**Faculty Of Science Computer and Mathematics**

Bachelor Of Computer Science (Software Engineering) With Honors

Semester 1 2024/2025

Software Project Management
(CSF 3403)

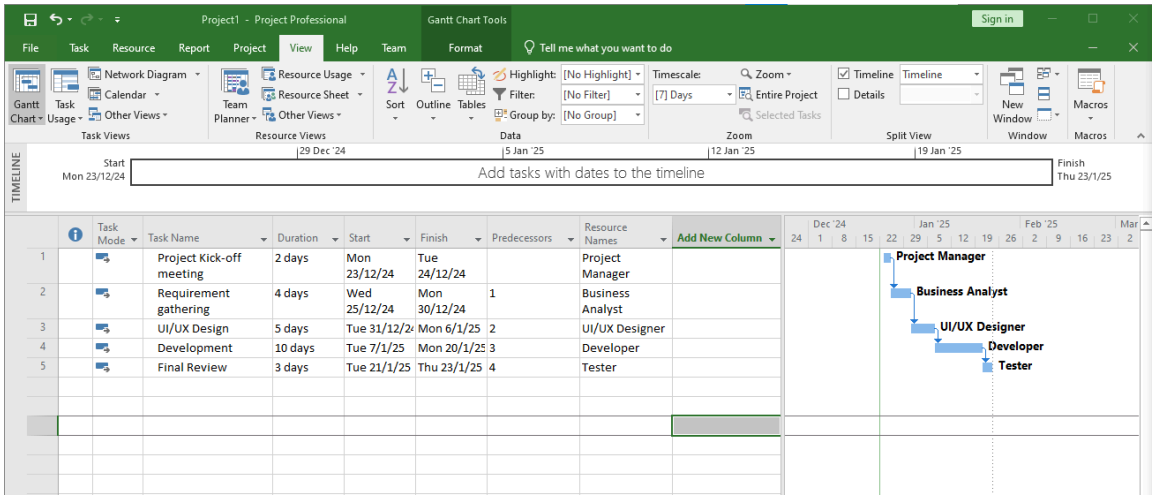
**Lab Module 7**

**Lecturer:**
Assoc. Prof. Dr. Noor Hafhizah binti Abd Rahman

| Name: | Matric No: |
|---|---|
| Ahmad Muaz Nabil | S65752 |
| Lab Moderator | |
| Nur Fadila Akma Mamat | |

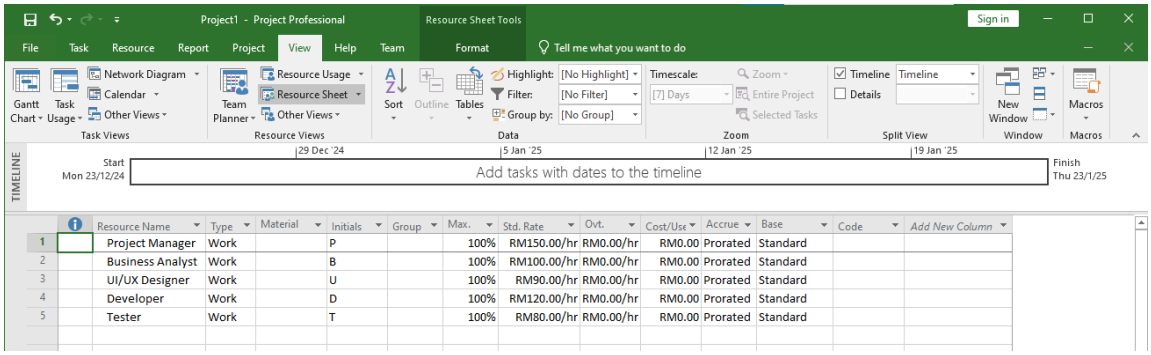
# Activity 1:

## Gantt Chart



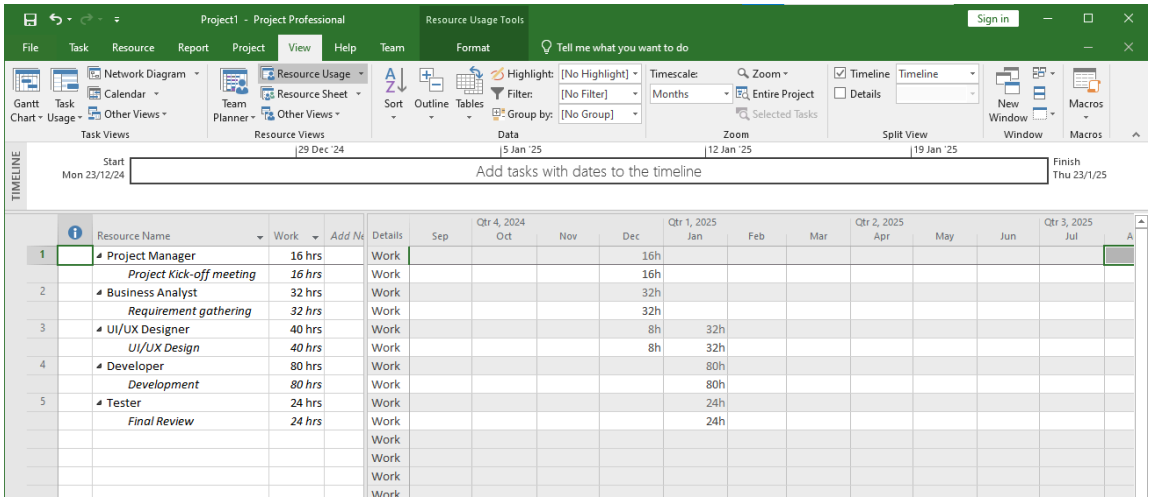

| | Task Mode | Task Name | Duration | Start | Finish | Predecessors | Resource Names |
|---|---|---|---|---|---|---|---|
| 1 | | Project Kick-off meeting | 2 days | Mon 23/12/24 | Tue 24/12/24 | | Project Manager |
| 2 | | Requirement gathering | 4 days | Wed 25/12/24 | Mon 30/12/24 | 1 | Business Analyst |
| 3 | | UI/UX Design | 5 days | Tue 31/12/24 | Mon 6/1/25 | 2 | UI/UX Designer |
| 4 | | Development | 10 days | Tue 7/1/25 | Mon 20/1/25 | 3 | Developer |
| 5 | | Final Review | 3 days | Tue 21/1/25 | Thu 23/1/25 | 4 | Tester |

