



# **Internet Of Things**

"Implementing IOT In the Workplace"

- Employee Wellness System -

#### Project Team Members Name's and ID's:

| PROJECT GROUP NUMBER "A" (IN BLACKBOARD): I |                           |  |  |  |  |  |  |
|---|---------------------------|--|--|--|--|--|--|
| ID  | NAME                      |  |  |  |  |  |  |
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CIS 414 - IT project managment 2024/2025

Instructor: Dr. Albandari Alamer

Submittion Date: Dec 5th

Milestone -3

# Table of Contents

| Project cost estimates                            | 3 |
|---|---|
| Project organizational chart                      | 4 |
| Responsibility Assignment Matrix                  | 5 |
| Resource Histogram                                |   |
| List of prioritized Risks                         | 7 |
| Trello Snapchat                                   | 8 |
| Milestone3 Report                                 |   |
| Figures:  |   |
| Figure 1 (Project organizational chart)           | 4 |
| Figure 2 (Resource Histogram)                     |   |
| Figure 3 (Risk and control matrix of the project) | 7 |
| Tables:   |   |
| Table 1 (Project Cost Estimates)                  | 3 |
| Table 2 (Responsibility Assignment Matrix)        | 5 |
| Table 3 (Table of resources)                      | 6 |
| Table 4 (List of prioritized risks)               | 7 |
| Table 5 (Milestone 3 report)                      | 9 |

