5% margin of error instead of prompting a user, which may allow said user to pull all points from a graph which may lead to future technical and budgetary issues. The current interface will be adjusted to reflect these search parameters for the time being. We were able to use this program to pull enough images for the machine learning team's new dataset, however we will need to collect another set of images as the FOV, and pitch parameters of the image set we have pulled are not able to satisfy their requirements.

For the next phase of the project, we will work with the machine learning team to establish a connection from our project to theirs to send and receive data through a TCP socket. Once we can consistently receive data from the machine learning algorithm, we can continue work on the user interface by implementing some form of data visualization. We will also be working on a storage solution to temporarily hold onto the pulled images as well as to hold the KAB scores and dates. The estimated cost of the next phase of the project will be approximately $4,875.

The time and cost of the third phase split between the five members of the SAIRA team has totaled 217 hours at a rate of $25.00 an hour, yielding a total amount of $5,425. The remaining two phases are projected to cost about $6,625. As of now the total accumulated cost of the project is $9,984.75 and is subject to change as we continue to work on this project which we expect to cost $16,725.

Best Regards,

Ray Thomas Cruz

A copy of this report will be submitted to both Dr. Schultz and Dr. Wu

By signing below, you hereby approve Team SAIRA to continue working on the following project: Keep America Beautiful: Litter Detective and agree to the aforementioned estimated costs.

Dr. Wesley Schultz, Advisor to Keep America Beautiful

1. Application Development

1.1 Statement of Business Context

Keep America Beautiful is a nonprofit organization with the mission to improve and clean the environment so we can have a beautiful and green country. One major goal to achieve this mission is to end littering. Littering is a major environmental issue that destroys the environment by polluting areas. There have been many ways that Keep America Beautiful have expressed their efforts to help end littering. They've done this through events and programs like Great American Cleanup and America Recycles Day.

1.2 Statement of Customer's Business Problems

- Keep America Beautiful needs a web based application with a user interface that detects litter in an area.
- Must be able to select geo-coordinates based on user-defined regions.
- Make litter scores accessible within the user-interface from the Machine Learning algorithm.
- Make images and data accessible to the Machine Learning Algorithm

1.3 Statement of Project Proposal

- Create a fully functional user interface that gives the user the ability to select geo-coordinates for a defined region.
- The ability to pull images and data from Google Streets.
- Record data of location and date of images pulled.
- Make a UI that works with the ML team algorithm.
- Display a data visualization of scored litter.
- Make it accessible on google cloud.

1.4 Measures of Success

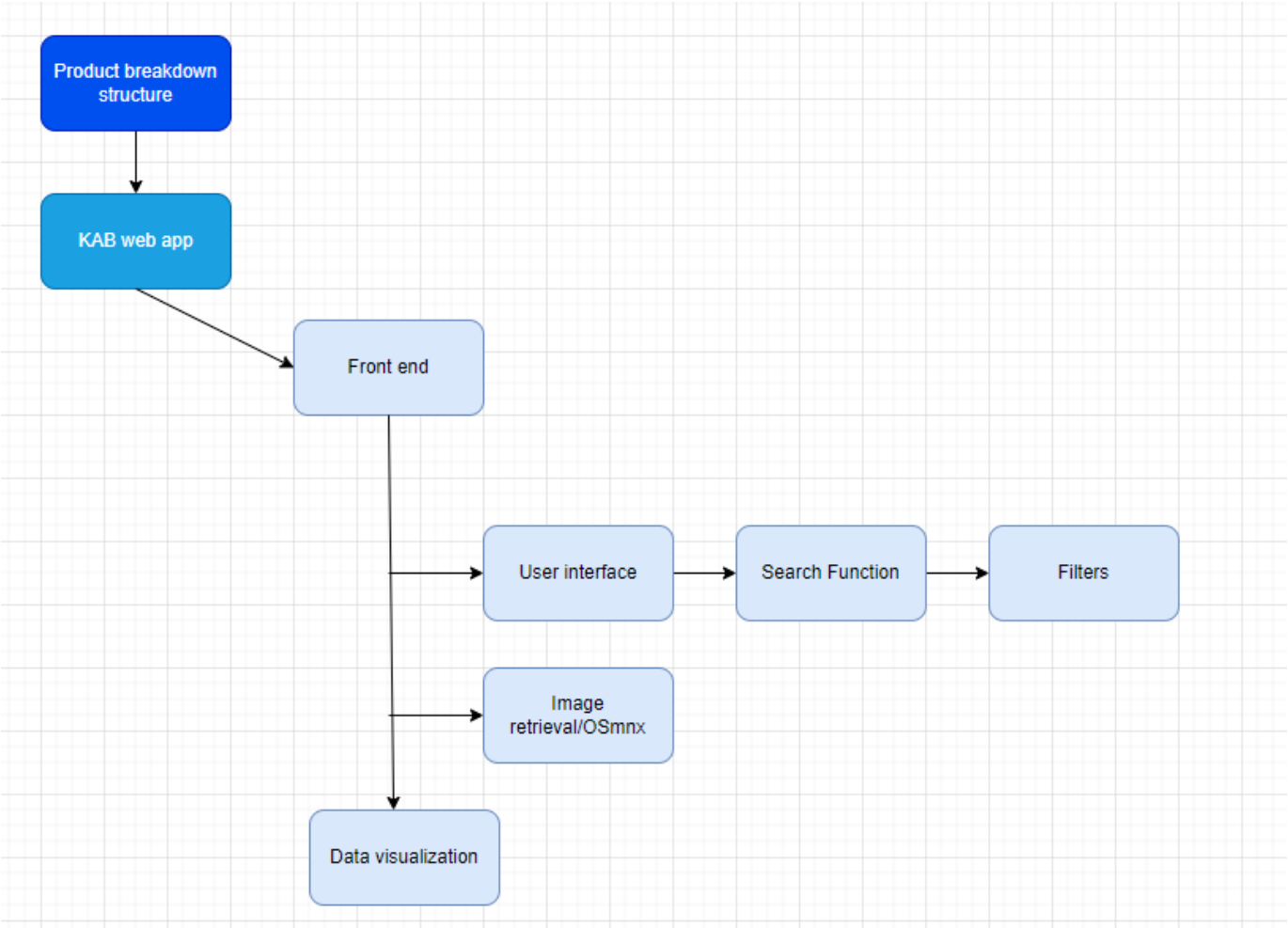
- JAD 1 - Define the requirements of the project.
- JAD 2 - Make any final adjustments or changes to the requirements.
- Prototype 1 - UI development, gives the user the ability to search for a geo-region.
- Prototype 2 -Implement Data Visualization
- Final Phase - Have a fully functional and complete UI that works with the ML teams algorithm.

