■ Official project name: Handmade market.

■ Project sponsor and contact information: Ahmed Essam,

Phone: +966 554 815804.

■ Project manager and contact information: Ahmed Hesham,

Phone: 01062385284.

■ Project team: Ahmed Abd El-Baky, Osama Mohamed, Ahmed Essam, Ahmed Ayman, and Ahmed Hesham.

■ Purpose of the project: Handmade manufacturers have difficulty marketing their products and delivering them to consumers, so we've developed a program to make it easier for handmade manufacturers to show their products to the largest number of consumers and provide home delivery.

■ Business case for the project: For every product delivered to a consumer the company gets 5% of its price as benefit, and the sponsor will get 30% of the company’s earnings at the end of every year.

■ Key deliverables of the project: Facilitate the marketing and delivering of handmade products, thus reaching the largest number of consumers, and encourage handmade manufacturers to show their products on our platform and improve them.

■ General statement about how the team will approach the work:

* Group 1 will be responsible for developing the software application.
* Group 2 will be responsible for the call center.
* Group 3 will be responsible for delivery.
* Group 4 will be responsible for marketing.

■ Milestones:

* August: Create the Application.
* September: Test the functionalities of the application.
* October: Solve the problems of the application.
* November: Launch the application and make an advertisement about it on the social media.
* December: Get feedback on the program from users.

■ Project resources:

* Budget: $ 200,000.
* A rented server for two years duration.
* 500 motor cycles for delivery.
* IT consultant, software developer, UI designer, and marketing consultant.

■ High-level assumptions and constraints:

* The project must be completed by February 1.
* The project must not exceed $ 250,000.
* The product must be delivered to the user in three days maximum.

■ High-level risks:

* Any error in the software or in the server could affect productivity and efficiency of the project.
* Any damage done to the product during delivery could affect user satisfaction negatively.

■ Project scope statement: -

* Product scope description: We will develop an application to help handmade manufacturers market their products thus reaching the largest number of consumers and we will provide delivery service.
* Product acceptance criteria:
  + The application must have a fast and secure delivery service that guarantees consumers and manufacturers their rights.
  + The application must have an online payment service.
  + Users can submit their feedback on the products so that manufacturers can consider their opinions.
* Project deliverables:

Facilitate the marketing and delivering of handmade products, thus reaching the largest number of consumers, and encourage handmade manufacturers to show their products on our platform and improve them.

* Project exclusions:
  + it’s not available to show products that are not handmade on our platform.
  + international shipping is not available.
  + dealing with foreign currency is not available.

* Project constraints: -
  + The project must be completed by February 1.
  + The project must not exceed $ 250,000.
* Project assumptions:
  + The products must be delivered to the consumers without any damage.
  + The product must be delivered to the user in three days maximum.

■ Work breakdown structure (WBS): -

* 22.1. Initiating
  + 22.1.1. Appoint the project manager and project team
  + 22.1.2. Create the project charter
* 22.2. Planning
  + 22.2.1. Scope management plan
  + 22.2.2. Cost management plan
  + 22.2.3. Risk management plan
  + 22.2.4. Schedule management plan
* 22.3. Executing and controlling
  + 22.3.1. Create the application.
    - 22.3.1.1. Software design.
    - 22.3.1.2. Building a software model.
    - 22.3.1.3 Constructing code.
    - 22.3.1.4. Testing
  + 22.3.2 Design user interface.
  + 22.3.3. Launch the application.
  + 22.3.4. Market the application.
  + 22.3.5. Get feedback from users and improve the application performance
* 22.4. Closing
  + 22.4.1. Conduct closeout meetings.
  + 22.4.3. Create project closeout documentation.

■ WBS dictionary: -

22.1 The initiation phase

* 22.1.1 Appointing the project manager and the project team: The first person appointed to the project is typically the project manager. The reason is that the project manager is responsible for ensuring that the right candidates with the right skills are appointed into the right roles within the project. The project manager will appoint his team leaders first and the team leaders will in turn appoint the team members. He will appoint software development team leader, marketing team leader, UI designing team leader, testing team leader, and network engineering team leader.
* 22.1.2 Creating the project charter: the project charter authorizes the project and it defines the business need in full. It identifies the sponsor of the project and the project manager. It makes the project manager accountable for the project and it assigns authority to the project manager on behalf of the project sponsor. The project manager creates the project charter and it should be created in the initiation phase.

