

Civil Engineering Informatics Intake:42



C-ALPHA

Team Members





Ahmed Owis



Aya Tharwat



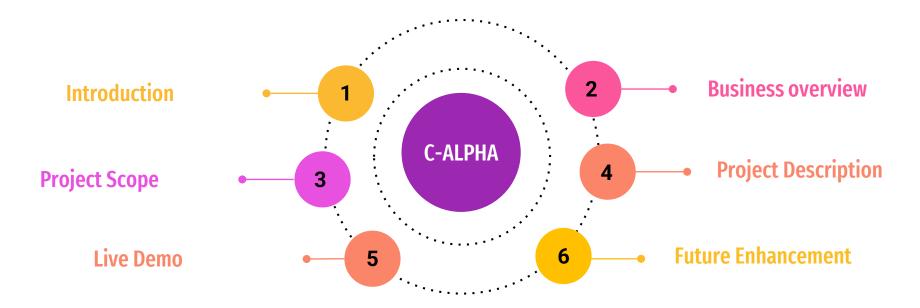
Fatma Alaa



Wesam Khaled



Table Of Content



1.Introduction:



1.1.Construction project management software

In the construction business, when you don't execute your plan well, things will slip through the cracks, literally! Watch your projects become a towering success using C-ALPHA Projects









Web of dependencies:

 You often find yourself trapped in trying to track and manage neverending dependencies



Time is money:

- You can't afford to postpone operations without huge expense overruns.
- Unmet deadlines often mean unplanned expenditures.







What? Who? When?

- What's happening at the construction site right now?
- Who is supposed to ship the material?
- When is the meeting scheduled?



But he said so

- Multiple people work on a single project.
- Miscommunication can lead to serious flops when the right information isn't communicated to the right people at the right time.



2. Business overview

Saving Time

It has more Productivity rate to make time schedule.

Free Open Source

Available Online.



Easy to use

It can reach the right work flow easily.

Compatible

It is compatible with other softwares like Primavera P6.

3. C-ALPHA Scope:



3.1. Task Management



3.2. Time Schedule





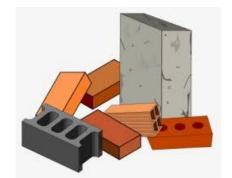
3. C-ALPHA Scope cont...

3.3. Planned Budget Tracking Method



3.4. Resource Analysis & Allocation





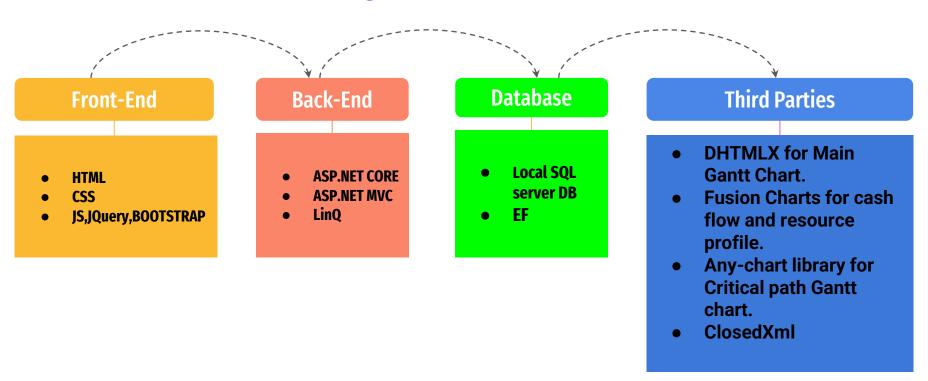




4. Project Description:



4.1. Used Technologies







Scheduling

- Activities as a gantt chart.
- Relations between activities.
- Lags.
- Critical path.
- Crashing (PERT).

Export

- To Excel (XIs).
- To Primavera(xml).
- To PDF.



Resources

- Resource allocation.
- Resources profile.

Cash Flow

Cash Flow (Monthly- Daily).

Calender

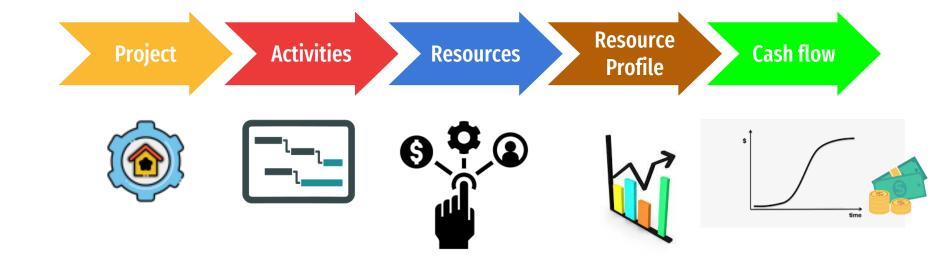
Assign Events & Meetings.

Upload-Files

Attachment files as PDF,JPG & Excel.



4.3. C-ALPHA Sequence







Project Information



Activities





Relation Between Activities



Resources



Project Issues

Isusse title	Issuer Description	Issue Date		
There is no discussion	There is no discussion till now	25/06/2022		
delay of invoices	delay of invoices	27/06/2022		
Delay invoices 2	Delay Invoices 2	03/07/2022		
delay	delay of puring thr first floor columns	14/07/2022		
delay 2	delay of puring thr first floor columns2l	21/07/2022		
delay 3	delay of puring thr first floor columns5	12/07/2022		

Event





4.5. C-ALPHA Outputs

Reports

Project Duration



Activities Start & End Dates

Took Name	Start Date	Duration	End bote	Total Float	Lete Short	Soto Finish	Criticality
Architectural Planning	2(/04/0022	- 4	27/04/2022		21/24/2022	27/04/2022	High
900 Planning & Design	27/06/3022	6	03/07/3022		27/06/3822	03/07/2022	High
Internal Painting	02/09/1022	4	00/09/2022	0	02/09/2022	06/09/2022	High
Doors & Windows	21/06/2022		22/06/2022	31	22/07/2022	23/07/2022	Low
Painting	21/06/2022	- 0	20/00/2022	54	14/29/2022	26/09/2002	Low
Building Loyout	03/07/3022	2	05/07/2022	0	03/07/2022	05/07/2022	High
She Office	05/07/2022	2	08/07/2022	0	05/07/2022	08/07/2022	High
Excevation	21/06/2022	6	20/06/2022		29/05/2022	06/07/2022	Low

73.8%

Resources Profile and Consumption rate





Critical Activities



Exported files to other software





5. Live Demo





6. Future Work

01 Resource Levelling

Update Schedule

03 Risk Analysis

Mobile Application Version



Fit the Time Schedule with a specific limit in a specific Resource.

Collect the Actual Rates of work from executed Activities and update the time schedule.

Time and Cost Risk Analysis with uncertainty calculations.

Mobile application can receive time schedule and make daily notification of daily work plan and required resources .

6. Future Work Cont...

05

Import files from Excel



Fit the Time Schedule with a specific limit in a specific Resource.

06

Assign tasks to users



Two case scenarios:

- 1- The role of the project manager to create the while project plan and edit through the tasks and assign roles to the engineers working on the project
- 2- Then each user would only have access to view the parts they are assigned to.