## Resource Sheet




| | Resource Name | Type | Material | Initials | Group | Max. | Std. Rate | Ovt. | Cost/Use | Accrue | Base | Code |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Project Manager | Work | | P | | 100% | RM150.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 2 | Business Analyst | Work | | B | | 100% | RM100.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 3 | UI/UX Designer | Work | | U | | 100% | RM90.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 4 | Developer | Work | | D | | 100% | RM120.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 5 | Tester | Work | | T | | 100% | RM80.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |

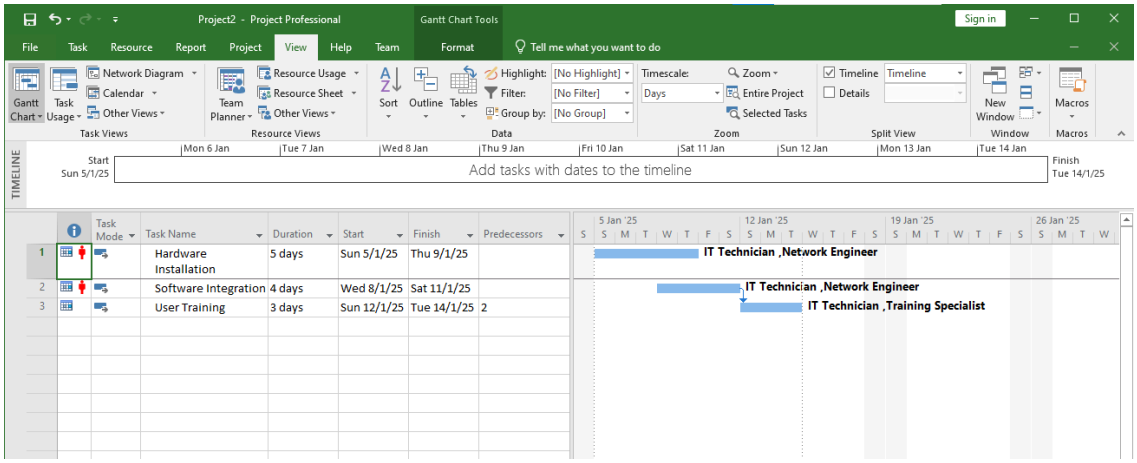
## Resource Usage



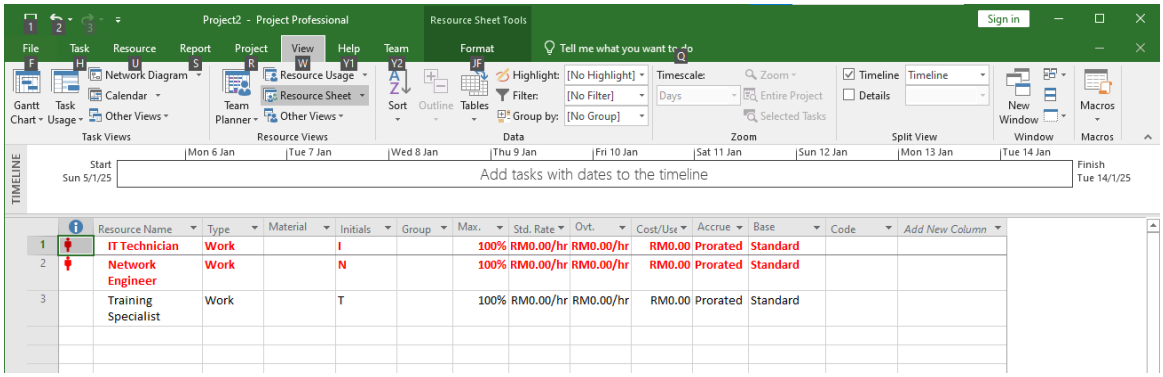

| | Resource Name | Work | Details | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Project Manager | 16 hrs | Work | | | | 16h | | | | | | | |
| | *Project Kick-off meeting* | *16 hrs* | Work | | | | 16h | | | | | | | |
| 2 | Business Analyst | 32 hrs | Work | | | | 32h | | | | | | | |
| | *Requirement gathering* | *32 hrs* | Work | | | | 32h | | | | | | | |
| 3 | UI/UX Designer | 40 hrs | Work | | | | 8h | 32h | | | | | | |
| | *UI/UX Design* | *40 hrs* | Work | | | | 8h | 32h | | | | | | |
| 4 | Developer | 80 hrs | Work | | | | | 80h | | | | | | |
| | *Development* | *80 hrs* | Work | | | | | 80h | | | | | | |
| 5 | Tester | 24 hrs | Work | | | | | 24h | | | | | | |
| | *Final Review* | *24 hrs* | Work | | | | | 24h | | | | | | |

