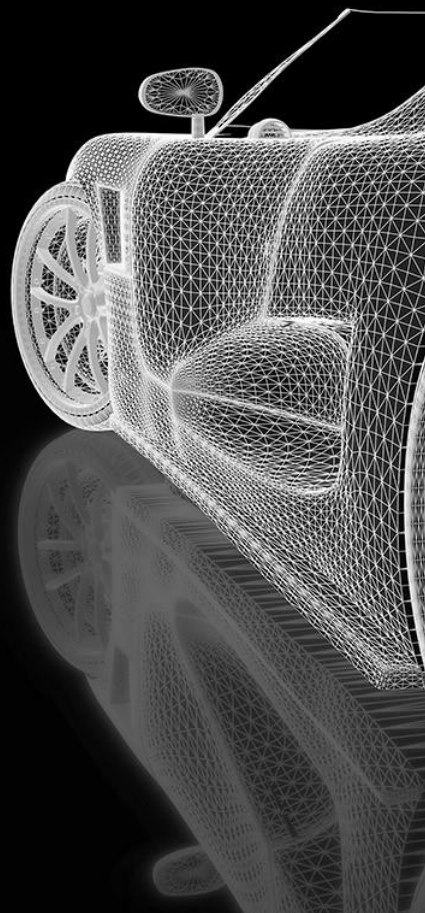

Easy Parking

Summary

Parking is a major problem in both developed and developing countries. The main cause of the problem is a severe discrepancy between the locations of parking and number of vehicles
With the advancement of technology, there are attempts to find smart solutions for this crisis .one of them is smart parking applications
The cameras in shops are used and a connection is made with the application, so that the user logs into the application and specifies the name of the street in which the stop is required and is connected to the cameras on the street so that the cameras show the driver's free spaces



Project Charter

Official project name: Easy Parking
Project sponsor: Traffic department
Project manager: Mostafa Mohamed Ahmed
Project members: Mostafa Mohamed - Mahmoud Ayman - Mahmoud Ali - Yasmeen Khaled - Mariam Alaa

Project Purpose :

Helping people to parking their cars easily via using an application that can find an empty parking for them.

Assumption:

1- will get all resources required.
2- make a regular meeting with the team.
3- collect data from stakeholders and review the team progress with them

Project Scope

1- Objectives:

- Reduce traffic jams .
- Keep income for necessities of life .
- Reduce accidents and crashes which happen when people park .
- See the parking space size .

2- Deliverables:

- Permission from shop owners to use their cameras.
- Software.
- Data base.
- Integration.

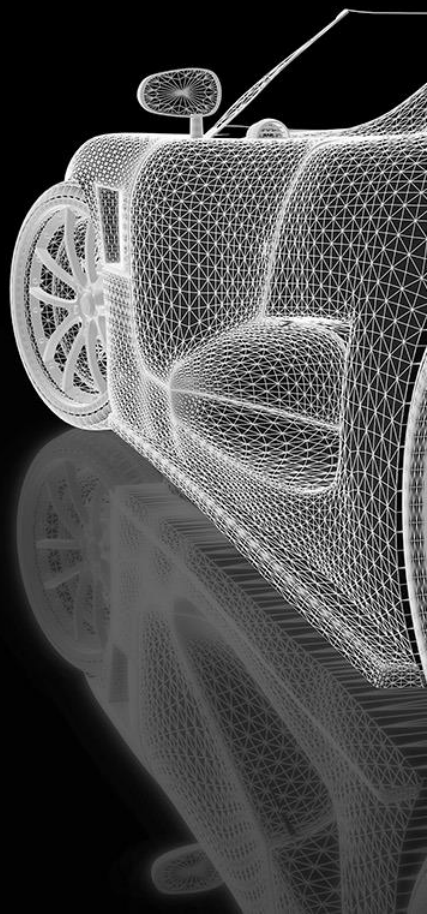
3- Milestones:

- **Requirements review : Requirements specifications are complete, correct, approved and suitable. By 1/11/2021**
- **Critical design review: Detailed designs fully implement the system architecture, are approved and are suitable for input into the development of code. By 15/11/2021.**
- **System test review : The software product has passed system testing and is suitable for input into acceptance testing. By 3/2/2022**
- **Product operational: The software is in use in its target operational environment. By 17/2/2022.**

