



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section	Course	Code	Date
Master	18 / 03 / 2021.	Thursday	(PMG506)

Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-8-20 في تمام الساعة 9 مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الانجليزية.
- يتم تسليم المشروع في صيغة ملف pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References. وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر 1.5 line spacing
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: ~~Eng. Amaal Aburumman~~ Eng. Dr. Akram M. S. Ali

Project:

You are required to document your role in administering a project. The project may be set in a business, social, sporting, or family environment but must be of a significant size and scale. If you do not have an actual project to write about you may complete the project hypothetically. **This report will be between three to six pages in length.** This is a significant research project.

Your report must address ~~each~~ **ONE** of the following issues:

1. Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**
2. Describe how the team is given an outline of the project.
3. Describe the strategies that are going to be set up to maintain communication with the team members.
4. Describe the tools that are going to be used to monitor the goals, time frames or milestones.
5. Identify project milestones and activities. **Display this information using an appropriate tool.**
6. Create a budget and link the costs to the key milestones for a project.
7. Describe how you are going to divide tasks and resources amongst a project team. **Display this information using an appropriate tool.**
8. Briefly describe how the progress will be monitored.
9. How are current project records maintained? Who has responsibility for this? provide some recommendations on how this process could be improved.
10. Describe the current procedure for finalizing projects. Create your own procedure and identify how you will evaluate the success of the project.
11. Legislation that may affect the project including health and safety, and anti-discrimination legislation.

Best of luck...

المشروع:

مطلوب منك توثيق دورك في إدارة مشروع. قد يتم تعيين المشروع في بيئة تجارية أو اجتماعية أو رياضية أو عائلية ولكن يجب أن يكون بحجم مناسب. إذا لم يكن لديك مشروع فعلي لتكتب عنه ، فيمكنك إكمال المشروع افتراضياً. سيكون هذا التقرير من ثلاث إلى ست صفحات .

يجب أن يعالج تقريرك كل من **احد** القضايا التالية:

١. تحديد ووصف الغرض والنطاق والأهداف من المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
٢. صف كيف يتم إعطاء الفريق مخططاً تفصيلياً للمشروع.
٣. وصف الاستراتيجيات التي سيتم وضعها للحفاظ على التواصل مع أعضاء الفريق.
٤. صف الأدوات التي سيتم استخدامها لرصد الأهداف أو الأطر الزمنية أو المعالم.
٥. تحديد معالم المشروع والأنشطة. اعرض هذه المعلومات باستخدام أداة مناسبة.
٦. إنشاء موازنة وربط التكاليف بالمعالم الرئيسية للمشروع.
٧. صف كيف ستقوم بتقسيم المهام والموارد بين فريق المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
٨. صف بإيجاز كيف سيتم رصد التقدم.
٩. كيف يتم الاحتفاظ بسجلات المشروع الحالية؟ من المسؤول عن هذا؟ تقديم بعض التوصيات حول كيفية تحسين هذه العملية.
١٠. وصف الإجراء الحالي لإنهاء المشاريع. قم بإنشاء الإجراء الخاص بك وحدد كيفية تقييم نجاح المشروع.
١١. التشريعات التي قد تؤثر على المشروع بما في ذلك الصحة والسلامة ، وتشريعات مكافحة التمييز.

مع تمنياتي بالتوفيق..

Introduction

Hospital planning standards: Site planning conditions are firstly, is preferable to have multiple roads connecting to the hospital, to avoid congestion, especially for ambulances. The site must be close to basic public services such as electricity, telephone, and sewage lines. The shape of the land is a rectangle with a ratio of 2: 1 or 3: 2, so that the largest side is in the direction East-West or Northeast-Southwest. The hospital is 40 meters from the hospital road and 80 meters from the general hospital roads. If contour lines are found on the project land, it is better for the project to go along with them, and that allows the presence of more than one entrance and more than one level. It is preferable to choose high places and cells to establish hospitals. The hospital site must be designated a health facility according to the approved plan. Approval of the Ministry of Health on the site. The selected site should be clean, away from areas of fog, pollution, and unpleasant odors, and away from noise. That the site is in contact with the main road networks and public transport stations that operate within the hospital. Directing the hospital building: the direction of the hospital is controlled by both the sun and the wind, so the hospital building is directed towards the prevailing winds of good effect, while the building is parallel to the unwanted winds. There is a relationship between the area of land and the number of beds in the hospital, as an area between (120 - 125) square meters is usually allocated for each bed, and 10 square meters are allocated for each bed from the gardens. Considering the possibility of future expansion. There are two types of medical equipment and non-medical equipment (such as furniture), and hospital equipment depends on the bed capacity.

As we are in the project planning phase, we are determining the type and capacity of the hospital: Preparing a program on the requirements of the project, the facilities to be established within the project, and the expected area for each section Start preparing the initial idea of the designs Discussing and reviewing designs until we reach the final accepted idea Work to prepare the designs and executive management of the project Fifth: the size and types of hospitals ... The size of the general hospital in cities is determined based on the applicable rate, let it be 2 beds per thousand people, and the size of the hospital depends on the scope of service. When calculating the size of the hospital, the population increase during the next 20 years is considered.