# Activity 2:

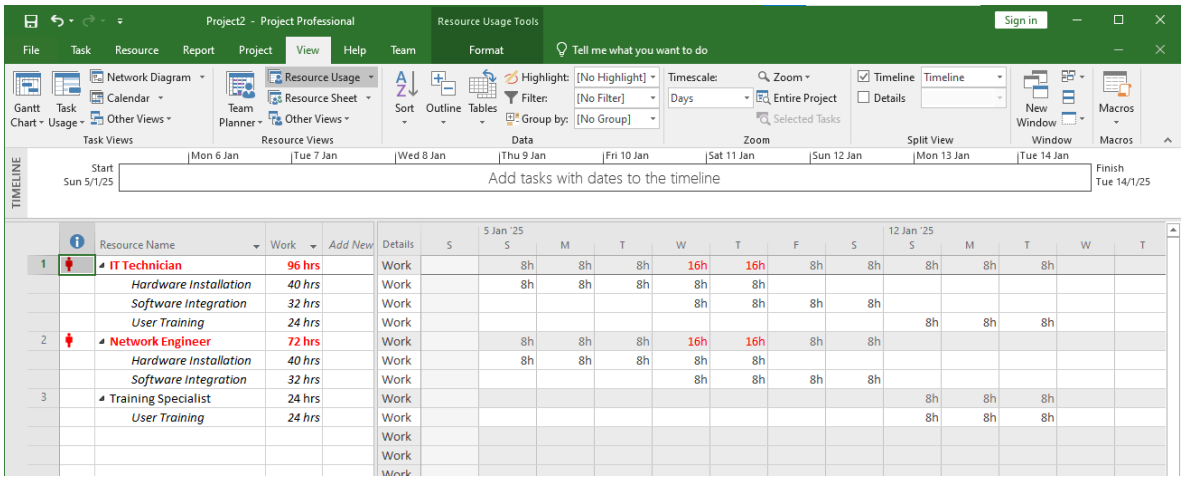
## Gantt Chart




## Resource Sheet




## Resource Usage

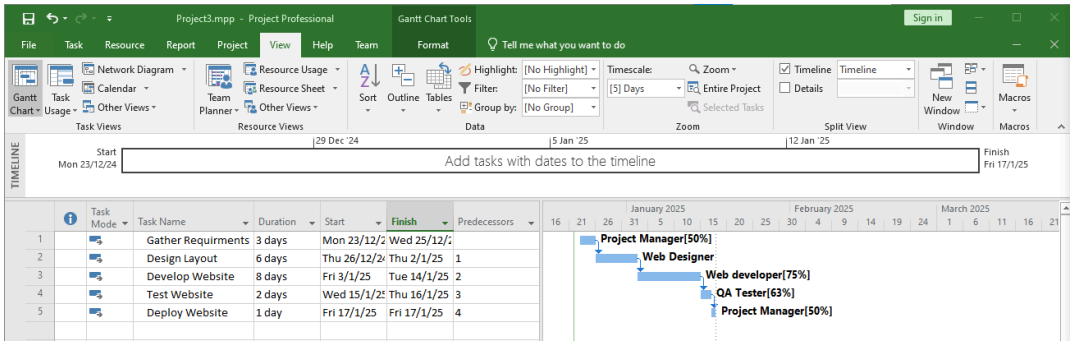


# Overallocated Resources

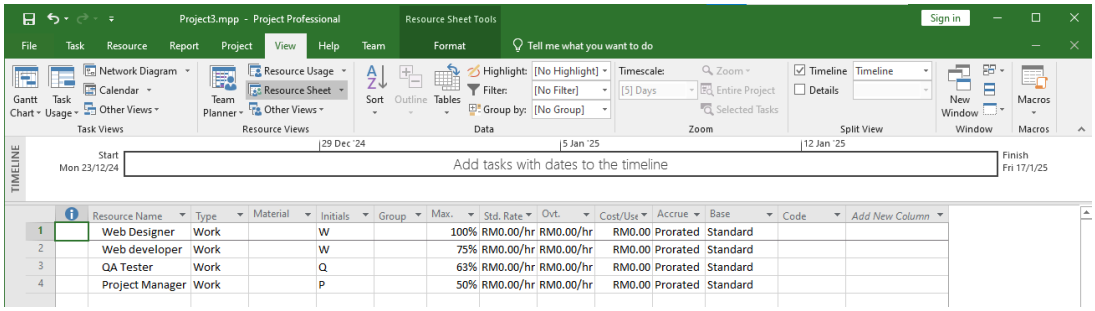
| | W | T | F |
|---|---|---|---|
| 8h | 16h | 16h | |
| 8h | 8h | 8h | |
| | 8h | 8h | |
| | | | |
| 8h | 16h | 16h | |
| 8h | 8h | 8h | |
| | 8h | 8h | |