2. Requirements Matrix

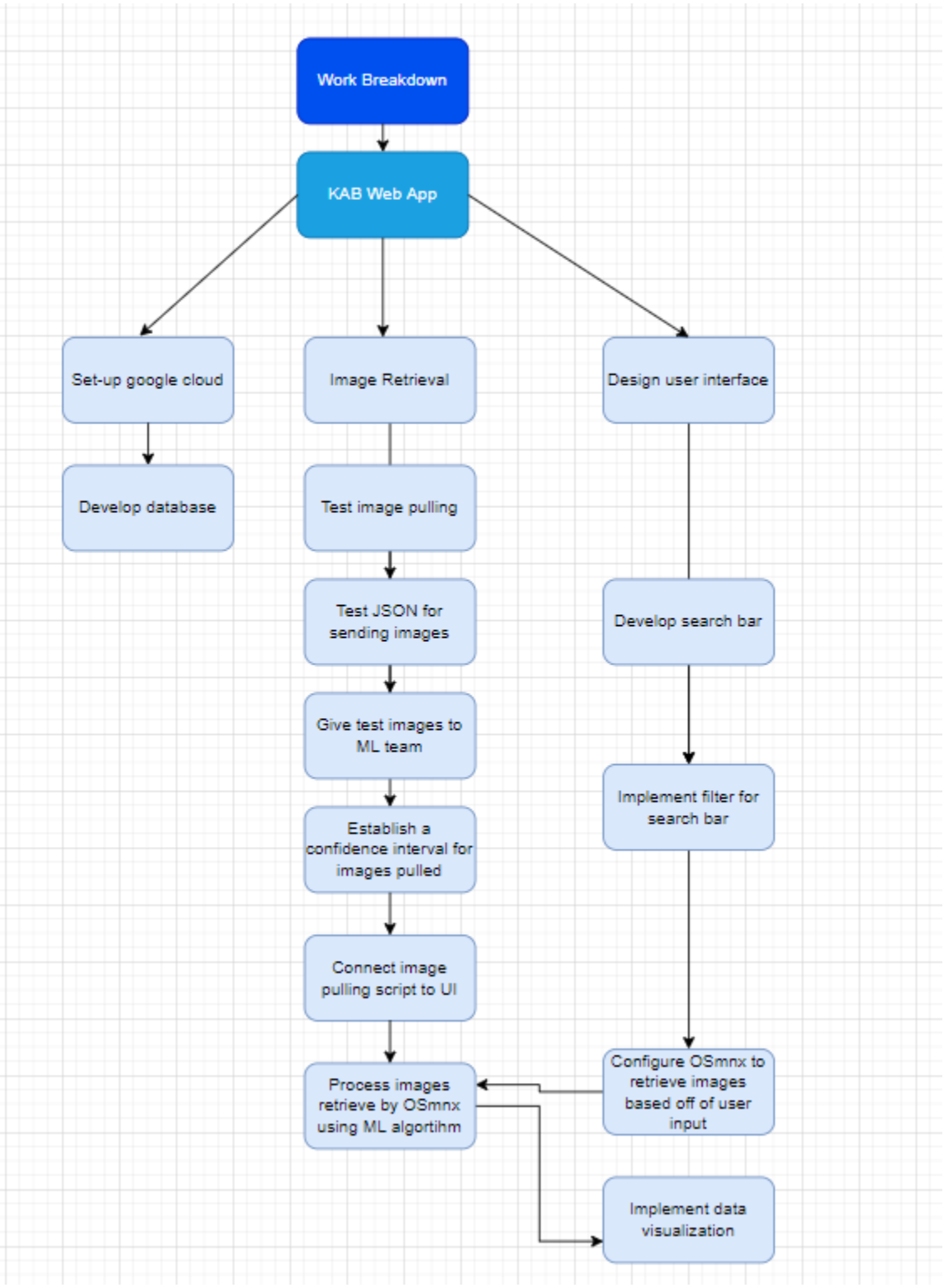
Req. #	Requirement	Description	Implemented [Y/N]	Task
1	Image pulling	-Implement OSMnx to draw streets of selected Cities	y	3.1.3
2	Image Storage	-Decide where to store images pulled with OSmnx -Store image and date pulled -Integrate with ML team	N	3.1., 4.2
3	User Interface	-Design User Interface -Display results from user Query -Retrieve Information from ML algorithm	N	3.2.1,3.2.2
4	Visual Representation	-Display Heatmap -Display KAB Score (Date, Amount of litter, 20 specific objects)	N	3.1.2,3.2.3