The aim of the project is to calculate the project costs. My role is to divide tasks and resources amongst the project team to conclude which is calculating the costs.

Literature Review

The accounting departments in contracting companies calculate the actual implementation cost of the project in the implementation phase, with the aim of controlling the cost. On the other hand, it is documented for use in estimating the cost of similar projects in the future.

- Approximate cost estimation methods:

They are methods used to estimate the initial cost in the planning and design phases, when the project is not yet accurately defined, and these estimates depend on knowing the actual cost of large units of the project obtained from previous projects, and these values are adjusted to reflect the circumstances of the new project such as its time and location, and include Examples of three of these methods are the following:

1- Per User: In which the total cost of the project is estimated on the basis of the average cost per user, an example of that is the cost per patient when estimating the cost of a hospital, or the cost per student when estimating the cost of a school, or the cost per car when estimating the cost of a garage, and the cost of the new project is calculated by multiplying the number of expected users At user cost.

2- cost using transactions: The cost of the establishment is estimated by adjusting the cost of implementing another similar facility, and the existing establishment is multiplied by transactions to control the estimated cost of the new establishment to reflect the different working conditions and workers' expenses ... etc.

3- Cost of unit volumes: The cost is estimated based on the cost of unit volumes from similar facilities, and it is suitable in projects such as large refrigeration refrigerators where the cost is estimated by multiplying the size of the facility with the cost of unit volumes.

Methodology

For detailed methods of cost estimation:

A detailed cost estimate is initiated only when the hospital drawings and specifications are completed, and the cost estimate is based on a complete and accurate inventory of the quantities required for the completion of the hospital, and the cost estimate includes the definition, classification and analysis of many cost items included in the implementation process, and the cost estimate requires a detailed and accurate study of the drawings as well as a deep knowledge. Prices of labor, equipment, and materials.

It is worth noting that project cost estimation is a relatively limited accuracy process. The reason for this is due to the uniqueness of the construction project, which makes each project a special case. Despite this, a trained person with experience using information from cost accounts for previous projects can estimate the cost of a new project. With acceptable accuracy, the following are the steps for estimating the cost:

Department costs = average department cost * number of beds

Section	Average cost	Bed Capacity	Total
Emergency	٥٠٠٠٠	٢٠٠	١٠,٠٠٠,٠٠٠,٠٠
Laboratory	٣٥٠٠٠	٢٠٠	٧,٠٠٠,٠٠٠,٠٠
X-rays	١٠٠٠٠٠	٢٠٠	٢٠,٠٠٠,٠٠٠,٠٠
Intensive Care	٦٢٠٠٠	٢٠٠	١٢,٤٠٠,٠٠٠,٠٠
Preparations	٦٠٠٠٠	٢٠٠	١٢,٠٠٠,٠٠٠,٠٠
Sterilization	٥٠٠٠٠	٢٠٠	١٠,٠٠٠,٠٠٠,٠٠
Admission wings	١٠٠٠٠٠	٢٠٠	٢٠,٠٠٠,٠٠٠,٠٠
Clinics	٣٨٠٠٠	٢٠٠	٧,٦٠٠,٠٠٠,٠٠
Total (riyal)			٩٩,٠٠٠,٠٠٠,٠٠

Table (1)

Costs to build hospital	
National average cost	\$112.5M
Average range	\$60M - \$187.5M
Minimum cost	\$52.2M
Maximum cost	\$210M

Table (2)

Discussion

The typical hospital needs approximately 2,500 square feet. award, equating to nearly 300,000 square feet for a 120-room hospital. On the national average, this amounts to a net expense of \$ 60,000,000 to \$ 187,500,000. Most cities that create a non-teaching, non-trauma centered hospital spend about \$ 112,500,000 on administrative centers, operating and emergency rooms, and other amenities (as shown in table number two).

Quantities inventory: The quantification process adds awareness and knowledge of the project's requirements and details. Most business items cannot be priced by the contractor without breaking them into smaller parts.

Administrative inputs: Before starting to estimate the cost, some decisions must be made in some matters related to the implementation of the project and directly affect the accuracy of the estimate, and these matters include the supervision of the implementation, the method of implementing the project, the initial schedule, and the implementation equipment.

An effective way to discuss these matters and make decisions related to them is to hold a meeting that includes the project management team and a group representing the contractor's administrative structure who have the authority to make decisions.

- Cost estimate lists

Each list contains the direct cost of the works that must be completed for the work item to be completed. As for the items that the contractor intends to put up to a specialized subcontractor, he does not estimate the cost of these items.

- Direct cost:

The direct cost of a work item is the expenditure that is spent directly on implementing the item. The direct cost is divided into the cost of materials, labor, equipment, and subcontractors.

- The cost of materials

- Labor cost

- The cost of the equipment

- Indirect cost

The indirect cost is that which is spent on the completion and implementation of the project, which does not fall directly under any of the business items of the project, and the indirect cost is divided into the cost of the site and the cost of managing the company.

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