# Activity 3

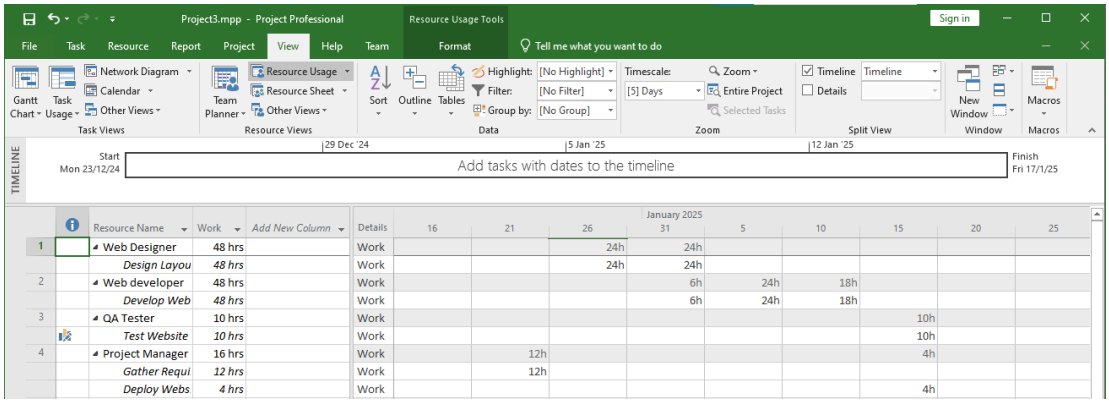
## Gantt Chart




## Resource Sheet

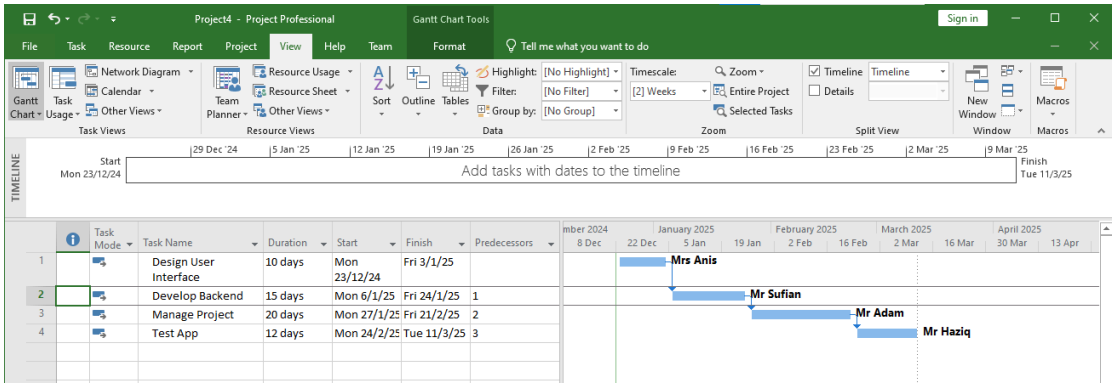



## Resource Usage



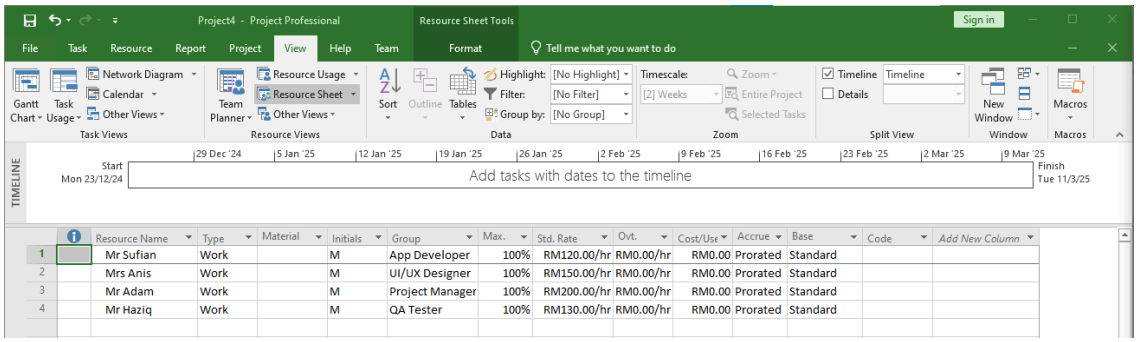
# Activity 4

## Gantt Chart



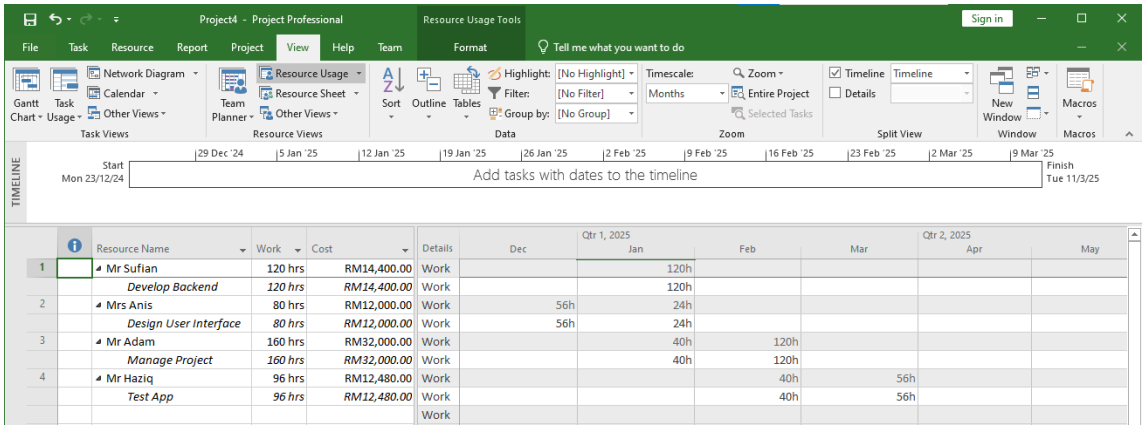

| | Task Name | Duration | Start | Finish | Predecessors |
|---|---|---|---|---|---|
| 1 | Design User Interface | 10 days | Mon 23/12/24 | Fri 3/1/25 | |
| 2 | Develop Backend | 15 days | Mon 6/1/25 | Fri 24/1/25 | 1 |
| 3 | Manage Project | 20 days | Mon 27/1/25 | Fri 21/2/25 | 2 |
| 4 | Test App | 12 days | Mon 24/2/25 | Tue 11/3/25 | 3 |

## Resource Sheet




| | Resource Name | Type | Material | Initials | Group | Max. | Std. Rate | Ovt. | Cost/Use | Accrue | Base | Code |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Mr Sufian | Work | | M | App Developer | 100% | RM120.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 2 | Mrs Anis | Work | | M | UI/UX Designer | 100% | RM150.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 3 | Mr Adam | Work | | M | Project Manager | 100% | RM200.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |
| 4 | Mr Haziq | Work | | M | QA Tester | 100% | RM130.00/hr | RM0.00/hr | RM0.00 | Prorated | Standard | |