3. Project Management

3.1 Product Breakdown Structure



3.2 Work Breakdown Structure



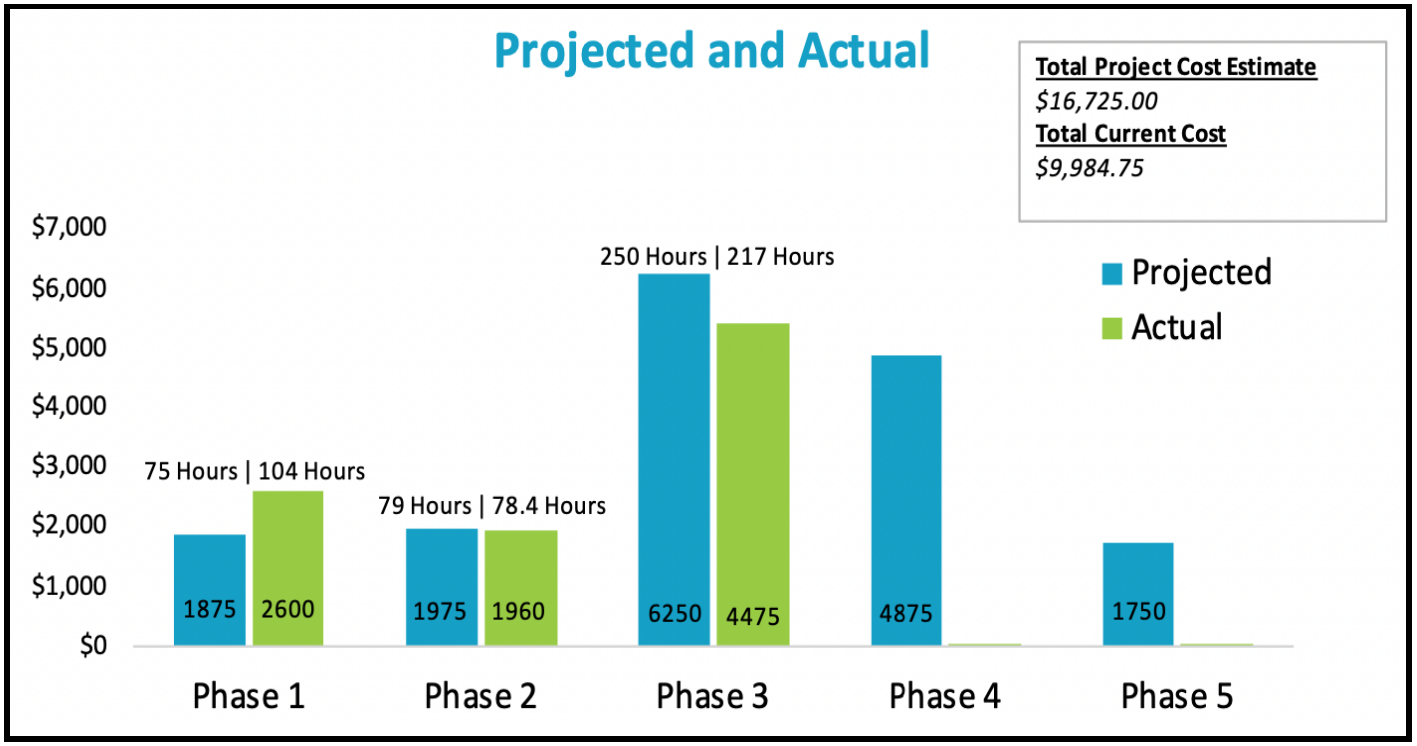
3.3 List of Tasks

1.0	***Team Saira - Phase 1***	27 days	1/26/2022	2/22/2022		100.00%
1.1.0	**Project Proposal**	7 days	1/26/2022	2/1/2022		100.00%
1.1.1	Team Formation	2 days	1/27/2022	1/29/2022	All	100.00%
1.1.2	Team Roles & Meeting	2 days	1/30/2022	1/30/2022	All	100.00%
1.1.3	Report 0	1 day	1/31/2022	2/1/2022	All	100.00%
1.1.4	Interview with Customer	1 day	2/1/2022	2/1/2022	All	100.00%
1.2.0	**Project Research**	6 days	2/2/2022	2/7/2022		100.00%
1.2.1	Previous Group Research	2 days	2/2/2022	2/3/2022	All	100.00%
1.2.2	Requirements Overview	2 days	2/3/2022	2/4/2022	All	100.00%
1.2.3	Prepare for JAD 1	2 days	2/5/2022	2/7/2022	All	100.00%
1.2.4	Team Meeting	1 day	2/7/2022	2/7/2022	All	100.00%
1.3.0	**JAD 1**	2 days	2/8/2022	2/9/2022		100.00%
1.3.1	JAD 1 Meeting	1 day	2/8/2022	2/8/2022	All	100.00%
1.3.2	Team Meeting Discussing JAD1	1 day	2/9/2022	2/9/2022	All	100.00%
1.4.0	**Report 1**	12 days	2/10/2022	2/10/2022		100.00%
1.4.1	Set-up Report & Tasks	1 day	2/10/2022	2/22/2022	All	100.00%
1.4.2	Report 1 Draft	5 days	2/10/2022	2/15/2022	All	100.00%
1.4.3	Sprint Meeting with Customer	1 day	2/13/2022	2/13/2022	All	100.00%
1.4.4	Report 1 Final	5 days	2/15/2022	2/22/2022	All	100.00%
2	***Team Saira - Phase 2***	12 days	2/22/2022	3/5/2022		100.00%
2.1.0	**JAD 2**					100.00%
2.1.1	Perepare For JAD 2	2 days	2/22/2022	2/23/2022		100.00%
2.1.2	JAD 2 Meeting	1 day	2/24/2022	2/24/2022		100.00%
2.1.3	Team Meeting	1 day	2/24/2022	2/24/2022		100.00%
2.1.4	Finalize Requirements	1 day	2/25/2022	2/25/2022		100.00%
