parking

project

PROJECT DEFINITION:

Name	**parking**
Description	help any driver to find the nearest parking space
Sponsor	Electronic Company
Manger	Head of the company

INTRODUCTION:

- Parking problems have always been an issue since the very first automobiles were invented. But it got even worse with the progressing urbanization and population expansion. Today in the US, for example, there are 8 parking spots for every car, parking lots on the average cover about 30% of cities, and collectively take up as much space as the state of West Virginia. Let’s see how this problem was solved in the past, what can be done today and what solutions the future holds.

EXECUTIVE SUMMARY :

- in our life we suffer from traffic jam because there is a lot of cars parking in a random way ,so we decide to solve this problem by our application by finding a good space to park based on user’s location, because parking cars randomly causes traffic jam.

MAIN OBJECT :

- we will create a program that tells the drivers about empty parking spaces by using data collected by the satellite and send the location to the user

OBJECTIVE :

1-the program will help any driver to find the nearest parking space

2-the project will reduce the traffic jam

3-increase the beauty of the streets by organizing parking spaces

4- it will decrease the problem between people about the parking place

5-Reduce traffic congestion.

6-Reduce the time to find a parking.

7-Simple user interface.

8-Easy to uses,faster and comfortable.

9-Saving money ,time and preserving the environment from car exhaust.

PROJECT SCOPE:

1-project scope discrebtion;

*It is an application through which you can take the location that is nearest to the user in 10 meters around the user

*The application will also show you all the empty locations

You can pay the cost online and specify the parking time.

2-Project execlusion

*the application will detect empty spaces, not full spaces.

3-Project constraints;

*Rules of company and policies.

*Budget:less than 700k$

*time:less than one year

*Recourses: no more than 3

4-Project assumptions;

*This application can run only on the IOS and Android operation system.

*You must register with a credit card in the application to pay online .

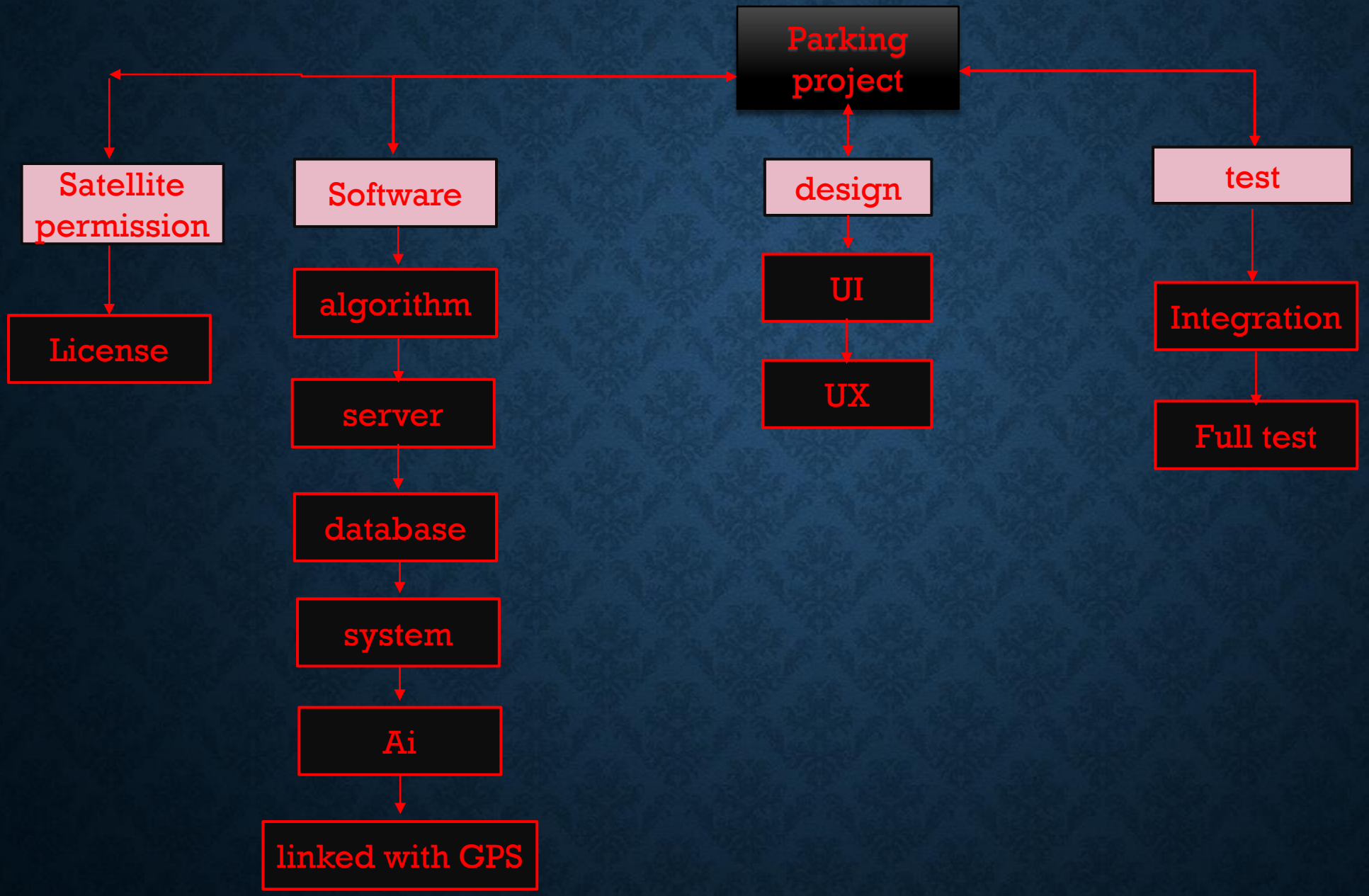
*It is necessary to register that you left the place before leaving.