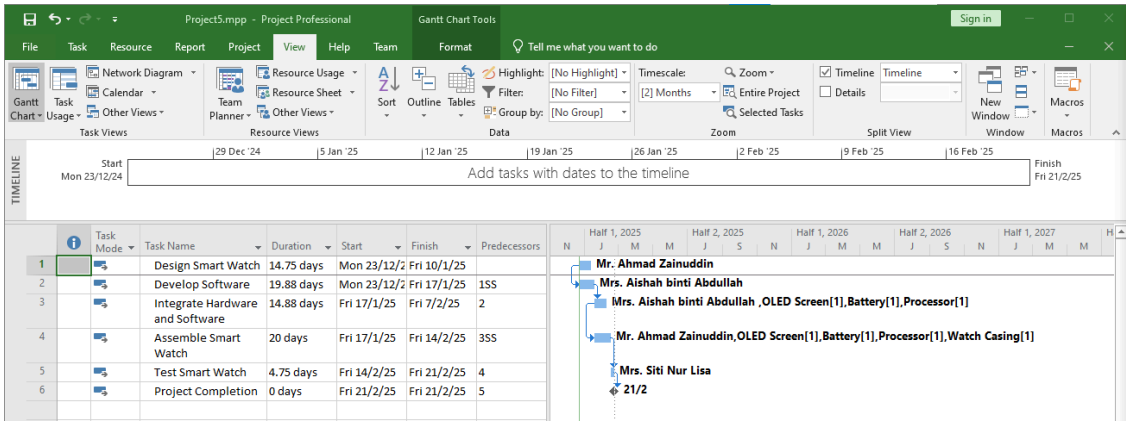
## Resource Usage



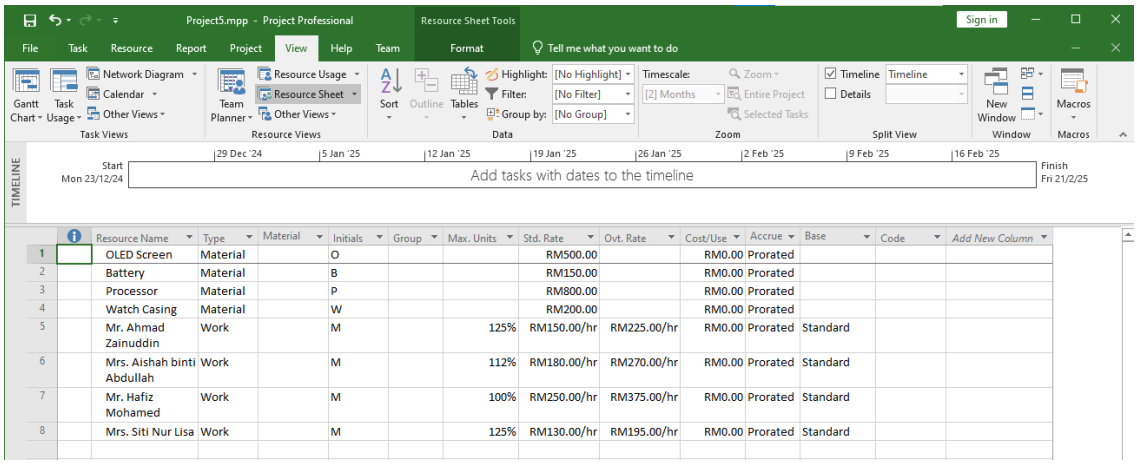

| | Resource Name | Work | Cost | Details | Dec | Qtr 1, 2025 Jan | Feb | Mar | Qtr 2, 2025 Apr | May |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Mr Sufian | 120 hrs | RM14,400.00 | Work | | 120h | | | | |
| | *Develop Backend* | *120 hrs* | *RM14,400.00* | Work | | 120h | | | | |
| 2 | Mrs Anis | 80 hrs | RM12,000.00 | Work | 56h | 24h | | | | |
| | *Design User Interface* | *80 hrs* | *RM12,000.00* | Work | 56h | 24h | | | | |
| 3 | Mr Adam | 160 hrs | RM32,000.00 | Work | | 40h | 120h | | | |
| | *Manage Project* | *160 hrs* | *RM32,000.00* | Work | | 40h | 120h | | | |
| 4 | Mr Haziq | 96 hrs | RM12,480.00 | Work | | | 40h | 56h | | |
| | *Test App* | *96 hrs* | *RM12,480.00* | Work | | | 40h | 56h | | |
| | | | | Work | | | | | | |