Project resources

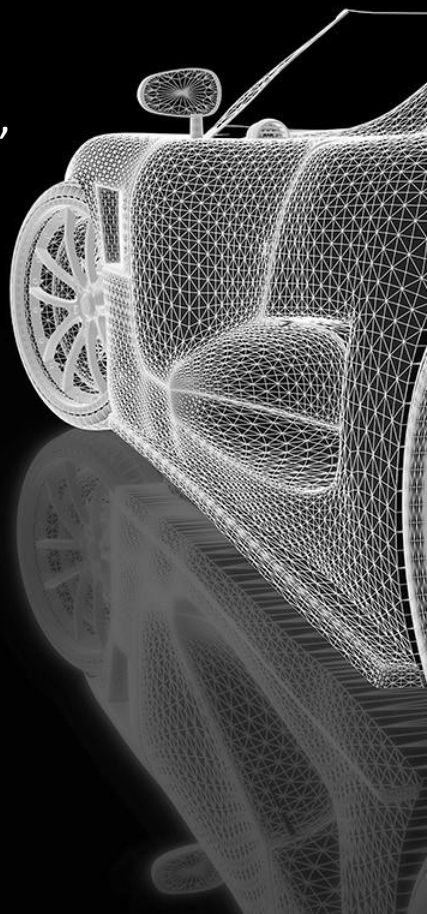
- Hardware :
- 10 PC .
- 3 Servers.

- Staff :
- Team android developers .
- Team network Engineer .
- Team UI design.



Budget

budget allocated for this project is **600000 L.E** (including servers, devices, developers and training).



Communication management

1- Conducting a weekly meeting between each department and the leader to discuss and solve problems and discuss suggestions to improve the quality of the application.
2- Meeting between the heads of the departments and the head of the company to discuss the latest developments

Limits & Exclusions

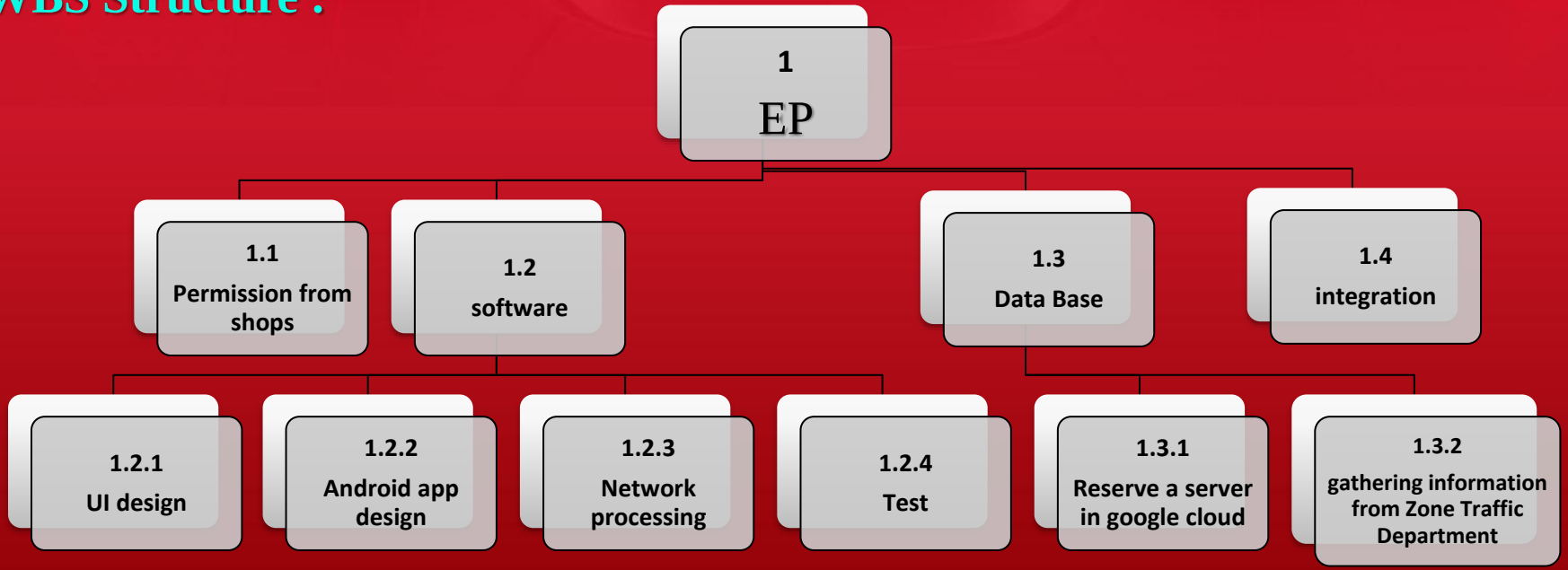
Limits :

