Project name: Saving electricity

Project sponsor: Ministry of electricity and energy .

Project manager: mohamed mahmoud

Purpose of the project: helping citizens to conservess electricity.

Business case: Designing an application helps people conserve electricity and saving their money.

If you keep devices plugged in and running when they're not in use that causes an increase in electrical use and, consequently, a bump in the amount of greenhouse gases that enter the atmosphere.

laptop plugged in all the time will use nearly 300 kilowatt hours (kWh) of electricity each year and a desktop computer left to idle will use more than 600 kW of electricity annually.

The app will be attached with the all devices at your home and about it you can turn on/off any devices you want from any place even if you are out of home, the app also will see you which devices are turned on and which turned off.

Project scope:

The application will show the user the status of all devices(On or Off).

It show the user with the most electricity consuming devices and suggests to turn it off.

It sends a notifications to the user if there are a device still turned on fo along time (like chargers), and the user can allow access to turn it off automatically.

It provide the user with a report (daily, weakly, or monthly) of the Consumption of each device to help him to reduce the total consumption.

The application also allows the user to pay electricity bills with it.

Key deliverables of the project:

The application allows the user to control in turn on and turn off of remote devices and the consumption of each device of electricity. And you can put a limit time to turn off all devices, by this way you can assure that all devices will turn off after this time.

Project milestons (Time line of project):

- In the first two weeks , the team of electrical engineers will collect information on remote control and consumption of electrical devices .

- For month , engineers will make remote recievers .

- For Two weeks , a team of programmers will make the mobile application .

- The project is being tested for a week .

Project resources:

1- A team of electrical engineering.
2- A team of programing.
3- Device of reciever

Budget: 1000,000$.

Staff:

- A team of elictrical engineers.

- A team of programmers.

Vendor:

Marketing companies, and enternet markets

(like Amazon, and Google play)

Budget:

1000,000 $ (includes servers, project licenses, developers, designers, training)

Constraints:

1-The project must take time less than 4 monthes.

2-The project must not exceed 1000,000 $.

3-laptops and computers must be bought from dell company.

Assumptions:

1- The project does not take more than 4 monthes.

2- The cost no more 1000,000$.

3- Efficiency in the devices.

High level risks:

1- Damage in the receivers.

2- Increase in the cost.

3- The lack of efficiency sufficient in the receiver or the teams.

4- Not to satisfy the users of product.

Project scope

1-Project scope discribtion:

- It is an application you use to control the elictric devices so that you can turn on/off any device at home from any where.
- The app also will show you all devices at home whatever it is turn on/off.
- You can pay the electricity bill with the app

2-Project acceptance criteries:

- Paying the electricity bill.

- Beutifull user interface.
- Easy to use, faster and comfortable.

3-Project deliverables:

- Project plan, reports, documents and resources which return to the company.
- Saving money, electricity and time.

4-Project excution:

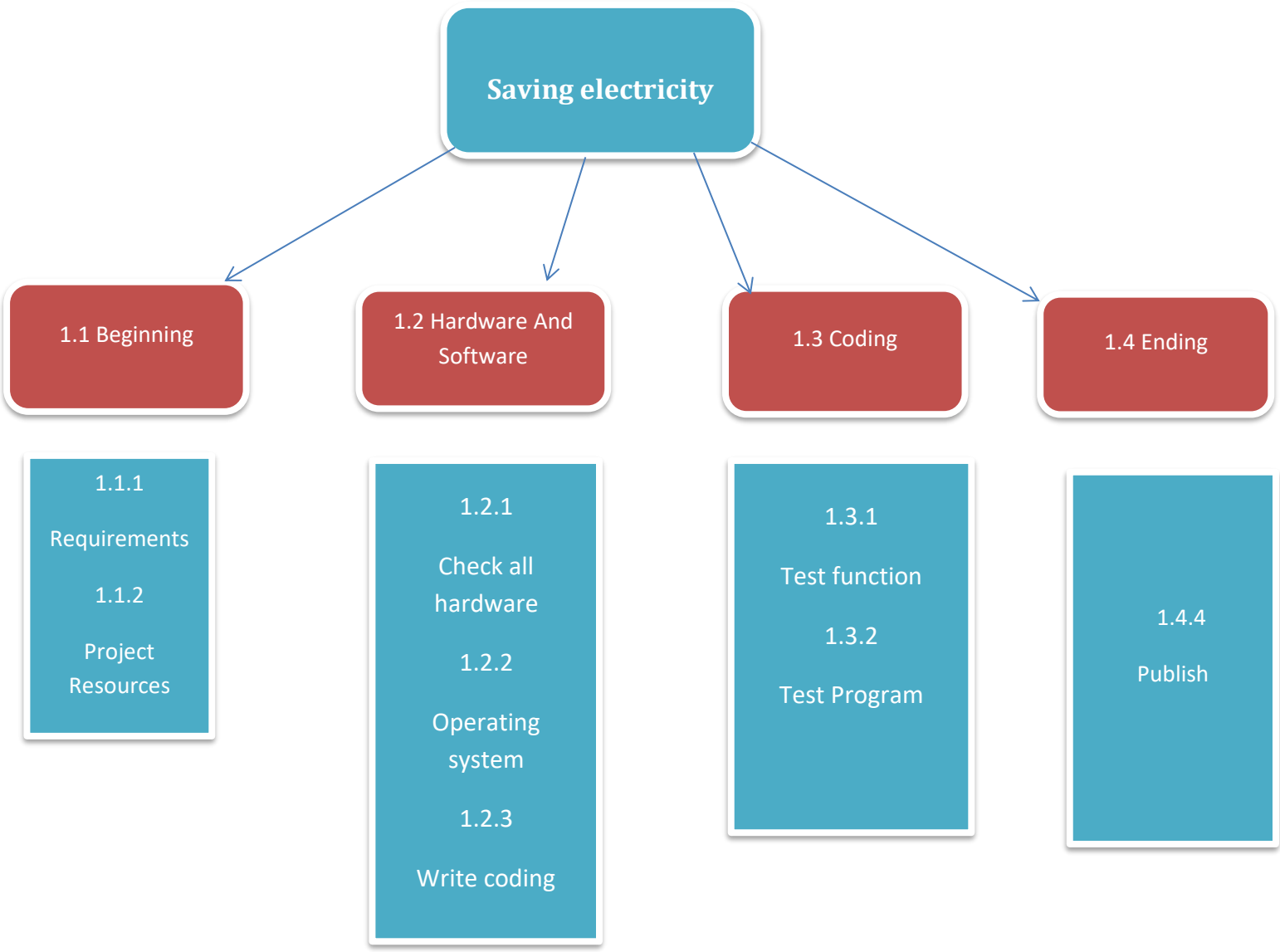
- One of customers reequirements that the app show him the average of using electricity every month, but the sponsor and manager refuse this request as it need a lot of time and cost.

5-Project constraints:

- Rules of company and policies.
- Budget.
- Time of submit.

6-Project assumptions:

- This application canrun only on The IOS and Android operating system.


Saving electricity
1.1 Beginning
1.2 Hardware And Software
1.3 Coding
1.4 Ending
1.1.1
Requirements
1.1.2
Project Resources
1.2.1
Check all hardware
1.2.2
Operating system
1.2.3
Write coding
1.3.1
Test function
1.3.2
Test Program
1.4.4
Publish

Dictionary of WBS

1.1 Starting

From 1\10\2021 to 20\10\2021

Work package id :	1.1.1
Work package name:	Identify Requirement
Description:	Searching about requires from people and process and Business environment .
Person :	Project Manager with team
Start date :	1\10\2021
End date :	20\10\2021

Work package id :	1.1.2
Work package name:	**Identify resources** •
Description:	**Searching about require Resources Software and Hardware (PCs , software , cables …etc) .**
Person :	**Project Manager with team**
Start date :	**21\10\2021**
End date :	**30\10\2021**

1.2 Designing :

from 21\10\2021 To 30\11\2021

Work package id :	1.2.1
Work package name:	**check the pcs and software &requirement** •
Description:	**Checking if the software appropriate for PCs , checking if there are problems in cables**
Person :	**Maintained workers**
Start date :	**1\11\2021**

End date :	**15\11\2021**

Work package id :	**1.2.2**
Work package name:	**Check operating system** •
Description:	**check all parts of operating system**
Person :	**Manager project with team**
Start date :	**16\11\2021**
End date :	**20\11\2021**

Work package id :	**1.2.3**
Work package name:	**COODING.** •
Description:	**Write code using any programming language.**
Person :	**Manager project with team.**
Start date :	**21\11\2021**
End date :	**30\11\2021**

1.3 Website coding : •

from 1\12\2021 To 30\12\2021 .