# Activity 5

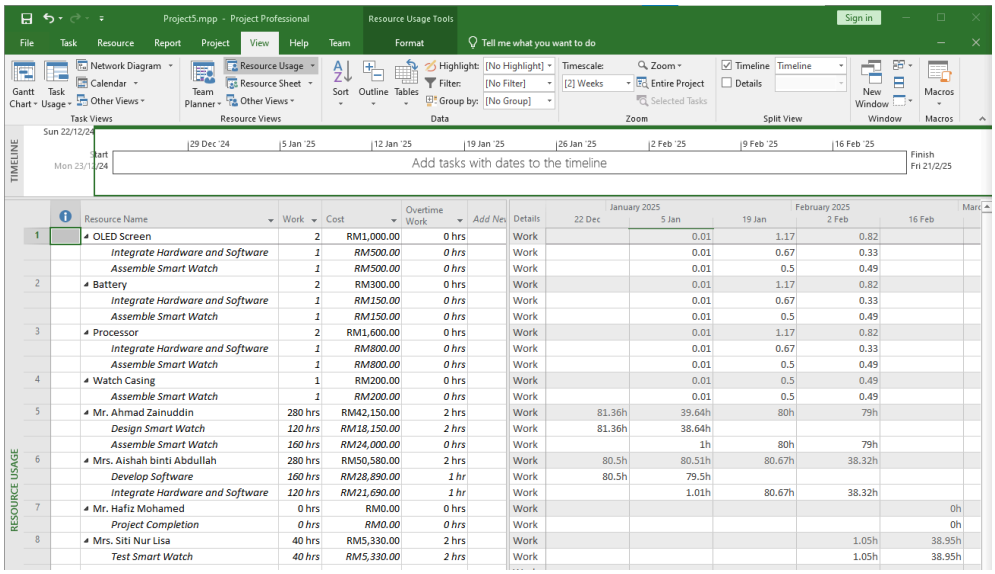
## Gantt Chart




## Resource Sheet



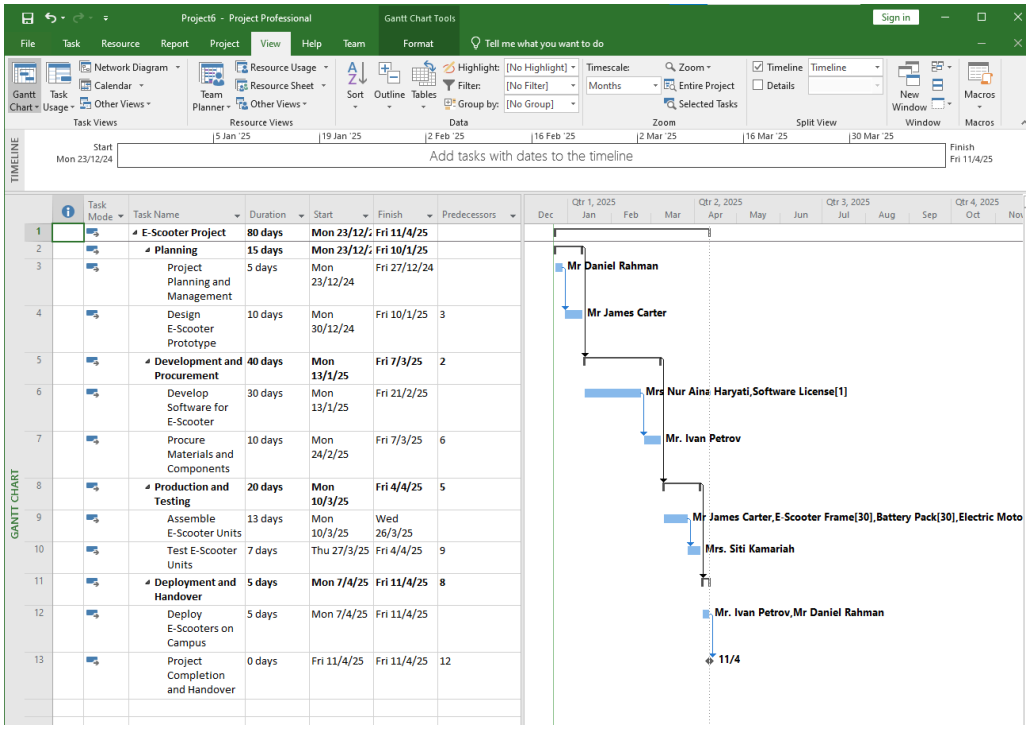
# Resource Usage




| | Resource Name | Work | Cost | Overtime Work | Details | 22 Dec | 5 Jan | 19 Jan | 2 Feb | 16 Feb |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | OLED Screen | 2 | RM1,000.00 | 0 hrs | Work | | 0.01 | 1.17 | 0.82 | |
| | *Integrate Hardware and Software* | *1* | *RM500.00* | *0 hrs* | Work | | 0.01 | 0.67 | 0.33 | |
| | *Assemble Smart Watch* | *1* | *RM500.00* | *0 hrs* | Work | | 0.01 | 0.5 | 0.49 | |
| 2 | Battery | 2 | RM300.00 | 0 hrs | Work | | 0.01 | 1.17 | 0.82 | |
| | *Integrate Hardware and Software* | *1* | *RM150.00* | *0 hrs* | Work | | 0.01 | 0.67 | 0.33 | |
| | *Assemble Smart Watch* | *1* | *RM150.00* | *0 hrs* | Work | | 0.01 | 0.5 | 0.49 | |
| 3 | Processor | 2 | RM1,600.00 | 0 hrs | Work | | 0.01 | 1.17 | 0.82 | |
| | *Integrate Hardware and Software* | *1* | *RM800.00* | *0 hrs* | Work | | 0.01 | 0.67 | 0.33 | |
| | *Assemble Smart Watch* | *1* | *RM800.00* | *0 hrs* | Work | | 0.01 | 0.5 | 0.49 | |
| 4 | Watch Casing | 1 | RM200.00 | 0 hrs | Work | | 0.01 | 0.5 | 0.49 | |
| | *Assemble Smart Watch* | *1* | *RM200.00* | *0 hrs* | Work | | 0.01 | 0.5 | 0.49 | |
| 5 | Mr. Ahmad Zainuddin | 280 hrs | RM42,150.00 | 2 hrs | Work | 81.36h | 39.64h | 80h | 79h | |
| | *Design Smart Watch* | *120 hrs* | *RM18,150.00* | *2 hrs* | Work | 81.36h | 38.64h | | | |
| | *Assemble Smart Watch* | *160 hrs* | *RM24,000.00* | *0 hrs* | Work | | 1h | 80h | 79h | |
| 6 | Mrs. Aishah binti Abdullah | 280 hrs | RM50,580.00 | 2 hrs | Work | 80.5h | 80.51h | 80.67h | 38.32h | |
| | *Develop Software* | *160 hrs* | *RM28,890.00* | *1 hr* | Work | 80.5h | 79.5h | | | |
| | *Integrate Hardware and Software* | *120 hrs* | *RM21,690.00* | *1 hr* | Work | | 1.01h | 80.67h | 38.32h | |
| 7 | Mr. Hafiz Mohamed | 0 hrs | RM0.00 | 0 hrs | Work | | | | | 0h |
| | *Project Completion* | *0 hrs* | *RM0.00* | *0 hrs* | Work | | | | | 0h |
| 8 | Mrs. Siti Nur Lisa | 40 hrs | RM5,330.00 | 2 hrs | Work | | | | 1.05h | 38.95h |
| | *Test Smart Watch* | *40 hrs* | *RM5,330.00* | *2 hrs* | Work | | | | 1.05h | 38.95h |