2.2.0	**Report 2**	11 days	2/25/2022	3/8/2022		100.00%
2.2.1	Set-up Report & Tasks	1 day	2/25/2022	2/25/2022		100.00%

2.2.2	Report 2 Draft	4 days	2/26/2022	3/1/2022		100.00%
2.2.3	Report 2 Final	7 days	3/2/2022	3/8/2022		
2.3.0	**Image Development**		3/1/2022	3/5/2022		100%
2.3.1	Study Previous Group Code	3 days	3/1/2022	3/3/2022		100%
2.3.2	Test Image Pulling	2 days	3/2/2022	3/3/2022		100%
2.3.3	Test JSON for Sending Images	2 day	3/4/2022	3/5/2022		100%
3.0	***Team Saira - Phase 3***	22 days	3/22/2022	4/12/2022		100.00%
3.1.0	**Cloud Development**	6 days	3/22/2022	3/27/2022		100.00%
3.1.1	Set-up Google Cloud	1 day	3/22/2022	3/22/2022		100.00%
3.1.2	Test OSmnx	4 days	3/23/2022	3/26/2022		100.00%
3.1.3	Give ML Team Images to Test	1 day	3/27/2022	3/27/2022		100.00%
3.2.0	**UI Development**	4 days	3/27/2022	3/31/2022		100.00%
3.2.1	Develop Search Bar	2 day	3/27/2022	3/28/2022		100.00%
3.2.2	Implement Filters	1 day	3/29/2022	3/29/2022		100.00%
3.2.3	Establish a Confidence Interval	1 day	3/30/2022	3/30/2022		100%
3.3.0	**Prototype 1**	5 days	4/1/2022	4/5/2022		100.00%
3.3.1	Prepare For Prototype 1	3 days	4/1/2022	4/3/2022		100.00%
3.3.2	Prototype 1	1 day	4/4/2022	4/4/2022		100.00%
3.3.3	Team Meeting	1 day	4/5/2022	4/5/2022		100.00%
3.4.0	**Report 3**	9 days	4/3/2022	4/12/2022		100.00%
3.4.1	Set-up Report & Tasks	1 day	4/3/2022	4/3/2022		100.00%
3.4.2	Report 3 Draft	1 day	4/3/2022	4/5/2022		100%
3.4.3	Report 3 Final	7 days	4/6/2022	4/12/2022		100.00%
4.0	*Team Saira - Phase 4*					#REF!
4.1.0	**Report 4**					0.00%
4.1.1	Team Meeting					
4.1.2	Set-up Report & Tasks					
4.1.3	Report 4 Draft					
4.1.4	Report 4 Final					