Work package id :	**1.3.1**
Work package name:	**TEST** •
Description:	**Checking functions that have been coded .**
Person :	**Programmers with Project manager**
Start date :	**1\12\2021**
End date :	**20\12\2021**

Work package id :	1.3.2
Work package name:	**TEST and TRAIN** •
Description:	**Test the program by training groups and take feedback from them**
Person :	**Programmers**
Start date :	**21\12\2021**
End date :	**30\12\2021**

1.4 Publish:

from 1\1\2022 To 15 \1\2022

Work package id :	1.4.1
Work package name:	**Advertisement** •
Description:	**Start to Advertise our APP on the internet** •
Person :	**Upper management**
Start date :	**1\1\2022**
End date :	**15\1\2022**

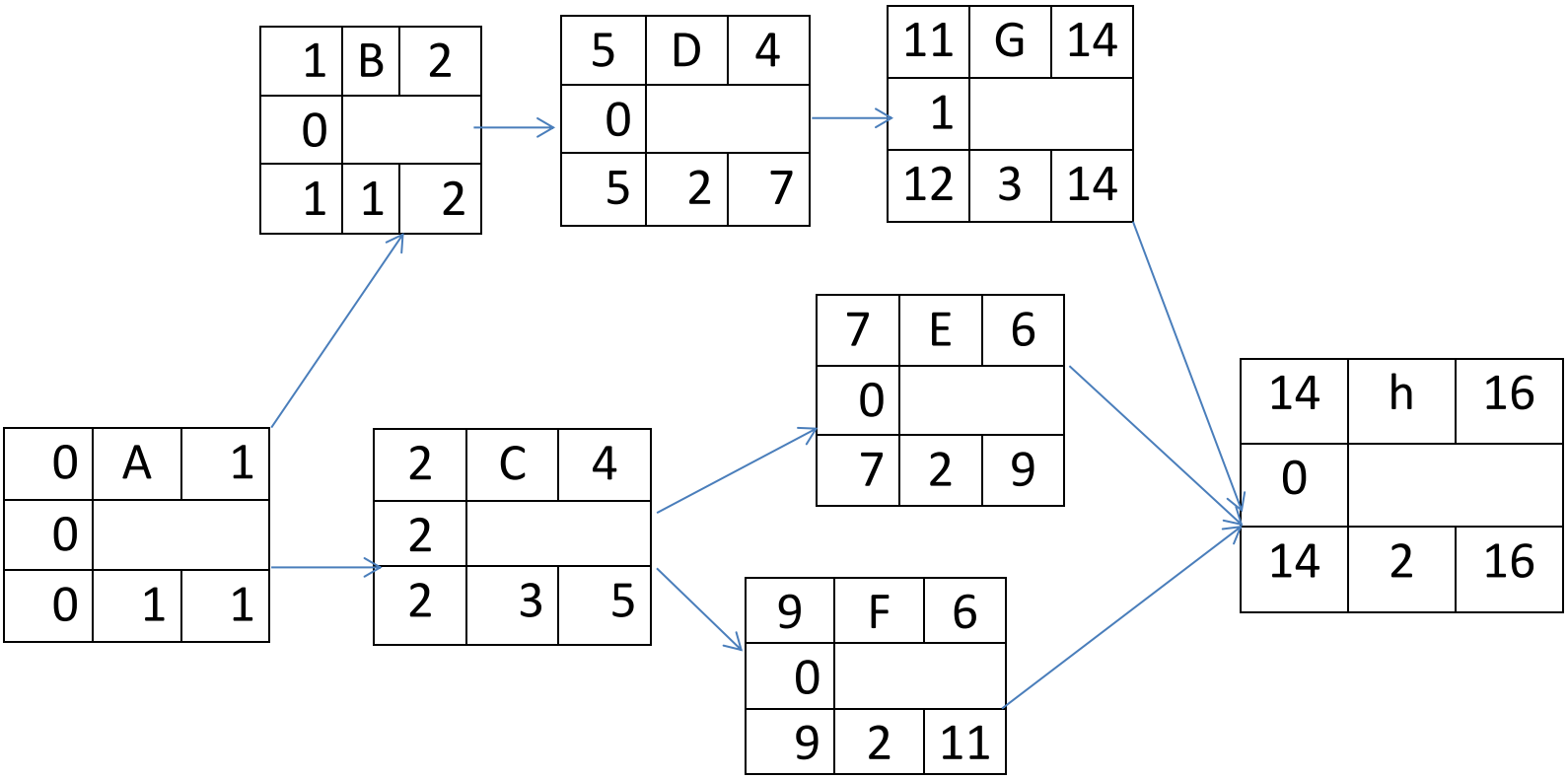
Work package id :	1.4.2
Work package name:	**LAUNCHING** •
Description:	**Publish our App on all App stores**
Person :	**Upper management**
Start date :	**16\1\2022**
End date :	**30\1\2022**