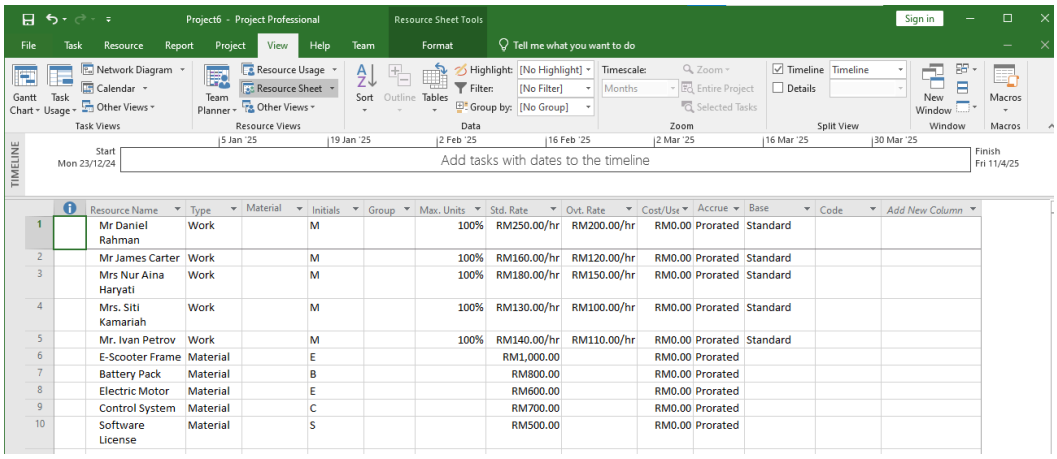
# Lab Exercise

## Gantt Chart



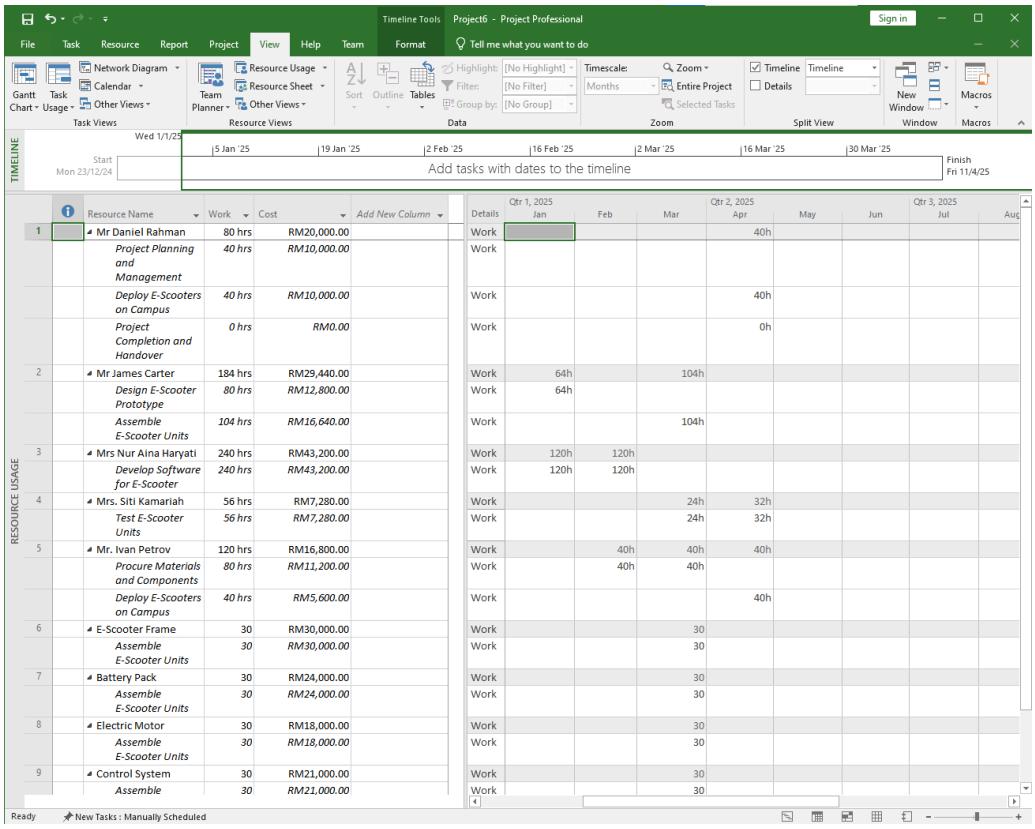

| | Task Mode | Task Name | Duration | Start | Finish | Predecessors |
|---|---|---|---|---|---|---|
| 1 | | **E-Scooter Project** | **80 days** | **Mon 23/12/2** | **Fri 11/4/25** | |
| 2 | | **Planning** | **15 days** | **Mon 23/12/2** | **Fri 10/1/25** | |
| 3 | | Project Planning and Management | 5 days | Mon 23/12/24 | Fri 27/12/24 | |
| 4 | | Design E-Scooter Prototype | 10 days | Mon 30/12/24 | Fri 10/1/25 | 3 |
| 5 | | **Development and Procurement** | **40 days** | **Mon 13/1/25** | **Fri 7/3/25** | **2** |
| 6 | | Develop Software for E-Scooter | 30 days | Mon 13/1/25 | Fri 21/2/25 | |
| 7 | | Procure Materials and Components | 10 days | Mon 24/2/25 | Fri 7/3/25 | 6 |
| 8 | | **Production and Testing** | **20 days** | **Mon 10/3/25** | **Fri 4/4/25** | **5** |
| 9 | | Assemble E-Scooter Units | 13 days | Mon 10/3/25 | Wed 26/3/25 | |
| 10 | | Test E-Scooter Units | 7 days | Thu 27/3/25 | Fri 4/4/25 | 9 |
| 11 | | **Deployment and Handover** | **5 days** | **Mon 7/4/25** | **Fri 11/4/25** | **8** |
| 12 | | Deploy E-Scooters on Campus | 5 days | Mon 7/4/25 | Fri 11/4/25 | |
| 13 | | Project Completion and Handover | 0 days | Fri 11/4/25 | Fri 11/4/25 | 12 |