- The project must be ready at the end of **February** .
- The application must connect to the cameras to know the nearest and best place for the user .
- The application will be for **Android** .

Exclusions :

- The project don't use **sensors** .
- The project don’t have responsibility for **security of the shops** .
- There is no wages for the **owners of the shops .**
- The application will not be for web .

WBS Structure :

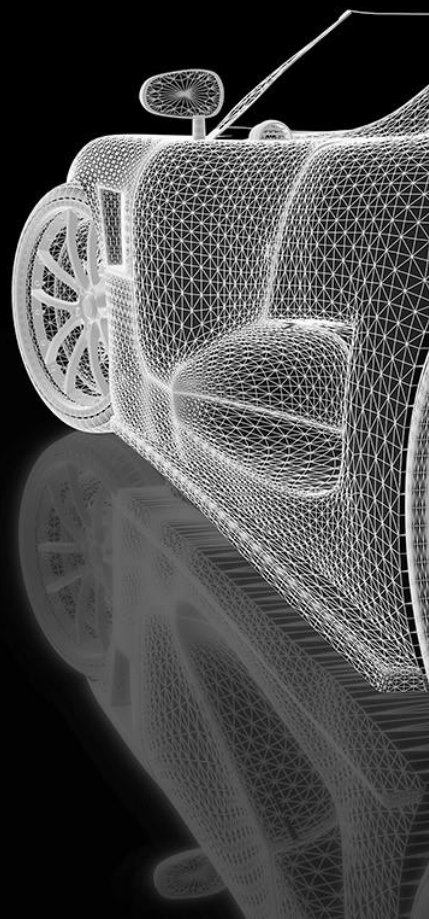


WBS Dictionary

Work Package	ID	Responsible	Start Date	End Date
Permission from shop	1.1	Mahmoud Ali	24/11/2021	29/12/2021
UI design	1.2.1	Mariam	29/12/2021	12/1/2022
Android App design	1.2.2	Mostafa	29/12/2021	19/1/2022
Network processing	1.2.3	Yasmeen	29/12/2021	5/1/2022
Test	1.2.4	Mahmoud Ayman	19/1/2022	3/2/2022
Reserve a server in Google cloud	1.3.1	Yasmeen	29/12/2021	5/1/2022
gathering information from Zone Traffic Department	1.3.2	Mahmoud Ali	29/12/2021	5/1/2022
Integration	1.4	Mahmoud Ayman	3/2/2022	17/2/2022

Responsibility matrix :

List of task / Member	Mahmoud Ali	Mostafa	Mariam	Mahmoud	Yasmeen
Permission from shop	R				A
UI design			R		
Android app design		R			
Network processing					R
Test		A	A	R	
Reserve a server in Google cloud					R
Gathering information from zone traffic department	R				
Full test		A		R	



Project network

Id	description	Preceding activity	duration
A	Permission from shop owners	none	5
B	UI design	A	2
C	Android app design	A	3
D	Network processing	A	2
E	Reserve a server in google cloud	A	1
F	gathering information	A	1
G	Test	B,C,D	2
H	Integration	E,F	2