Responsibility Matrix

DESCREPTION	MOHAMED MAHMOUD	MOHAMED MOSTAFA
DEFINE REQUIREMENT	**R**	S
ASSIGN TEAM	S	**R**
DESIGN HARDWARE	S	**R**
CODE SOFTWARE	S	**R**
BUILD & TESTHARDWARE	R	**S**
DEVELOPTENT REQUIREMENTS	R	**S**
TEST SOFTWARE	R	**S**
INTEGRATE SYSTEM	R	S

Project Network :

ACTIVITY	DESCREPTION	PRECEDING ACTIVITY	ACTIVITY TIME
A	DEFINE REQUIREMENT	NONE	1
B	ASSIGN TEAM	A	1
C	DESIGN HARDWARE	A	3
D	CODE SOFTWARE	B	2
E	BUILD & TESTHARDWARE	C	2
F	DEVELOPTENT REQUIREMENTS	C	2
G	TEST SOFTWARE	D	3
H	INTEGRATE SYSTEM	E.F.G	2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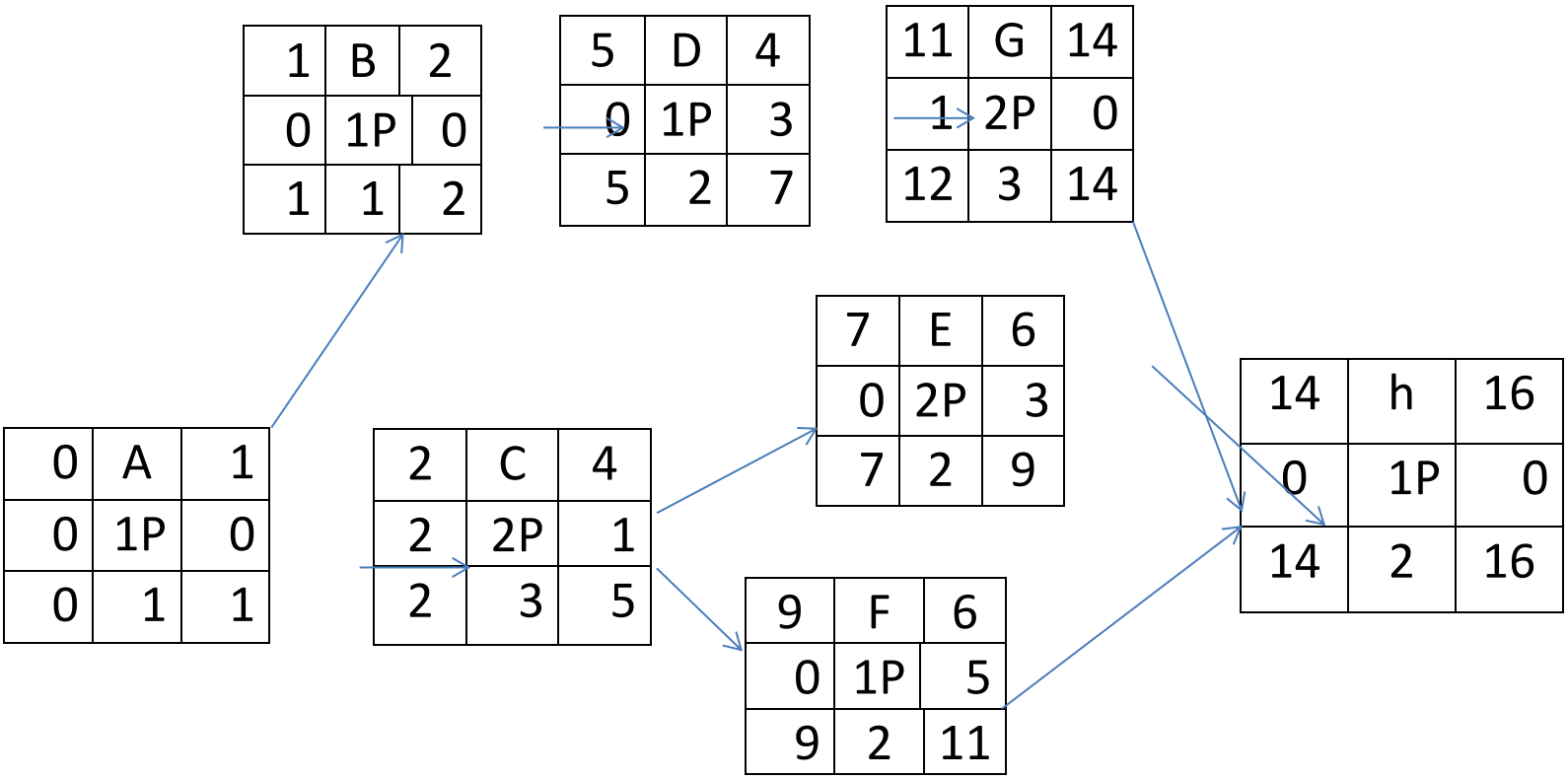
0
0 1 1
1 B 2
0
1 1 2
2 C 4
2
2 3 5
5 D 4
0
5 2 7
7 E 6
0
7 2 9
9 F 6
0
9 2 11
11 G 14
1
12 3 14
14 h 16
0
14 2 16

Resource Constrained



ID	RES	DUR	ES	LF	SL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	**1**	**1**	**0**	1	0	1																
B	**1**	**1**	1	2	0		1															
C	**2**	**3**	2	5	2			2	2	SL	SL											
D	**1**	**2**	5	7	0						1	1										
E	**2**	**2**	7	9	1								2	0								
F	**1**	**2**	9	11	0										1	1						
G	**2**	**3**	11	14	1												2	2	2	SL		
H	**1**	**2**	14	16	0																1	1
Total Resource Load						1	1	2	2	0	1	1	2	0	1	1	2	2	2	0	1	1
Resource Available						**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**

Time phased Package Budget Labor Cost Only

Matrix of Activity with cost

ID												
1	60	50	70	70								
2					20	10	10	10				
3					25	25						

4									20	40	20	
5												70

Baseline Budget

ID	Budget																				
1	**250**	60	50	70	70																
2	**50**					20	10	10	10												
3	**50**					25	25														
4	**80**									20	40	20									
5	**70**												70								
Total	**500**	60	50	70	70	45	35	10	10	20	40	20	70								

Risks:

Negative risks:-

-Interruption of the Internet.

-hackers.

-One of our employee leave the company.

-Another competitive company make the same technology with better quality than us.

-Damage in the receivers.

-Increase in the cost.

-The lack of efficiency sufficient in the receiver or the teams.

-Not to satisfy the users of product.

Positive risks:-

-There is only our company in the market.

-Make a change in company that may improve our technology.

-This application work The IOS and Android and windows operating system

Team Member

1. **Mohamed Mustafa Abd Eltwab**

2. **Mohamed Mahmoud Ahmed**