HOW THE APPLICATION WORK :

- First the user asked for a free space on the application after that the application starts to work by sending to the satellite to detect the area around the user in25 meters and do this many times and sending these information to the application and by using Ai the free locations that are available to park appear on the application interface to the user and the user choose the best place for him and booked this location for him and don’t show this place for another users even this user didn’t arrive this place .
- if the user book the place the application calculate the distance between him and the park location and if he didn’t arrive the application shows that place is available for parking

WBS DICTIONARY

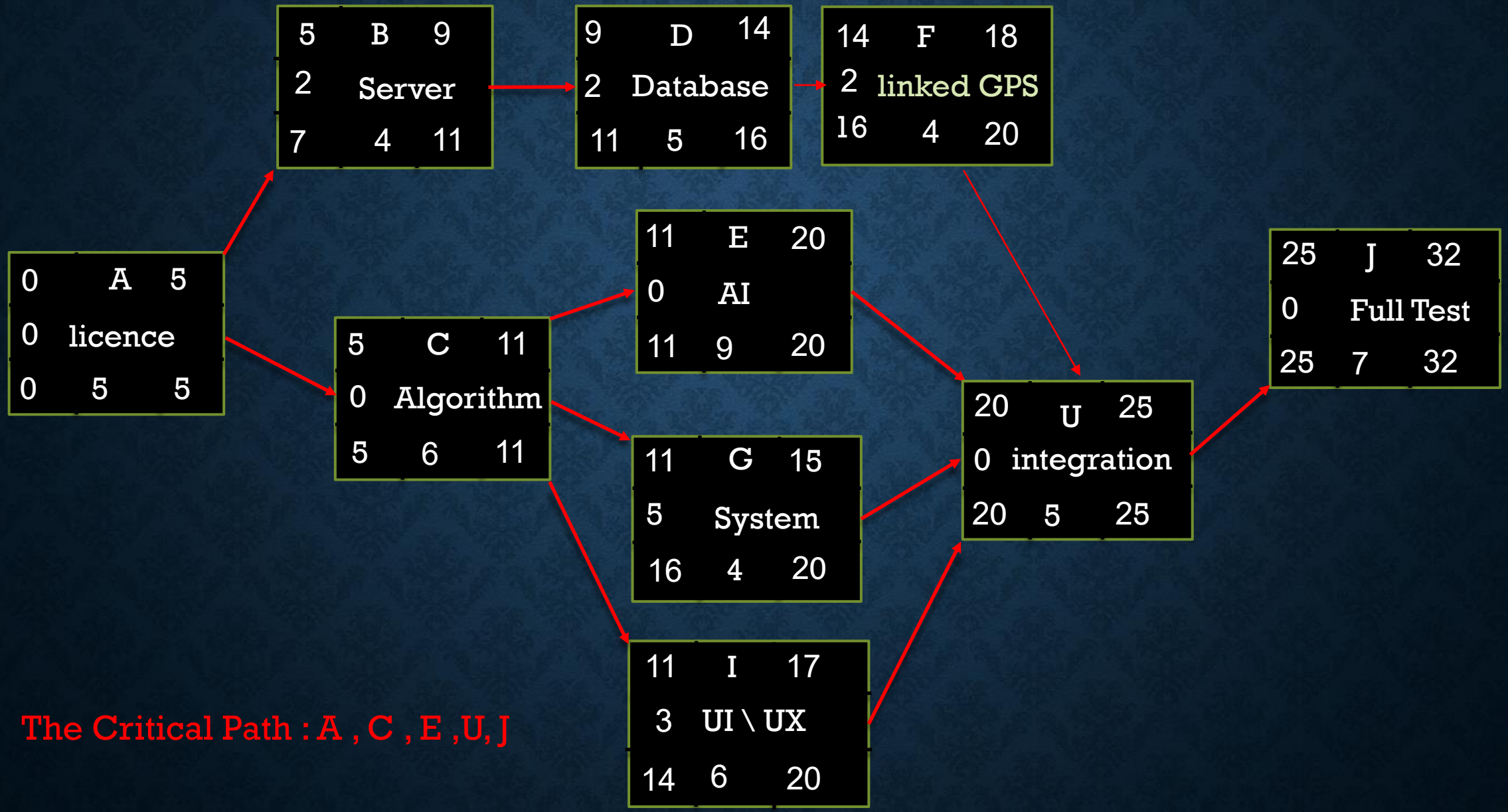
ID	DESCRIPTION	Resources	cost	Milestone
1	Satellite permission	3R	110 K$	5WEEKS
1.1	License	3R	110 K$	5 WEEKS
2	Software	9R	325 K$	15 WEEKS
2.1	algorithm	1R	60 K$	4WEEKS
2.2	server	2R	50 K$	4WEEKS
2.3	database	2R	75 K$	5WEEKS
2.4	system	1R	45 K$	4WEEKS
2.5	Ai	1R	70 K$	9WEEKS
2.6	linked with GPS	2R	25 K$	4WEEKS
3	design	2R	65 K$	6WEEKS
1.3	UI/UX	2R	65 K$	6WEEKS
4	Test	6R	90 K$	12WEEKS
1.4	Integration	3R	40 K$	5WEEKS
2.4	Full test	3R	50 K$	7WEEKS


Parking project
Satellite permission
License
Software
algorithm
server
database
system
Ai
linked with GPS
design
UI
UX
test
Integration
Full test

Responsibilities Matrix:

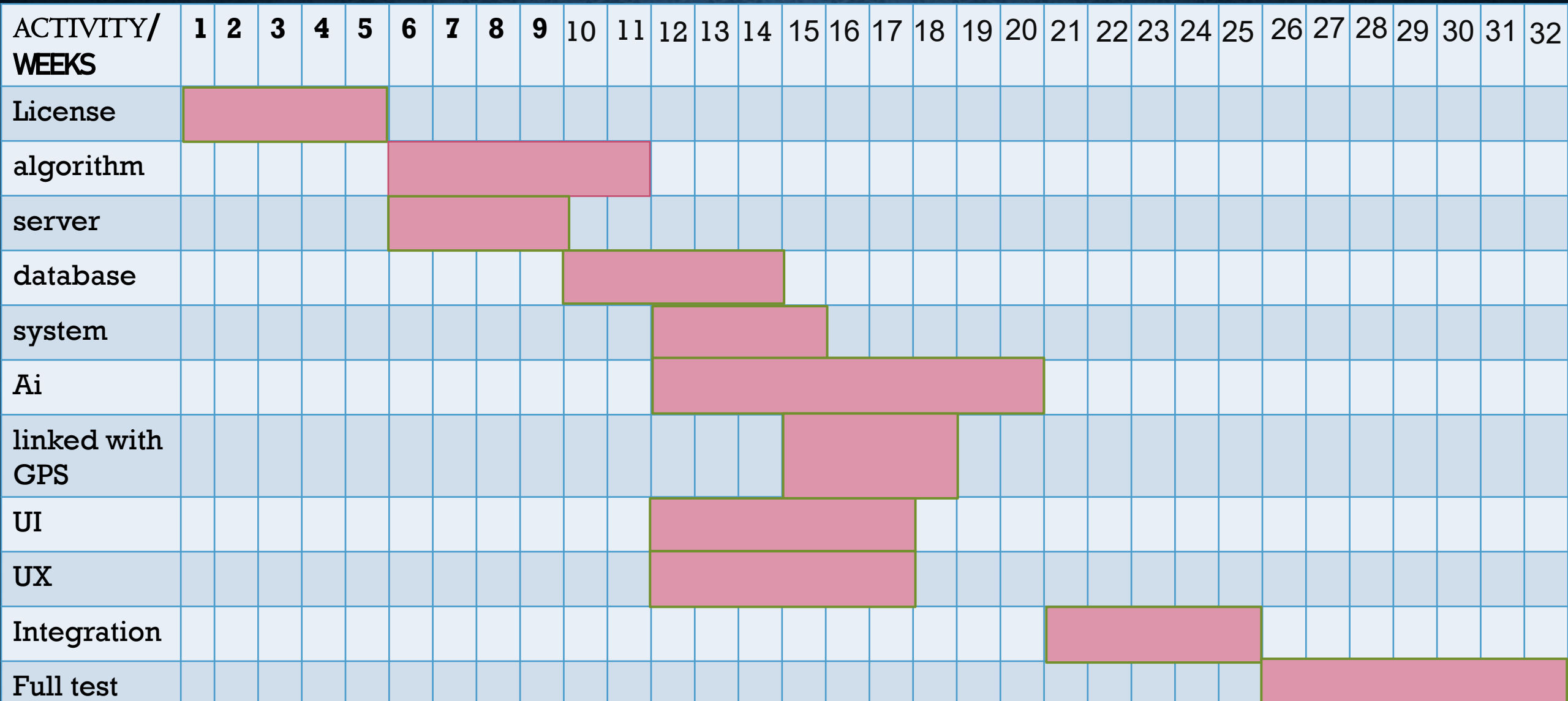
R: *RESPONSIBLE*
C: *COUNSUITANT*
A: ACOUNTABLE

Activity\ member	**Mahmoud Mohamed**	**Mostafa Ragab**	**Mahmoud Shehata**	**Mohamed Abd elatif**	**Mostafa Gamal**	**Mahmoud Abdelbaki**
License	R				A	C
algorithm			R			
server		R		C		
database				R	C	
system						R
Ai					R	
linked with GPS			R	C		
UI/UX	C			R		
Integration	A	C			R	
Full test	R		C	A		



The Critical Path : A , C , E ,U, J

GANTT CHART:


ACTIVITY/ WEEKS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
License
algorithm
server
database
system
Ai
linked with GPS
UI
UX
Integration
Full test