22.2 The planning phase:

* 22.2.1 Creating the scope management plan: The scope management plan is the collection of processes that are used to ensure that the project includes all the tasks required to complete the project while excluding all the work/tasks that are out of scope. The primary purpose of the scope management plan is to define how the project scope will be explained, developed/structured, and verified.
* 22.2.2 Creating the cost management plan: A cost management plan is a document that helps you map and control a budget. It enables project managers to estimate their costs, allocate resources to the right areas, and control overall spending. Cost management plans keep all project costs in one place, including direct and indirect costs. A project manager will track these costs to ensure there are no budget overruns. It is one of the most essential parts of a project’s planning phase that helps to complete the project on time and on budget.
* 22.2.3 Creating the risk management plan: risk management plan is a document that a project manager prepares to foresee risks, estimate impacts, and define responses to risks and it’s designed to eliminate or minimize the impact of the risk events that have a negative impact on the project.
* 22.2.4 Creating the schedule management plan: A schedule management plan is the precise organization of project activities and tasks by time factors. It outlines the start and end dates of tasks and milestones that must be accomplished for project completion.

22.3 The execution and control phase:

* 22.3.1 Create the application:
  + 22.3.1.1 The software developer will design the application. Software design usually involves problem-solving and planning a software solution
  + 22.3.1.2 The software developer will build a model of the software with a modeling tool that uses a modeling language to conduct early validation, prototyping and simulation of the design.
  + 22.3.1.3 The software developer will construct the code in the appropriate programming language. This process involves team review to eliminate problems early and produce quality software faster.
  + 22.3.1.4 The software tester will test the software to check whether the actual software product matches expected requirements and to ensure that software product is free from errors.
* 22.3.2 Design user interface: The UI designer will design the user interface. The user interface (UI) is the point at which human users interact with a computer, website or application. The goal of effective UI is to make the user's experience easy, requiring minimum effort from the user to receive maximum desired outcome.
* 22.3.3 Launch the application: The network engineer will launch the application and the project manager will approve it. it's important to be available across multiple platforms to reach the largest number of users.
* 22.3.4 Market the application: The marketing team will market the application. One of the best ways of marketing is social media. Social media marketing is a powerful way for businesses of all sizes to reach customers.
* 22.3.5 Get feedback from users and improve the application performance: It’s so important to get feedback from users. It allows us to determine which of our proposed features are most important to them in the context of our app. Once we’re armed with this knowledge, we can begin to prioritize our roadmap based on what will add the most customer delight. we’ll also be able to determine which of our current features needs a little touch-up to meet or exceed customer expectations.

22.4 The closing phase:

* 22.4.1 Conducting closeout meetings: In These meetings team evaluates project successes by looking at planned and actual deliverables, comparing achievements with the project’s objective. Team also identifies areas for improvement, lessons learned and recommendations for future projects.
* 22.4.2 Project closeout report: The purpose of this report is to mark the completion of the project by assessing the project's performance, identifying the lessons learned. The report should capture what went well, what were the challenges, recommended future actions, and any information that would be helpful to future projects and teams.

■ Roles and responsibilities matrix:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Task/Role | Project manager | Software developer | Marketing manager | UI designer | Testing manager | Network engineer | Business analyst |
| Project planning | R | I | I | I | I | I | C |
| Create the application | A | R |  |  | C | C |  |
| Design UI | A |  |  | R |  |  |  |
| Test the application | A | I |  |  | R |  |  |
| Launch the application | R |  |  |  |  | C |  |
| Market the application | A |  | R |  |  |  |  |
| Improve the application | A | R |  | R | R | R |  |
| Project closeout | R | I | I | I | I | I | C |

