# Management and Controlling Electricity Outside home (home Automation)

# **Executive summary:**

In this project we will solve the problem of wasting the electricity by making application that can control electricity from anywhere you are.

We can turn on/off our smart devices like (air conditioner, TV, refrigerator and electric ovens) in our homes from work.

The App enable us to see which device is turn on/off.

We can know which device save or waste electricity.

By applying this App we can see if there are electricity saved.

#### • Deliverables:

- > Technical expert collects information about operating system of smart devices.
- Design the Application program.
- Programmers write code and debug it and fixed errors.
- Connect App with smart devices using internet and test the performance of App.

#### • Resource:

- > A technical smart devices expert.
- > 20 laptops with core i7.
- > Team of software developer.
- > Team of designers.
- > Team of programmers.
- Scope statement of project:

This Application enable us to turn on or turn off smart devices. show all smart devices at home its turn on/off. But the Application cannot tell you if the device will be damage soon. We use the App on windows, IOS and Android but not Linux.

## Milestones:

- One month for technical experts to collect information.
- Five weeks to design the program.
- Eight weeks for the programmers write code and fixed errors.
- One week to connect App with smart devices.
- One month to test the performance of the App.

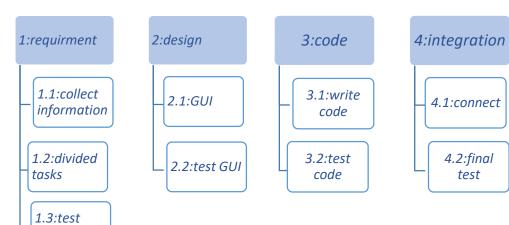
## **Assumption:**

- The App will not need high internet connection.
- This App will be enabled to control smart devices that will be invented in the future.
- It is supposed to provide 15% of electricity.
- It can make update for the App.
- Success in show consumption and numbers of working hours for the device.

## **Constraints:**

- Total time: the App will be end before 1 year.
- Total Budget: we needed to make the App 100.000\$
- Limiting be 5 persons in the day.



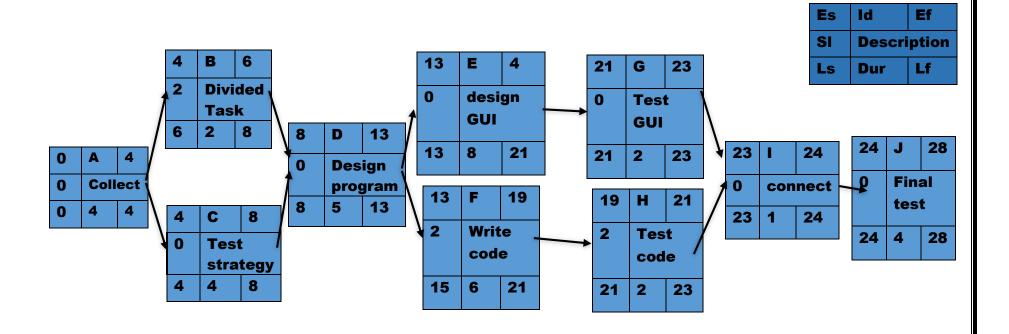


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## \* Responsibility matrix

ACTIVITIES	NOURHAN	HEND	ALIAA	NERMEEN	MANAL
COLLECT INFORMATION		R	5		
DIVIDE TASKES	R	S	R	S	
TEST STRATIGE		S	R		
CREATE APPLICATION		R		S	R
TEST APP	S		S	R	S
DESIGN GUI	R		5	S	
TEST GUI	S		R		R
WRITE CODE	R		R		5
TEST CODE		R	5	R	S
CONNECT APP WITH SMART DEVICES	5		R	R	S