Network

0	A	5
0	Permission from shop	
0	5	5

5	B	7
1	UI design	
6	2	8

5	C	8
0	Android app design	
5	3	8

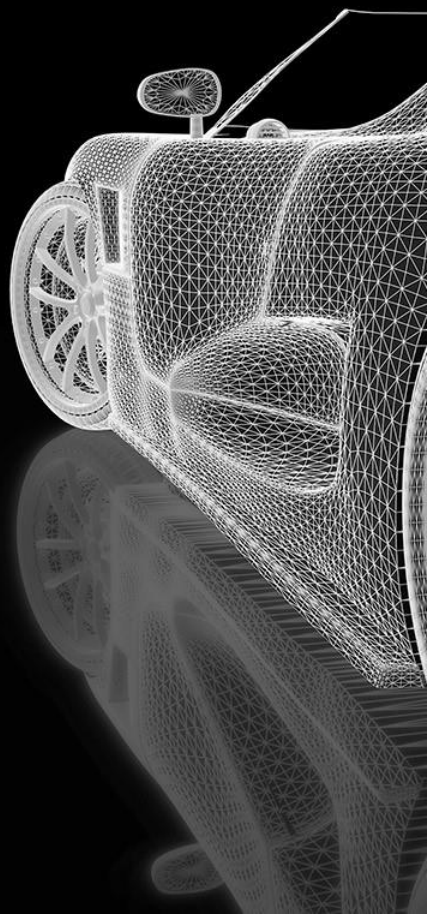
5	D	7
1	Network processing	
6	2	8

5	E	6
4	Reserve a server in google	
9	1	10

5	F	6
4	Gathering Information	
9	1	10

8	G	10
0	Test	
8	2	10

10	H	12
0	Integration	
10	2	12



Resource constrained

	RES	DUR	ES	LF	SL	0	1	2	3	4	5	6	7	8	9	10	11
A	2	5	0	5	0	2	2	2	2	2							
B	1	2	5	8	1						1	1					
C	1	3	5	8	0						1	1	1				
D	1	2	5	8	1						1	1					
E	1	1	5	10	4						1						
F	1	1	5	10	4						1						
G	3	2	8	10	0									3	3		
H	2	2	10	12	0											2	2
Total Resource Load						2	2	2	2	2	5	3	1	3	3	2	2
Resource Available						5	5	5	5	5	5	5	5	5	5	5	5