■ **Project network:**

|  |  |  |
| --- | --- | --- |
| **ID** | **description** | **predecessor** |
| A | Project charter | None |
| B | Project plan | A |
| C | Create the app | B |
| D | Design UI | B |
| E | Test the app | C |
| F | Launch the app | E, D |
| G | Market the app | F |
| H | Get feedback from users | F |
| I | Improve the app | H |
| J | Project closeout | I, G |

|  |  |  |
| --- | --- | --- |
| 5 | C | 8 |
| 0 | 2 | 0 |
| 5 | 3 | 8 |

|  |  |  |
| --- | --- | --- |
| 8 | E | 10 |
| 0 | 1 | 0 |
| 8 | 2 | 10 |

|  |  |  |
| --- | --- | --- |
| 13 | I | 15 |
| 0 | 2 | 0 |
| 13 | 2 | 15 |

|  |  |  |
| --- | --- | --- |
| 11 | H | 13 |
| 0 | 1 | 0 |
| 11 | 2 | 13 |

|  |  |  |
| --- | --- | --- |
| 0 | A | 2 |
| 0 | 1 | 0 |
| 0 | 2 | 2 |

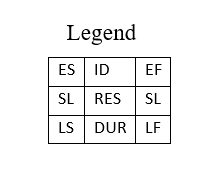
|  |  |  |
| --- | --- | --- |
| 2 | B | 5 |
| 0 | 2 | 0 |
| 2 | 3 | 5 |

|  |  |  |
| --- | --- | --- |
| 10 | F | 11 |
| 0 | 1 | 0 |
| 10 | 1 | 11 |

|  |  |  |
| --- | --- | --- |
| 5 | D | 8 |
| 2 | 1 | 2 |
| 7 | 3 | 10 |

|  |  |  |
| --- | --- | --- |
| 15 | J | 16 |
| 0 | 1 | 0 |
| 15 | 1 | 16 |

|  |  |  |
| --- | --- | --- |
| 11 | G | 13 |
| 2 | 2 | 2 |
| 13 | 2 | 15 |



■ **Resource constrained project**:

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **RES** | **DUR** | **ES** | **LF** | **SL** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **A** | 1 | 2 | 0 | 2 | 0 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B** | 2 | 3 | 2 | 5 | 0 |  |  | 2 | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |
| **C** | 2 | 3 | 5 | 8 | 0 |  |  |  |  |  | 2 | 2 | 2 |  |  |  |  |  |  |  |  |
| **D** | 1 | 3 | 5 | 8 | 0 |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  |  |
| **E** | 1 | 2 | 8 | 10 | 0 |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| **F** | 1 | 1 | 10 | 11 | 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| **G** | 2 | 2 | 11 | 13 | 0 |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| **H** | 1 | 2 | 11 | 13 | 0 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| **I** | 2 | 2 | 13 | 15 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 |  |
| **J** | 1 | 1 | 15 | 16 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Total Resource Load** | | | | | | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 1 | 1 | 3 | 3 | 2 | 2 | 1 |
| **Resource Available** | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

■ **Time-Phased Budget Baseline:**

0 1 2 3 4 5 6 7 8 9 10 11 12 11 14 15 16

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Duration** | **Budget** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A | 2 | 2 | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B | 3 | 3 |  |  | 3 | 3 | 3 |  |  |  |  |  |  |  |  |  |  |  |
| C | 3 | 7 |  |  |  |  |  | 7 | 7 | 7 |  |  |  |  |  |  |  |  |
| D | 3 | 5 |  |  |  |  |  | 5 | 5 | 5 |  |  |  |  |  |  |  |  |
| E | 2 | 4 |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  |  |  |
| F | 1 | 3 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |
| G | 2 | 5 |  |  |  |  |  |  |  |  |  |  |  | 5 | 5 |  |  |  |
| H | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 |  |  |  |
| I | 2 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 |  |
| J | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| **Total** | 21 | 38 | 2 | 2 | 3 | 3 | 3 | 12 | 12 | 12 | 4 | 4 | 3 | 8 | 8 | 4 | 4 | 2 |
|  | **Commutative** | | 2 | 4 | 7 | 10 | 13 | 25 | 37 | 49 | 53 | 57 | 60 | 68 | 76 | 80 | 84 | 86 |

■ Risks:

* Any error in the software or in the server could affect productivity and efficiency of the project.
  + We can handle this risk by constantly testing the software and the server for any error and fixing them if there any.
* Any damage done to the product during delivery could affect user satisfaction negatively.
  + We can handle this risk by providing a safe and secure delivery service.