4.2.0	**Database Development**					0.00%
4.2.1	Develop Database					
4.3.0	**Front-End Development**					0.00%
4.3.1	Connect Image pulling script to UI					
4.3.2	Configure OSmnx to work with user input					
4.3.3	Process images using ML algorithm					
4.3.4	Implement Data Visualization					
4.4.0	**Prototype 2**					
4.4.1	Prepare For Prototype 2					
4.4.2	Prototype 2					
4.4.3	Team Meeting					
5.0	***Team Saira - Phase 5***					0.00%
5.1.0	**Final**					
5.1.1	Final Report					
5.2.0	**Final Presentation**					0.00%
5.2.1	Prepare For Presentation					
5.2.2	Prepare Visuals & Demos					
5.2.3	Rehearse Presentation					
5.2.4	Present Final Presentation					

3.5 Cost Tracking Chart



Phase 1	Projected	Actual	Variance
Meetings	1,250	1,625	-375
Report 0	125	125	0
Report 1	500	850	-350
Total Cost	1,875	2,600	-725

Phase 2	Projected	Actual	Variance
Meetings	1,033	941	92
Individual work	942	1,019	-77
Total Cost	1,975	1,960	15

Phase 3	Projected	Actual	Variance
Meetings	1,625	2,375	-750
Individual work	4,625	3,050	1,575
Total Cost	6,250	5,425	825

Total	Projected	Actual	Variance
as of 4/12	10,100	9,985	115
Total Project Cost Estimate	Total Accumulated as of 4/12		
$16,725.00	$9,984.75		

3.5 Cost Tracking Breakdown

	Project Phase	Hours Per Member	Team's Total Hours	Avg. Cost	Others Cost	Total Cost	Team's Actual Hrs	Total Accumulated Costs as of 4/12
1	Phase 1	15	5 members	$25	$0	**$1,875**	1/25-2/22	**$2,600.00**
1.1	Initial Setup	1	5	$25	$0	$125	5	$125.00
1.2	Meetings	7	35	$25	$0	$875	50	$1,250.00
1.3	Report 0	1	5	$25	$0	$125	5	$125.00
1.4	JAD 1	2	10	$25	$0	$250	10	$250.00
1.5	Report 1	4	20	$25	$0	$500	34	$850.00
2	Phase 2	15.7	5 members	$25	$0	**$1,975**	2/22-3/8	$1,959.75
2.1	Meetings	8.2	41.32	$25	$0	$1,033	37.64	$941.00
2.2	Individual work	7.5	37.68	$25	$0	$942	40.75	$1,018.75
3	Phase 3	50	5 members	$25	$0	**$6,250**	3/8-4/12	$5,425
3.1	Meetings	13	65	$25	$0	$1,625	95	$2,375
3.2	Individual work	37	185	$25	$0	$4,625	122	$3,050
4	Phase 4	39	5 members	$25	$0	**$4,875**	4/12-4/28	
4.1	Meetings	14	70	$25	$0	$1,750		
4.3	Individual work	25	125	$25	$0	$3,125		
5	Phase 5	14	5 members	$25	$0	**$1,750**	4/28-5/17	
5.1	Meetings	7	35	$25	$0	$875		
5.2	Final Report	7	35	$25	$0	$875		
	Total	133.7	669	25 per hr		$16,725		

Estimated Hours Per Person	133.7		
Total Hours	669	**Total Project Cost Estimate**	**Total Accumulated as of 4/12**
Team Fee's	$16,725.00	$16,725.00	$9,984.75