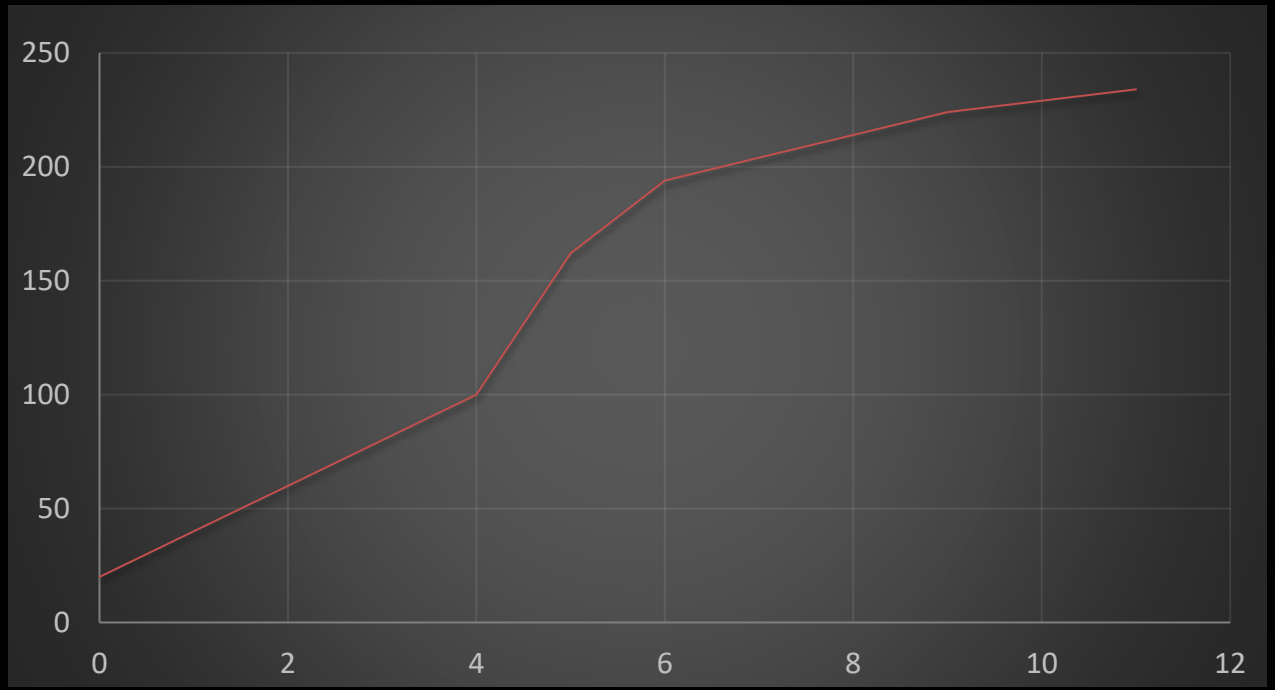
Gantt Chart

ID	0	1	2	3	4	5	6	7	8	9	10	11
A	√	√	√	√	√							
B						√	√					
C						√	√	√				
D						√	√					
E						√						
F						√						
G									√	√		
H											√	√

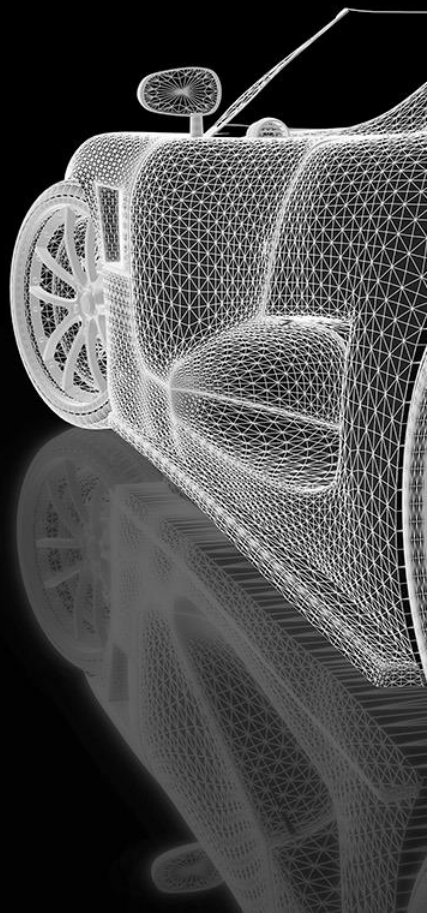
Budget Baseline

ID	DUR	Task	Budget	0	1	2	3	4	5	6	7	8	9	10	11
A	5	Permission from shop	100	20	20	20	20	20							
B	2	UI design	14						7	7					
C	3	Android App design	30						10	10	10				
D	2	Network processing	30						15	15					
E	1	Reserve a server in Google cloud	5						5						
F	1	gathering information from Zone Traffic Department	25						25						
G	2	Test	20									10	10		
H	2	Integration	10											5	5
Total			52	20	20	20	20	20	62	32	10	10	10	5	5
Commutative				20	40	60	80	100	162	194	204	214	224	229	234

Commutative
Budget
Baseline



Weeks



Risk Management

Risk description	Probability risk	Impact of risk	Risk category	Solution
The location that the user will impact may be not clear	Medium	High	Performance	Input a detailed location
Poor resource plans result to delaying deadlines of the final product	Medium	High	Resource	Resources should be allocated before a project begins
The project cost risk is the risk that a project will spend more money than was originally budget	High	High	Budget	Ensuring strong plans are done for budget time and for tasks
Drop in a server	Medium	High	Performance	Develop a server contingency plan

Under supervision of

Ibrahim El-Semman

Team members

“ Mostafa Mohamed Ahmed - Mahmoud Ayman Hashim –

Mahmoud Ali Abd Elftah - Yasmeen Khaled Farhan - Mariam Alaa El-Din “

..Thank you..