## Resource Sheet

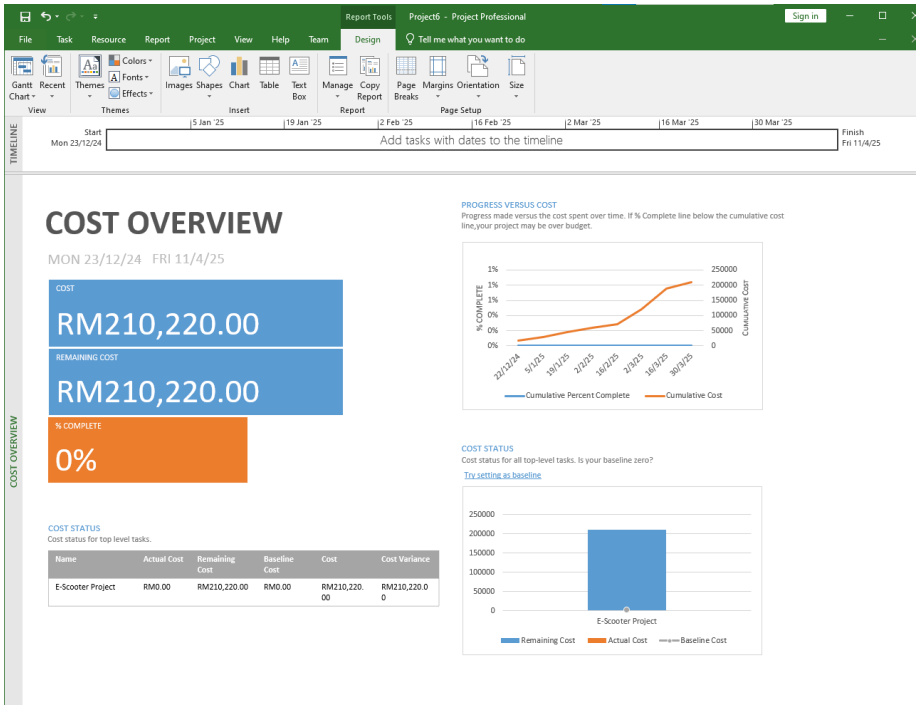



| | Resource Name | Type | Material | Initials | Group | Max. Units | Std. Rate | Ovt. Rate | Cost/Use | Accrue | Base | Code | Add New Column |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Mr Daniel Rahman | Work | | M | | 100% | RM250.00/hr | RM200.00/hr | RM0.00 | Prorated | Standard | | |
| 2 | Mr James Carter | Work | | M | | 100% | RM160.00/hr | RM120.00/hr | RM0.00 | Prorated | Standard | | |
| 3 | Mrs Nur Aina Haryati | Work | | M | | 100% | RM180.00/hr | RM150.00/hr | RM0.00 | Prorated | Standard | | |
| 4 | Mrs. Siti Kamariah | Work | | M | | 100% | RM130.00/hr | RM100.00/hr | RM0.00 | Prorated | Standard | | |
| 5 | Mr. Ivan Petrov | Work | | M | | 100% | RM140.00/hr | RM110.00/hr | RM0.00 | Prorated | Standard | | |
| 6 | E-Scooter Frame | Material | | E | | | RM1,000.00 | | RM0.00 | Prorated | | | |
| 7 | Battery Pack | Material | | B | | | RM800.00 | | RM0.00 | Prorated | | | |
| 8 | Electric Motor | Material | | E | | | RM600.00 | | RM0.00 | Prorated | | | |
| 9 | Control System | Material | | C | | | RM700.00 | | RM0.00 | Prorated | | | |
| 10 | Software License | Material | | S | | | RM500.00 | | RM0.00 | Prorated | | | |

# Resource Usage




# Cost Overview

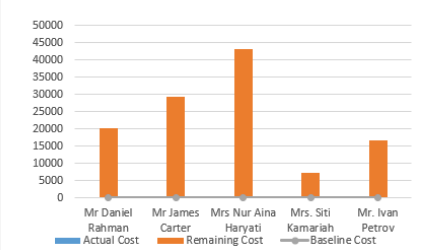


# Total Labour Cost and Material Cost

## RESOURCE COST OVERVIEW

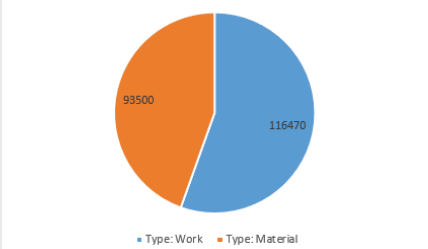
COST STATUS

Cost status for work resources.




COST DISTRIBUTION

How costs are spread out amongst different resource types.




COST DETAILS

Cost details for all work resources.

| Name | Actual Work | Actual Cost | Standard Rate |
|---|---|---|---|
| Mr Daniel Rahman | 0 hrs | RM0.00 | RM250.00/hr |
| Mr James Carter | 0 hrs | RM0.00 | RM160.00/hr |
| Mrs Nur Aina Haryati | 0 hrs | RM0.00 | RM180.00/hr |
| Mrs. Siti Kamariah | 0 hrs | RM0.00 | RM130.00/hr |
| Mr. Ivan Petrov | 0 hrs | RM0.00 | RM140.00/hr |