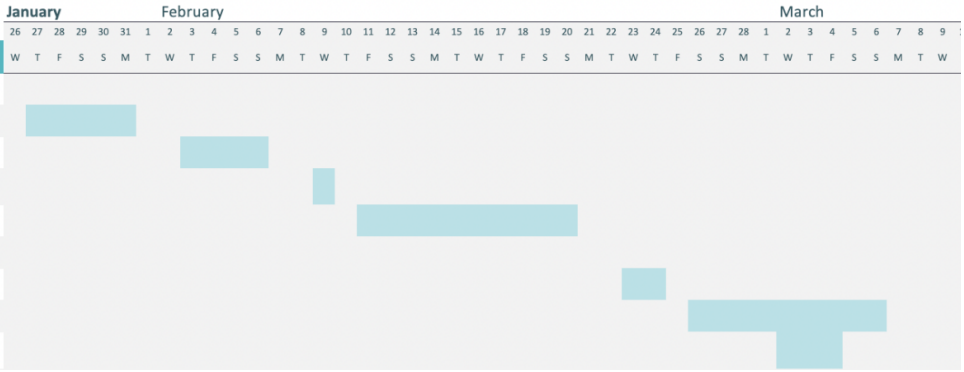
3.6 Gantt Chart

SAIRA

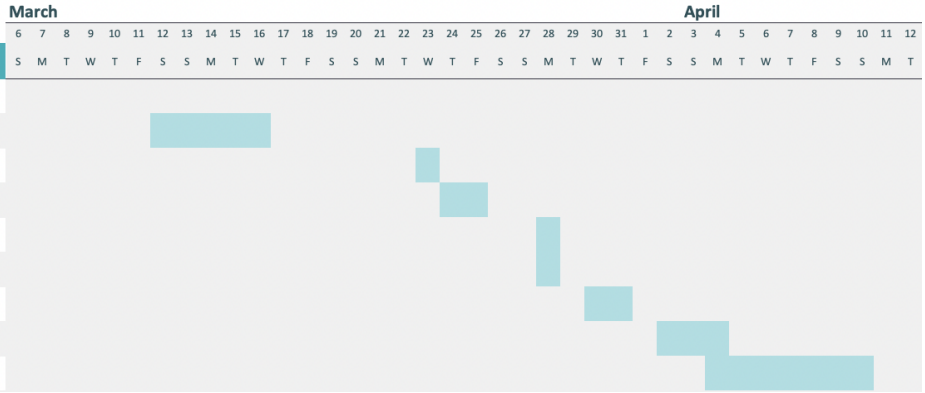
Project start date: 1/25/22

Scrolling increment: 1

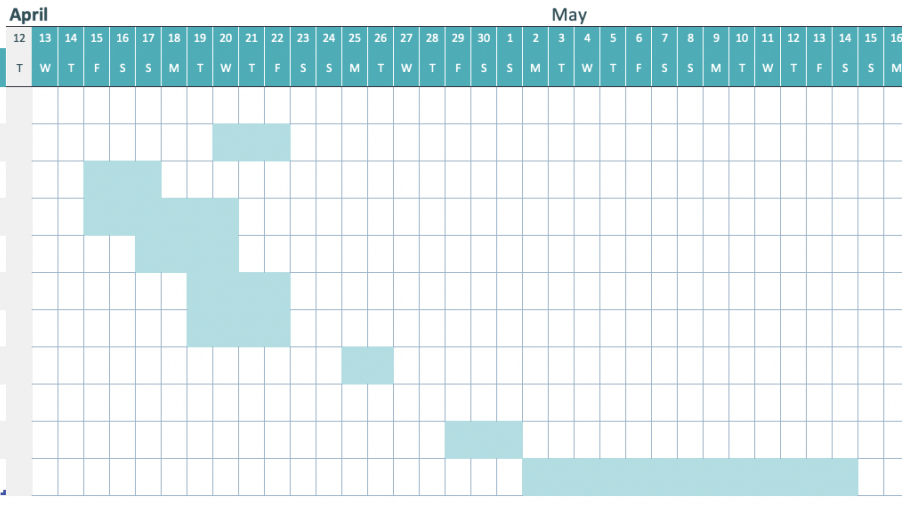
Task	Assigned | Status	Start	Days	End
Phase 1	100%			
Proposal	ALL | COMPLETE	1/26/22	7	2/1/22
Research	ALL | COMPLETE	2/2/22	6	2/7/22
JAD 1	ALL | COMPLETE	2/8/22	3	2/9/22
Report 1	ALL | COMPLETE	2/10/22	12	2/22/22
Phase 2	100%			
JAD 2	ALL | COMPLETE	2/22/22	4	2/25/22
Report 2	ALL | COMPLETE	2/25/22	11	3/8/22
Image Development	ALL | COMPLETE	3/1/22	5	3/5/22



Task	Assigned | Status	Start	Days	End
Phase 3	100%			
Retrieve Images	ALL | COMPLETE	3/11/22	7	3/24/22
Set-up Google Cloud	Ray | COMPLETE	3/22/22	3	3/22/22
Test OSmnx	ALL | COMPLETE	3/23/22	4	3/26/22
Give ML Team Images	ALL | COMPLETE	3/27/22	3	3/27/22
Develop Search Bar	Isaiah & Ray | COMPLETE	3/27/22	3	3/28/22
Implement Filters	Ray & Andre | COMPLETE	3/29/22	4	3/29/22
Prototype 1	ALL | COMPLETE	4/1/22	5	4/5/22
Report 3	ALL | COMPLETE	4/3/22	9	4/12/22



