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| --- | --- |
| Project name | Saving and Controlling Electricity |
| Project sponsor | Ministry of electricity and energy |
| Project manager | Eng./ Mohammed Salah |
| Purpose of the project | helping citizens to conserves electricity. |
| Business case | the application in used to bring money by saving electricity and control electricity-power and function through Egypt.  If you keep devices plugged in and running when they're not in use the result is an increase in electrical use and, consequently, a bump in the amount of greenhouse gases that enter the atmosphere. Leaving your 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.  Even leaving your fully charged cellphone attached to its charger can waste almost 20 kWh a year it led to raise the cost of electricity bill and affect in your salary.  Conserving energy is not just about saving on your electricity costs. The Organization for Economic Co-operation and Development warns that given the current trends, energy-related emissions will increase by 70 percent by 2050. This can accelerate the negative consequences of climate change including higher temperatures and a rise in the frequency of extreme weather events for this the ministry of electricity decided to make a mobile phone app that enable you to control of your home electricity from any place.  The app will be attached with the all devices at your home and about if you can turn on/off any devices you want from any place even if you are out of home, the app also will see your which devices are turned on and which turned off. |
| Project scope | 1- The application will show the user the status of all devices (On or Off).  2- It show the user with the most electricity consuming devices and suggests to turn it off.  3- It sends a notification to the user if there are a device still turned on of along time (like chargers), and the user can allow access to turn it off automatically.  4- 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.  5- 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 milestones (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 receivers.  - 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 receiver  Budget: 500,000$.  Staff:  - A team of electrical engineers.  - A team of programmers.  **Vendor:** Marketing companies, and internet markets (like Amazon, and Google play) |
| Budget | 500,000 $ (includes servers, project licenses, developers, designers, training) |
| Constraints | 1-The project must take time less than 3 months.  2-The project must not exceed 500,000 $.  3-laptops and computers must be bought from dell company. |
| Assumptions | 1- The project does not take more than 3 months.  2- The cost no more 500,000$.  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 description:**

• It is an application you use to control the electric devices so that you can turn on/off any device at home from anywhere.

• 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 criteria:**

• Paying the electricity bill.

• Beautifully 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 execution:

• One of customers’ requirements 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 can run only on The IOS and Android operating system.

**WBS**

Electricity controlling

1.1.1 Requirements 1.1.2 Policies 1.1.3 Doing Study about the Project 1.1.4 Plan the Project

1.3.1 Test the Application 1.3.2 Explain and Fixed Errors 1.3.3 Finish the Application 1.3.4 Install the Application

1.2.1 Procurements 1.2.2 Operating System 1.2.3 Testing Devices

1.2 Hardware and Software

1.1 Starting

1.3

Finishing

Dictionary of WBS

1.1 Starting

|  |  |
| --- | --- |
| Work PackageID | 1.1.1 |
| Work Package Name | Requirment |
| Description | Meeting with team,Stakeholder and Sponser |
| Person | Manager & Team Members |
| Start Date | 1 December 2021 |
| End Date | 5 December 2021 |

|  |  |
| --- | --- |
| Work PackageID | 1.1.2 |
| Work Package Name | Policites |
| Description | Know the Policites and Recommends of the minister |
| Person | Manager |
| Start Date | 6 December 2021 |
| End Date | 8 December 2021 |

|  |  |
| --- | --- |
| Work PackageID | 1.1.3 |
| Work Package Name | Doing Study about the Project |
| Description | Collecting all information about the project |
| Person | Manager and Team Member |
| Start Date | 9 December 2021 |
| End Date | 11 December 2021 |

|  |  |
| --- | --- |
| Work PackageID | 1.1.4 |
| Work Package Name | Plan the Project |
| Description | a collection of smaller plans |
| Person | Team Member |
| Start Date | 12 December 2021 |
| End Date | 15 December 2021 |

1.2 Hardware and Software

|  |  |
| --- | --- |
| Work PackageID | 1.2.1 |
| Work Package Name | Procurements |
| Description | a collection of deliverables |
| Person | Team Member |
| Start Date | 16 December 2021 |
| End Date | 17 December 2021 |

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| --- | --- |
| Work PackageID | 1.2.2 |
| Work Package Name | Operating System |
| Description | Software programmers work well |
| Person | Manager and Team Member |
| Start Date | 18 December 2021 |
| End Date | 20 December 2021 |

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| --- | --- |
| Work PackageID | 1.2.3 |
| Work Package Name | Testing Devices |
| Description | Check components of device |
| Person | Manager and Team Member |
| Start Date | 21 December 2021 |
| End Date | 22 December 2021 |

1.3 Finishing

|  |  |
| --- | --- |
| Work PackageID | 1.3.1 |
| Work Package Name | Test the Application |
| Description | a collection of checks |
| Person | Manager and Team Member |
| Start Date | 23 December 2021 |
| End Date | 24 December 2021 |

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| --- | --- |
| Work PackageID | 1.3.2 |
| Work Package Name | Explain and Fixed Errors |
| Description | Sure no error |
| Person | Team Member |
| Start Date | 25 December 2021 |
| End Date | 28 December 2021 |

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| --- | --- |
| Work PackageID | 1.3.3 |
| Work Package Name | Finish the Application |
| Description | Sure that Application work efficiently |
| Person | Team Member |
| Start Date | 29 December 2021 |
| End Date | 30 December 2021 |

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| --- | --- |
| Work PackageID | 1.3.4 |
| Work Package Name | Install the Application |
| Description | Application is read to use |
| Person | Manager |
| Start Date | 30 December 2021 |
| End Date | 31 December 2021 |

**Network:**

|  |  |  |
| --- | --- | --- |
| 5 | 1.1.2 | 8 |
| 16 | Policies | |
| 21 | 3 | 24 |

|  |  |  |
| --- | --- | --- |
| 11 | 1.2.1 | 13 |
| 11 | Procurements | |
| 22 | 2 | 24 |

|  |  |  |
| --- | --- | --- |
| 16 | 1.3.1 | 18 |
| 6 | Test App | |
| 22 | 2 | 24 |

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| --- | --- | --- |
| 0 | 1.1.1 | 5 |
| 0 | Requirements | |
| 0 | 5 | 5 |

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| --- | --- | --- |
| 24 | 1.3.4 | 31 |
| 0 | Install App | |
| 24 | 7 | 31 |

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| --- | --- | --- |
| 5 | 1.1.3 | 11 |
| 0 | Studying | |
| 5 | 6 | 11 |

|  |  |  |
| --- | --- | --- |
| 11 | 1.2.2 | 16 |
| 0 | Software | |
| 11 | 5 | 16 |

|  |  |  |
| --- | --- | --- |
| 16 | 1.3.2 | 22 |
| 2 | Fixed Errors | |
| 18 | 6 | 24 |

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| --- | --- | --- |
| 5 | 1.1.4 | 15 |
| 9 | Planning | |
| 14 | 10 | 24 |

|  |  |  |
| --- | --- | --- |
| 11 | 1.2.3 | 18 |
| 6 | Testing Devices | |
| 17 | 7 | 24 |

|  |  |  |
| --- | --- | --- |
| 16 | 1.3.3 | 24 |
| 0 | Finish App | |
| 16 | 8 | 24 |

**Team members**

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