■ Monitoring:

Purpose of the project: Helping handmade manufacturers to marketing and delivering their products.

Business case: the company gets 5% of its price as benefit, and the sponsor will get 30% of the company’s earnings at the end of every year.

Key deliverables of the project: marketing and delivering handmade product.

General statement about how the team will approach the work:

* Group 1: developing the software application.
* Group 2: for call center.
* Group 3: for delivery.
* Group 4: marketing.

Milestones:

* August: Create the Application.
* September: Test the application.
* October: Solve the problems.
* November: Launch the application.
* December: Get feedback.

project resources:

* Budget: $ 200,000.
* rented server.
* 500 motor cycles.
* IT consultant.

High-level assumptions and constraints:

* The project must be completed by February 1.
* The project must not exceed $ 250,000.
* The product must be delivered to the user in three days maximum.

High-level risks:

* Any error in the software.
* Any damage in the product.

Project scope statement:

* Product scope description: We will develop an application to help handmade manufacturers to market their products.
* Product acceptance criteria:
  + The application must have a fast and secure delivery service.
  + The application must have an online payment service.
  + Users can submit their feedback on the products.
* Project deliverables: Facilitate the marketing and delivering of handmade products.
* Project exclusions:
  + it’s not available to show products except handmade market.
  + international shipping is not available.
  + dealing with foreign currency is not available.
* Project constraints:
  + The project must be completed at limited time.
  + The project must not exceed limited budget.
* Project assumptions:
  + The products must be delivered without any damage.
  + The product must be delivered in three days maximum.

Work breakdown structure (WBS): -

* 22.1. Initiating:
  + 22.1.1. Appoint the project manager and project team.
  + 22.1.2. Create the project charter.
* 22.2. Planning:
  + 22.2.1. Scope management plan.
  + 22.2.2. Cost management plan.
  + 22.2.3. Risk management plan.
  + 22.2.4. Schedule management plan.
* 22.3. Executing and controlling:
* 22.3.1. Create the application:
  + - 22.3.1.1. Software design.
    - 22.3.1.2. Building a software model.
    - 22.3.1.3 Constructing code.
    - 22.3.1.4. Testing.
  + 22.3.2 Design user interface.
  + 22.3.3. Launch the application.
  + 22.3.4. Market the application.
  + 22.3.5. Get feedback from users and improve the application performance.
* 22.4. Closing:
  + 22.4.1. Conduct closeout meetings.
  + 22.4.3. Create project closeout documentation.

■ Roles and responsibilities matrix: -

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Task/Role | Project manager | Software developer | Marketing manager | UI designer | Testing manager | Network engineer | Business analyst |
| Project planning | R | I | I | I | I | I | C |
| Create the application | A | R |  |  | C | C |  |
| Design UI | A |  |  | R |  |  |  |
| Test the application | A | I |  |  | R |  |  |
| Launch the application | R |  |  |  |  | C |  |
| Market the application | A |  | R |  |  |  |  |
| Improve the application | A | R |  | R | R | R |  |
| Project closeout | R | I | I | I | I | I | C |