Task	Assigned | Status	Start	Days	End
Phase 4	0%			
Report 4	ALL | NOT COMPLETE	4/19/22	5	4/24/22
Process images using ML algorithm	Stephen | NOT COMPLETE	4/14/22	5	4/19/22
Connect Image to UI	Andre | NOT COMPLETE	4/14/22	8	4/22/22
Configure Osmnx input	Isaiah | NOT COMPLETE	4/16/22	6	4/22/22
Develop Database	Ray | NOT COMPLETE	4/18/22	6	4/24/22
Implement Data Visualization	Angelica | NOT COMPLETE	4/18/22	6	4/24/22
Prototype 2	ALL | NOT COMPLETE	4/24/22	4	4/28/22
Phase 5	0%			
Testing & Debugging	ALL | NOT COMPLETE	4/28/22	5	5/3/22
Prepare for Presentation	ALL | NOT COMPLETE	5/1/22	15	5/16/22



3.7 Timesheet

Timesheet for Week Ending: Week 3
Team SAIRA
2/15/2022

Member Names	**Role**
Andre Castillo	Application Development
Angelica Olmedo	Gantt Chart and Cost Tracking Chart
Isaiah Martin	Application Development
Stephen Palumbo	Documentation
Ray Cruz	Planning and Team Support

Andre Castillo

	Timesheet for Week Ending:		Week 6		
Team Name	Team SAIRA				
Member Name	Andre Castillo			Role	Application Development
Signed:					
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/8/2022	Study Previous Group Code	2	1	-1	yes
3/8/2022	Testing JSON for sending Images	2	1	-1	yes
3/8/2022	Meetings	2	2	0	yes
Totals for Week in hours		6	4	-2	

	Timesheet for Week Ending:		Week 7		
Team Name	Team SAIRA				
Member Name	Andre Castillo			Role	Application Development
Signed:					
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/15/2022	UI	8	6	-2	yes
3/15/2022	Meetings	2	2	0	yes
Totals for Week in hours		10	8	-2	

	Timesheet for Week Ending:		Week 8		
Team Name	Team SAIRA				
Member Name	Andre Castillo			Role	Application Development
Signed:					
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/22/2022	Give ML images to test	6	5	-1	yes
3/22/2022	Meetings	4	4	0	yes
Totals for Week in hours		10	9	-1	

	Timesheet for Week Ending:		Week 9		
Team Name	Team SAIRA				
Member Name	Andre Castillo			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/29/2022	Prototype1	10	8	-2	yes
3/29/2022	Meetings	6	6	0	yes
Totals for Week in hours		16	14	-2	

	Timesheet for Week Ending:		Week 10		
Team Name	Team SAIRA				
Member Name	Andre Castillo			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
4/5/2022	Edit Report	2	2	0	yes
4/5/2022	Image gathering	4	2	-2	yes
4/5/2022	Meetings	5	5	0	yes
Totals for Week in hours		11	9	-2	

Angelica Olmedo

	Timesheet for Week Ending: _____	Week 6			
Team Name	_____Team SAIRA_____				
Member Name	_____Angelica Olmedo_____			Role _____	Project Manager
Signed:	_____				
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/8/2022	Test Image Pulling	2	2	0	yes
3/8/2022	Meetings	2	2	0	yes
Totals for Week in hours		4	4	0	

	Timesheet for Week Ending: _____	Week 7			
Team Name	_____Team SAIRA_____				
Member Name	_____Angelica Olmedo_____			Role _____	Project Manager
Signed:	_____				
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/15/2022	Osmnx	5	4	-1	yes
3/15/2022	Meetings	2	2	0	yes
Totals for Week in hours		7	6	-1	

	Timesheet for Week Ending:	Week 8			
Team Name	Team SAIRA				
Member Name	Angelica Olmedo			Role	Project Manager
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/22/2022	Give ML images to test	6	5	-1	yes
3/22/2022	Meetings	4	4	0	yes
Totals for Week in hours		10	9	-1	

	Timesheet for Week Ending:	Week 9			
Team Name	Team SAIRA				
Member Name	Angelica Olmedo			Role	Project Manager
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/29/2022	Prototype1	10	8	-2	yes
3/29/2022	Report3	6	4	-2	yes
3/29/2022	Meetings	6	6	0	yes
Totals for Week in hours		22	18	-4	

	Timesheet for Week Ending: _____	Week 10			
Team Name	_____Team SAIRA_____				
Member Name	_____Angelica Olmedo_____			Role _____	Project Manager
Signed:	_____				
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
4/5/2022	Redo Gantt Chart	3	2	-1	yes
4/5/2022	Update Costs	2	2	0	yes
4/5/2022	Meetings	5	5	0	yes
Totals for Week in hours		10	9	-1	