ID	RES	DUR	ES	LF	SL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
A	3	5	0	5	0	3	3	3	3	3																													
B	2	4	5	11	2						2	2	2	2																									
C	1	6	5	17	0						1	1	1	1	1	1																							
D	2	5	9	16	2										2	2	2	2	2																				
E	1	9	11	20	0												1	1	1	1	1	1	1	1	1														
F	2	4	14	20	2															2	2	2	2																
G	1	4	11	20	5												1	1	1	1																			
I	2	6	11	20	3												2	2	2	2	2	2																	
U	3	5	20	25	0																					3	3	3	3	3									
J	3	7	25	32	0																										3	3	3	3	3	3	3		
	Resource Scheduled																																						
	Resource available					3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Shifting:

ID	RES	DUR	ES	LF	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A	3	5	0	5	3	3	3	3	3																															
B	2	4	5	11						2	2	2	2																											
C	1	6	5	17						1	1	1	1	1	1																									
D	2	5	9	16										2	2	2	2	2																						
E	1	9	11	20												1	1	1	1	1	1	1	1	1																
F	2	4	14	20																					2	2	2	2												
G	1	4	11	20																					1	1	1	1												
I	2	6	11	20															2	2	2	2	2	2															
U	3	5	20	25																									3	3	3	3	3							
J	3	7	25	32																														3	3	3	3	3	3	3
	Resource Scheduled																																							
	Resource available				3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

MILESTONE

- Satellite permission cost 110k$ and take 5 weeks
- Software cost 325k$ and take 15 weeks
- Design cost 65k$ and take 6 weeks
- Test cost 90k$ and take 12 weeks

The total cost is 590k$

TIME PHASE BUDGET:

ID	DUR	Task	Budget	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	5	License	110	22	22	22	22	22															
2	6	algorithm	60						10	10	10	10	10	10									
3	4	server	50						10	10	10	20											
4	5	database	75											15	15	15	15	15					
5	4	system																					
6	9	Ai	70												10	10			10	10	10	10	10
7	4	linked with GPS																					
8	6	UI/UX	65															20	10		10	10	15
9	5	Integration																					
10	7	Full test																					
		Week total	430	22	22	22	22	22	20	20	20	30	10	25	25	25	15	35	20	10	20	10	35
		Cumulative			44	66	88	110	130	150	170	200	210	235	260	285	300	335	355	365	385	395	430

TIME PHASE BUDGET:

ID	DUR	Task	Budget	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	5	License																					
2	4	algorithm																					
3	4	server																					
4	5	database																					
5	4	system	45	10	10	10	15																
6	9	Ai																					
7	4	linked with GPS	25	10	5	5	5																
8	6	UI/UX																					
10	5	Integration	40					10	10	10		10											
11	7	Full test	50										10	10		10		10	10				
		Week total	590	20	15	15	20	10	10	10		10	10	10		10		10	10				
		Cumulative		450	465	480	500	510	520	530		540	550	560		570		580	590				

RISKS

1-the system breakdown
2- the ai that we use might make mistake
3-users couldn’t deal with it
4-technical problem in the company
5-Hacking

RISKS SOLUTIONS:

*Contracting with a software company to secure our system against damage And *constantly update the equipment.

*Employ IT professionals with an awareness and understanding of emerging threats

*Use high-quality data sets when training AI systems

*Automate key security processes for faster detection and response

*Go beyond compliance to create tailored security solutions

*Perform routine security audits and penetration testing

*Upgrade software and hardware as needed Amend security policies to address new threats

*making videos and catalogue that teach users how to deal with it and made simple tutorial

*Promote cybersecurity awareness through ongoing employee education Prioritize data protection

RESULTS :

1. It guarantees snappy and computerized parking and simple recovery of vehicles.
2. Up to 3 cars can be effectively and securely parked in the outlined model.
3. The surface space required is identical to the parking spot of two cars as it were.
4. Most reasonable for parking in workplaces, shopping centers and comparable spots.

TIME OF THE MEETING

- Every Friday: online meeting

- Every Monday: face to face meeting

Teem members
1. Mahmoud Mohamed abdelhalim Ali
Mostafa Ragab saber
Mahmoud Shehata Gaber
Mahmoud Mohamed Mahmoud Abdelbaky
Mohamed Abdellateef Ahmed khalifa
Mostafa Gamal Salih

Thanks ^^