■ **Project network: -**

|  |  |  |
| --- | --- | --- |
| **ID** | **description** | **predecessor** |
| A | Project charter | None |
| B | Project plan | A |
| C | Create the app | B |
| D | Design UI | B |
| E | Test the app | C |
| F | Launch the app | E, D |
| G | Market the app | F |
| H | Get feedback from users | F |
| I | Improve the app | H |
| J | Project closeout | I, G |

|  |  |  |
| --- | --- | --- |
| 5 | C | 8 |
| 0 | 2 | 0 |
| 5 | 3 | 8 |

|  |  |  |
| --- | --- | --- |
| 8 | E | 10 |
| 0 | 1 | 0 |
| 8 | 2 | 10 |

|  |  |  |
| --- | --- | --- |
| 13 | I | 15 |
| 0 | 2 | 0 |
| 13 | 2 | 15 |

|  |  |  |
| --- | --- | --- |
| 11 | H | 13 |
| 0 | 1 | 0 |
| 11 | 2 | 13 |

|  |  |  |
| --- | --- | --- |
| 0 | A | 2 |
| 0 | 1 | 0 |
| 0 | 2 | 2 |

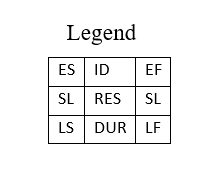
|  |  |  |
| --- | --- | --- |
| 2 | B | 5 |
| 0 | 2 | 0 |
| 2 | 3 | 5 |

|  |  |  |
| --- | --- | --- |
| 10 | F | 11 |
| 0 | 1 | 0 |
| 10 | 1 | 11 |

|  |  |  |
| --- | --- | --- |
| 5 | D | 8 |
| 2 | 1 | 2 |
| 7 | 3 | 10 |

|  |  |  |
| --- | --- | --- |
| 15 | J | 16 |
| 0 | 1 | 0 |
| 15 | 1 | 16 |

|  |  |  |
| --- | --- | --- |
| 11 | G | 13 |
| 2 | 2 | 2 |
| 13 | 2 | 15 |



■ **Resource constrained project**: -

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **RES** | **DUR** | **ES** | **LF** | **SL** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **A** | 1 | 2 | 0 | 2 | 0 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B** | 2 | 3 | 2 | 5 | 0 |  |  | 2 | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |
| **C** | 2 | 3 | 5 | 8 | 0 |  |  |  |  |  | 2 | 2 | 2 |  |  |  |  |  |  |  |  |
| **D** | 1 | 3 | 5 | 8 | 0 |  |  |  |  |  | 1 | 1 | 1 |  |  |  |  |  |  |  |  |
| **E** | 1 | 2 | 8 | 10 | 0 |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |  |  |  |
| **F** | 1 | 1 | 10 | 11 | 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |
| **G** | 2 | 2 | 11 | 13 | 0 |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 |  |  |  |
| **H** | 1 | 2 | 11 | 13 | 0 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  |  |
| **I** | 2 | 2 | 13 | 15 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 2 |  |
| **J** | 1 | 1 | 15 | 16 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| **Total Resource Load** | | | | | | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 1 | 1 | 3 | 3 | 2 | 2 | 1 |
| **Resource Available** | | | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

■ **Time-Phased Budget Baseline: -**

0 1 2 3 4 5 6 7 8 9 10 11 12 11 14 15 16

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Duration** | **Budget** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A | 2 | 2 | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| B | 3 | 3 |  |  | 3 | 3 | 3 |  |  |  |  |  |  |  |  |  |  |  |
| C | 3 | 7 |  |  |  |  |  | 7 | 7 | 7 |  |  |  |  |  |  |  |  |
| D | 3 | 5 |  |  |  |  |  | 5 | 5 | 5 |  |  |  |  |  |  |  |  |
| E | 2 | 4 |  |  |  |  |  |  |  |  | 4 | 4 |  |  |  |  |  |  |
| F | 1 | 3 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |
| G | 2 | 5 |  |  |  |  |  |  |  |  |  |  |  | 5 | 5 |  |  |  |
| H | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  | 3 | 3 |  |  |  |
| I | 2 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 | 4 |  |
| J | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| **Total** | 21 | 38 | 2 | 2 | 3 | 3 | 3 | 12 | 12 | 12 | 4 | 4 | 3 | 8 | 8 | 4 | 4 | 2 |
|  | **Commutative** | | 2 | 4 | 7 | 10 | 13 | 25 | 37 | 49 | 53 | 57 | 60 | 68 | 76 | 80 | 84 | 86 |

■ Risks: -

* Any error in the software or in the server could.
* Any damage done to the product during delivery could affect user satisfaction negatively.