Isaiah Martin

	Timesheet for Week Ending:	Week 6			
Team Name	Team SAIRA				
Member Name	Isaiah Martin			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/8/2022	Study Previous Group Code	2	1	-1	yes
3/8/2022	Meetings	2	2	0	yes
Totals for Week in hours		4	3	-1	

	Timesheet for Week Ending:	Week 7			
Team Name	Team SAIRA				
Member Name	Isaiah Martin			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/15/2022	UI	8	7	-1	yes
3/15/2022	Meetings	2	2	0	yes
Totals for Week in hours		10	9	-1	

	Timesheet for Week Ending:	Week 8			
Team Name	Team SAIRA				
Member Name	Isaiah Martin			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/22/2022	Meetings	4	4	0	yes
Totals for Week in hours		4	4	0	

	Timesheet for Week Ending:	Week 9			
Team Name	Team SAIRA				
Member Name	Isaiah Martin			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/29/2022	Prototype1	11	10	-1	yes
3/29/2022	Meetings	6	6	0	yes
Totals for Week in hours		17	16	-1	

	Timesheet for Week Ending:	Week 10			
Team Name	Team SAIRA				
Member Name	Isaiah Martin			Role	Application Development
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
4/5/2022	Report3	1	1	0	yes
4/5/2022	Meetings	5	5	0	yes
Totals for Week in hours		6	6	0	

Stephen Palumbo

	Timesheet for Week Ending:	Week 6			
Team Name	Team SAIRA				
Member Name	Stephen Palumbo			Role	Documentation
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/8/2022	Test Image Pulling	2	1	-1	yes
3/8/2022	Meetings	2	2	0	yes
Totals for Week in hours		4	3	-1	

	Timesheet for Week Ending:	Week 7			
Team Name	Team SAIRA				
Member Name	Stephen Palumbo			Role	Documentation
Signed:					
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/15/2022	Osmnx	3	4	1	yes
3/15/2022	Meetings	2	2	0	yes
Totals for Week in hours		5	6	1	

Timesheet for Week Ending: _____ Week 8

Team Name _____Team SAIRA_____

Member Name _____Stephen Palumbo_____ Role _____ Documentation

Signed: _____

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/22/2022	Give ML team images to test	6	5	-1	yes
3/22/2022	Meetings	4	4	0	yes
Totals for Week in hours		10	9	-1	

Timesheet for Week Ending: _____ Week 9

Team Name _____Team SAIRA_____

Member Name _____Stephen Palumbo_____ Role _____ Documentation

Signed: _____

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/29/2022	Prototype1	7	6	-1	yes
3/29/2022	Report3	6	4	-2	yes
3/29/2022	Meetings	6	6	0	yes
Totals for Week in hours		19	16	-3	

	Timesheet for Week Ending:	Week 10			
Team Name	Team SAIRA				
Member Name	Stephen Palumbo			Role	Documentation
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
4/5/2022	Image Gathering	3	2	-1	yes
4/5/2022	Meetings	5	5	0	yes
Totals for Week in hours		8	7	-1	

Ray Cruz

	Timesheet for Week Ending:	Week 6			
Team Name	Team SAIRA				
Member Name	Ray Cruz			Role	Team Leader
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/8/2022	Test JSON for sending images	2	1	-1	yes
3/8/2022	Study Previous group code	2	1	-1	yes
3/8/2022	Meetings	2	2	0	yes
Totals for Week in hours		6	4	-2	

	Timesheet for Week Ending:	Week 7			
Team Name	Team SAIRA				
Member Name	Ray Cruz			Role	Team Leader
Signed:					
Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/15/2022	UI	8	7	-1	yes
3/15/2022	Meetings	2	2	0	yes
Totals for Week in hours		10	9	-1	

	Timesheet for Week Ending:	Week 8			
Team Name	Team SAIRA				
Member Name	Ray Cruz			Role	Team Leader
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/22/2022	Give ML team Images to Test	6	5	-1	yes
3/22/2022	Meetings	4	4	0	yes
Totals for Week in hours		10	9	-1	

	Timesheet for Week Ending:	Week 9			
Team Name	Team SAIRA				
Member Name	Ray Cruz			Role	Team Leader
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
3/29/2022	Prototype`1	10	8	-2	yes
3/29/2022	Report3	3	4	1	yes
3/29/2022	Meetings	6	6	0	yes
Totals for Week in hours		19	18	-1	

	Timesheet for Week Ending:	Week 10			
Team Name	Team SAIRA				
Member Name	Ray Cruz			Role	Team Leader
Signed:					

Date	Task	Planned Hours	Actual Hours	Difference	Task Completed?
4/5/2022	Updated Report	2	1	-1	yes
4/5/2022	Image Gathering	1	1	0	yes
4/5/2022	Meetings	5	5	0	yes
Totals for Week in hours		8	7	-1	