BELGIUM CAMPUS iTversity
It's the way we're wired

Introduction

The objective of this project is to give you practice in managing projects using an appropriate Project Management Software. You are expected to formulate and communicate the project plan which includes monitoring and control, covering all project management knowledge areas as defined in the Project Management Body of Knowledge (PMBOK).

Project Description

Study the project outline below and answer the following questions.

1 CONSTRUCTION

1.1 STAGE 1
- 1.1.1 Demo Preparation (5 days)
- 1.1.2 Demolition (18 days)
- 1.1.3 Excavation (4 days)
- 1.1.4 Concrete (12 days)

1.2 STAGE 2
- 1.2.1 Pre backfill (2 days)
- 1.2.2 Framing (41 days)
- 1.2.3 Roofing (21 days)
- 1.2.4 Plumbing (41 days)
- 1.2.5 Windows (23 days)

1.3 STAGE 3
- 1.3.1 Heating, Ventilation, and Air Conditioning - Hv Ac (21 days)
- 1.3.2 Electrical (12 days)
- 1.3.3 AV and Network Installation (5 days)
- 1.3.4 House Wrap (3 days)
- 1.3.5 Insulation (18 days)
- 1.3.6 Dry Wall (20 days)

1.4 STAGE 4
- 1.4.1 Exterior Stone (14 days)
- 1.4.2 Exterior Casework (9 days)
- 1.4.3 Laundry room flooring (23 days)
- 1.4.4 Putting Hardwoods (50 days)
- 1.4.5 Putting Tiles (11 days)
- 1.4.6 Finish (milestone)

Practical Tasks:

2. Project planning

a) Open MS Project (or any Project Management Software of your choice e.g., Jira, ClickUp, Monday.com, Asana, ProjectLibre, OpenProject, etc.) and name the project "Belgium Campus Construction".

b) Set the start date of the project "1 March 2023" and use the standard working time and pay attention to public holidays.
c) Auto schedule the tasks
d) Enter the project schedule using the Gantt view as shown above and enter durations in theduration columns.
e) Enter notes to the following tasks

Demolition - "make sure that you wear protective clothing."

Concrete - "Water Permeable cement must be used."

Insulation - "Double Insulation should be done."

Putting Hardwoods - "Shiny hardwoods are the best choice."
f) Enter re-occurring meetings 4 times on a weekly basis every Monday with 1-hour duration. Then move the meetings to the top under Construction.
g) Link all tasks, each task follows each other.
h) All tasks have Finish to Start relationship except for the following:

Roofing - --   **Start to Start**

Windows -----   **Start to Finish**

Insulation -----   **Start to Start**

Laundry Room Flooring------ **Finish to Finish**

i) Plumbing can only happen after the 17th of September 2023 due to unavailability of the plumbers.
j) Hardwoods is going to happen 15 days after Laundry Room Flooring (Lag) to allow time for the flow to dry.

3. Managing resources

Resource Name	Type	Max Units	Standard Rate	Overtime	Group	Fixed Cost	Additional information
Grace	Work	100%	R120/hour	R145/hour	Crew		Email address: grace@gmail.com Will take 5 days off from 8 May 2023 to 12 May 2023
Mark	Work	200%	R150/hour	R170/hour	Crew		Email address: mark@gmail.com
Paul	Work	100%	R130/hour	R150/hour	Crew		Email address: paul@gmail.com Will be on vacation 14 June 2023
Timothy	Work	50%	R180/hour	R220/hour	Crew		Email address: timmy@yahoo.com
Sand (m³)	Material		R10.00		Material		
Water	Material		R5.00		Material		
Bricks	Material		R2.10		Material		
Windows	Material		R23.21		Material		
Metal	Material		R12.50		Material		

Floor Tiles	Material		R3.50		Material		
Wood	Material		R1.75		Material		
Truck	Cost	100%			Equipment	R1500.00	
Excavator	Cost	100%			Equipment	R3500.00	
Wires	Material		R1.45		Material		
Roof tiles	Material		R5.00		Material		
Cement	Material		R50.76		Material		
Tubes	Material		R3.00		Material		
Insulant	Material		R2.20		Material		
Boards	Material		R30.00		Material		
Stone	Material		R12 000.00		Material		

a) Allocate the following resources using the resource sheet.
b) Please assign resources as shown below:

Activity	Resources
Demo Preparation	Grace, Mark
Demolition	Paul, Timothy, excavator
Excavation	Grace, Mark, Paul, excavator
Concrete	Paul, Mark, water 500 units, sand 200 units, cement 25 bags, bricks 4000 units
Pre backfill	Grace, Paul, Mark, Timothy, cement 12 bags
Framing	Grace, Timothy, Paul, metal 30 units
Roofing	Mark, Grace, and roof tiles 500
Plumbing	Paul, Grace, tubes 120 units
Windows	Timothy, Grace, 15 windows
Hv Ac	Grace
Electrical	Mark, wires 100 units
AV and Network Installation	Mark, Grace
House wrap	Paul, Timothy
Insulation	Grace, Insulant 30 units
Drywall	Timothy, Paul, cement 3 bags, boards 20 units
Exterior Stone	Mark, Timothy, cement 2 bags, stone 1
Exterior casework	Mark, Grace
Laundry room Flooring	Paul
Hardwoods	Grace, Timothy, wood 432 units
Tiling	Paul, floor tiles 50 units

c) Add the exceptions of the (non- working days) in the additional information column to the resources, and also makes notes on the resources.
d) Level all resources after you are done with allocation of resources.
e) Group the resources by Cost.
f) In the Gantt View, apply a filter in the duration column and only show tasks which

has aduration of less than 20 days.

 g) Set the baseline of the project and save it as Baseline1.

 h) On Demolition, add resources Grace and Mark

 i) Update the following tasks

  Demo Prep ----100% complete

  Demolition 100% complete

  Excavation 45% complete

  Framing: reduce the duration to 20 days and remove the resource Timothy

 j) View the cost variance of the Project.

Create a folder with your full names and student number and save your work.

Mark Allocation:

Criteria	Weight
Project Planning	30
Managing resources	40
Correct Project Baseline	10
Correct project cost variance	10
Group presentation	10
	100

Additional Information

- This is a group assignment.

- Groups may have a minimum of 2 people but may not exceed 4 people.

- All work must be original. Any form of cheating will not be tolerated.

- Names of all group members must appear on the Project Information.

- Submit your project on Teams before the due date.

- Belgium Campus consists of software that can **scan for plagiarism** and a student caught doing this will get 0 for this assignment.

- Late projects will not be accepted; missing the deadline is an automatic 0.

- Choose a group leader who will be responsible for managing the project.

- All group members must submit a copy of the project.

- No mark will be awarded if the project is not uploaded via Teams Assignments.

- Fill in the peer-to-peer evaluation form and submit it along with your project.

- If you don't present your project will not be marked.