## Project cost estimates

Prepared by: Albandari Alnassar

Project Start Day: 2/12/2024

| project Name: internet of things                         |          |             | Date  | :5/12/2024 | 1        |      |           |     |           |       |              |       |            |       |       |
|--|----------|-------------|-------|------------|----------|------|-----------|-----|-----------|-------|--------------|-------|------------|-------|-------|
|  |          |             |       |            |          |      |           |     | - 22      |       |              |       |            |       |       |
|  | internal | \$ hours    |       | rnal       | external | \$ h | ours      |     | ternal    | total | non labor \$ | total |            | % of  |       |
| wbs catagories   | labor    |             | tota  | al         | labor    |      |           | tot | tal       | labor |              | cost  |            | total |       |
| 1.initiating   |          |             |       |            |          |      |           |     |           |       |              | \$    | 13,450.00  |       | 11.33 |
| 1.1 Kick - off meeting                                   |          | \$ 150.00   |       | 300.00     |          | \$   | 300.00    | _   |           | 300   |              |       | 800.00     |       |       |
| 1.2 Assign project manager                               | 2        |             |       | 300.00     |          | \$   | 250.00    | ١.  |           | 300   |              |       | 1,300.00   |       |       |
| 1.3 Identify key stakeholders                            | 2        |             |       | 200.00     |          | 8 \$ | 300.00    |     | 2,400.00  | 2600  | 250          |       | 2,850.00   |       |       |
| 1.4 Prepare project charter                              |          | \$ 150.00   |       | 600.00     |          | 8 \$ | 200.00    |     | 1,600.00  | 2200  |              |       | 2,500.00   |       |       |
| 1.5 Stakeholder Register                                 | 2        |             |       | 150.00     |          | 8 \$ | 200.00    |     | 1,600.00  | 1750  | 200          |       | 1,950.00   |       |       |
| 1.6 Stakeholder Strategy                                 | 2        | \$ 75.00    | 3 \$  | 150.00     | 2        | 8 \$ | 200.00    | \$  | 1,600.00  | 1750  | 300          |       | 2,050.00   |       |       |
| 2.planning   |          |             |       |            |          |      |           |     |           |       |              | \$    | 14,125.00  |       | 11.83 |
| 2.1Team contract   |          | \$ 200.00   |       | 3,750.00   |          | \$   | 300.00    |     |           | 3750  |              |       | 4,250.00   |       |       |
| 2.2 Scope statement                                      | 10       |             |       | 1,100.00   |          | \$   | 300.00    | _   |           | 1100  |              |       | 1,600.00   |       |       |
| 2.3 Project management plan                              | 7        |             |       | 525.00     |          | \$   | 200.00    |     |           | 525   | 300          |       | 825.00     |       |       |
| 2.4 Project organizational structure                     | 7        |             |       | 525.00     | 3        | \$   | 200.00    |     |           | 525   |              |       | 825.00     | 1     |       |
| 2.5 Responsibility assignment matrix                     | 7        |             |       | 525.00     |          | \$   | 200.00    |     |           | 525   |              |       | 825.00     |       |       |
| 2.6 Project cost estimate                                | 5        |             |       | 500,00     |          | \$   | 300.00    |     |           | 500   |              |       | 800.00     |       |       |
| 2.7 Prepare WBS  | 4        |             |       | 300.00     | 100      | 8 \$ | 300.00    |     | 2,400.00  | 2700  | 300          |       | 3,000.00   |       |       |
| 2.8 Schedule & cost                                      | 2        | \$ 150.00   | D \$  | 300.00     | 16       | 8 \$ | 300.00    | \$  | 2,400.00  | 2700  | 300          | -     | 3,000.00   |       |       |
| 3.Executing  |          |             | - 2   |            |          |      |           |     |           |       |              | \$    | 61,000.00  |       | 51.36 |
| 3.1 Set Up IoT Devices & Sensors                         | 25       | \$ 100.00   | D \$  | 2,500.00   |          | 8 \$ | 700.00    | \$  | 5,600.00  | 8100  | 1000         | \$    | 9,100.00   |       |       |
| 3.2 Build the Mobile App for Employees                   | 25       | \$ 100.00   | 0 \$  | 2,500.00   |          | 8 \$ | 1,000.00  | \$  | 8,000.00  | 10500 | 3000         | \$    | 13,500.00  |       |       |
| 3.3 Build the Admin Dashboard                            | 35       | \$ 100.00   | 0 \$  | 3,500.00   |          | 8 \$ | 1,000.00  | \$  | 8,000.00  | 11500 | 2500         | \$    | 14,000.00  | 1     |       |
| 3.4 Set Up the Backend                                   | 25       | \$ 250.00   | D \$  | 2,500.00   |          | 8 \$ | 700.00    | \$  | 5,600.00  | 8100  | 1500         | \$    | 9,600.00   | 1     |       |
| 3.5 Ensure Security & Privacy                            | 20       | \$ 250.00   | 0 \$  | 2,000.00   |          | 8 \$ | 600.00    | \$  | 4,800.00  | 6800  | 1000         | \$    | 7,800.00   |       |       |
| 3.6 Test the System                                      | 10       | \$ 250.00   | 0 \$  | 1,000.00   |          | 8 \$ | 400.00    | \$  | 3,200.00  | 4200  | 500          | \$    | 4,700.00   | 1     |       |
| 3.7 Launch the System                                    | 10       | \$ 250.00   | ) \$  | 1,000,00   |          | 8 \$ | 600.00    | \$  | 4,800.00  | 5800  | 500          | \$    | 6,300,00   |       |       |
| 4. Monitoring & Controling                               |          |             |       |            |          |      |           |     |           |       |              | \$    | 10,750.00  |       | 9.05  |
| 4.1Monitoring & Testing application                      | 20       | \$ 65.00    | ) \$  | 1.300.00   |          | 8 \$ | 300.00    | \$  | 2.400.00  | 3700  | 200          | \$    | 3.900.00   |       |       |
| 4.2 Progress Report                                      | 15       | \$ 50.00    |       | 750.00     |          | 8 \$ | 200.00    |     | 1,600.00  | 2350  | 100          |       | 2,450.00   |       |       |
| 4.3 Trial before Launching the application               | 20       | \$ 65.00    |       | 1.300.00   |          | 8 \$ | 350.00    | \$  | 2.800.00  | 4100  | 300          |       | 4.400.00   |       |       |
| 5. closing   | 20       | + 00.00     |       | 1,000.00   |          | -    | 000.00    | -   | 2,000.00  | 4100  |              | \$    | 6.150.00   |       | 5.17  |
| 5.1Final project Report                                  | 4        | \$ 50.00    | 1 \$  | 200.00     |          | 8 \$ | 300.00    | \$  | 2.400.00  | 2600  | 200          |       | 2,800.00   |       | 3.11  |
| 5.2 Final project Report  5.2 Final project Presentation |          | \$ 50.00    |       | 250.00     |          | 8 \$ | 350.00    | \$  | 2,400.00  | 3050  | 300          |       | 3,350.00   |       |       |
| subtotal   | 3        | → 30.00     | , 4   | 230.00     |          | 0 *  | 330.00    | *   | 2,000.00  | 3030  |              | \$    | 11,450.00  |       | _     |
| subtotal<br>Reserves                                     |          |             |       |            |          | 1    |           |     |           |       |              |       | 107,325.00 |       |       |
|  | 220      | A 2.240.00  | 1 4 2 | 0.005.00   | 40       | 0 4  | 10.550.00 |     | 00,000,00 | -     |              |       |            |       |       |
| Total  | 328      | \$ 3,240.00 | \$ 2  | 3,625.00   | 12       | 0 \$ | 10,550.00 | *   | 68,800.00 |       |              | \$    | 118,775.00 |       |       |
|  |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
|  |          |             |       |            |          |      |           |     |           |       | i            |       |            |       |       |
| Assumptions  |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
| all currency in dollars internal total= internal         |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
| labor*\$hours  |          |             |       |            | ļ        |      |           |     |           |       |              |       |            |       |       |
| External total=External labor*Shours                     |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
| Total labor =Internal labor+External labor               |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
| Total cost= Eternal total + internal total subtotal= sum |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
| of all total cost values                                 |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |
| Reserves= 10% of subtotal                                |          |             |       |            |          |      |           |     |           |       |              |       |            |       |       |