#### \* Project network.

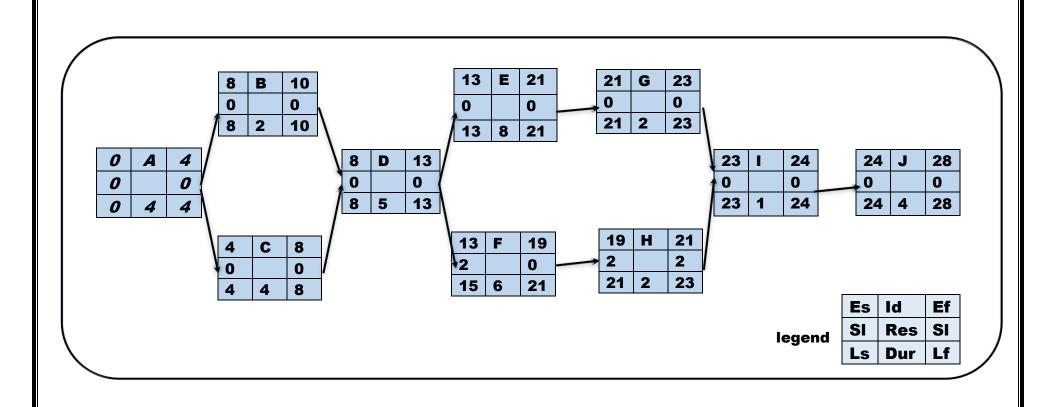


#### **Gantt chart:**

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Collect																												
information																												
Divide task																												
Develop																												
strategy																												
Design																												
program																												
GUI																												
Write code																												
Test GUI																												
Test code																												
Connect																												
devices																												
Final test																												

#### \* resource constrained project

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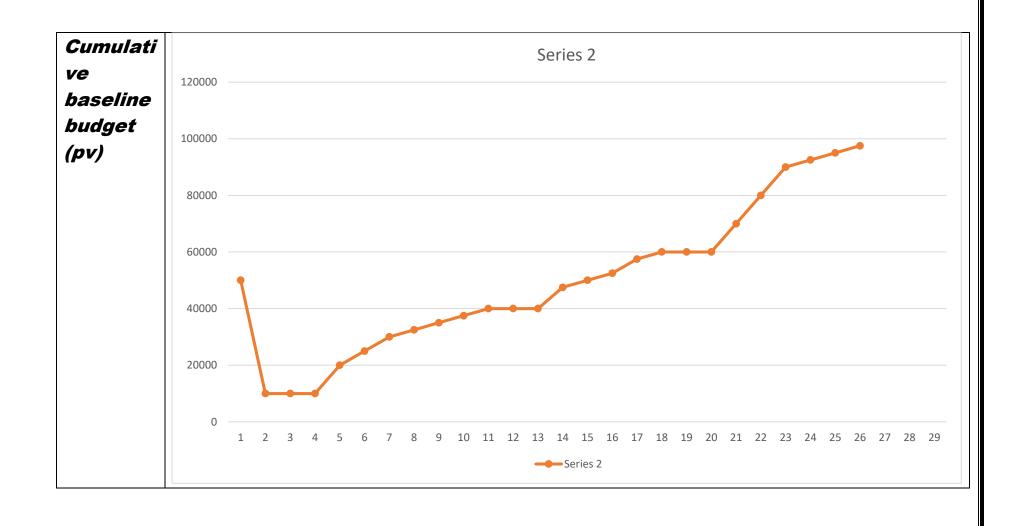
#### Final resource constrained.

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## Risk:

Cost Risk:

The project cost is higher than the budget funds

Risk management: changing the project plan to eliminate the high cost

> Technical Risk:

Packing wrong system for project.

Risk management: Reload the system for project again to reduce risk.

Computer network problem.

Risk management: we have backup computers when there is a problem with a computer while working.

Poor installation techniques.

Risk management: Rework on installation techniques.

> Security Risk:

Wrong implementation of security standers.

Risk management: Accuracy during the implementation of safety standers.

"team member"

1-منال على سيد سيد 2- هند عبد المنعم سيد عبد الغنى 3- علياء احمد ابوزيد 4-منال على سيد سيد عبد الحميد على محمد 5-نورهان احمد ابراهيم احمد 2"مجموعه 2"