Table 1: Project Cost Estimates

#### Project organizational chart

Prepared by: Darah Al-Qahtani

Project Start Day: 2/12/2024



Figure 1: Project organizational chart

# Responsibility Assignment Matrix

Prepared by: Reef Alwarthan

Project Start Day: 3/12/2024

| OBS/WBS                   | Project | Project | Programmer | Software  | Business | Database      | Supply     |
|---------------------------|---------|---------|------------|-----------|----------|---------------|------------|
|                           | Manager | Sponsor |            | Developer | Analyst  | Administrator | Hardware & |
|                           |         |         |            |           |          |               | Software   |
| 1.1 Kick-off meeting      | RP      | А       | -          | -         |          | -             | -          |
| 1.2 Assign project        | RP      | Р       | -          | -         | -        | -             | -          |
| manager                   |         |         |            |           |          |               |            |
| 1.3 Identify key          | RP      | Р       | -          | -         | -        | -             | -          |
| stakeholders              |         |         |            |           |          |               |            |
| 1.4 Prepare project       | RP      | Р       | -          | -         | RP       | -             | -          |
| charter                   |         |         |            |           |          |               |            |
| 1.5 Stakeholder register  | RP      | Р       | -          | -         | RP       | -             | -          |
| 1.6 Stakeholder strategy  | RP      | Р       | -          | -         | RP       | -             | -          |
| 2.1 Team contract         | RP      | Р       | -          | -         | RP       | -             | -          |
| 2.2 Scope statement       | RP      | Р       | -          | -         | RP       | -             | -          |
| 2.3 Project management    | RP      | Р       | -          | -         | RP       | -             | -          |
| plan                      |         |         |            |           |          |               |            |
| 2.4 Project               | RP      | Р       | -          | -         | RP       | -             | -          |
| organizational structure  |         |         |            |           |          |               |            |
| 2.5 Responsibility        | RP      | Р       | -          | -         | RP       | -             | -          |
| assignment matrix         |         |         |            |           |          |               |            |
| 2.6 Project cost estimate | RP      | Р       | -          | -         | RP       | -             | -          |
| 2.7 Prepare WBS           | RP      | Р       | -          | -         | RP       | -             | -          |
| 2.8 Schedule & cost       | RP      | Р       | -          | -         | RP       | -             | -          |
| 3.1 Set up IoT Devices &  | RP      | A       | R          | Р         | -        | -             | RP         |
| Sensors                   |         |         |            |           |          |               |            |
| 3.2 Build the Mobile      | RP      | Р       | R          | R         | -        | -             | -          |
| Арр                       |         |         |            |           |          |               |            |
| 3.3 Build the Admin       | RP      | Р       | R          | R         | -        | -             | -          |
| Dashboard                 |         |         |            |           |          |               |            |
| 3.4 Set Up the Backend    | RP      | Р       | R          | R         | -        | RP            | -          |
| 3.5 Ensure Security &     | RP      | Р       | -          | R         | -        | -             | -          |
| Privacy                   |         |         |            |           |          |               |            |
| 3.6 Test the System       | RP      | Α       | -          | Р         | -        | -             | -          |
| 3.7 Launch the System     | RP      | Р       | -          | Р         | -        | -             | -          |
| 4.1 Monitoring &          | RP      | Α       | -          | Р         | Р        | -             | -          |
| Testing Application       |         |         |            |           |          |               |            |
| 4.2 Progress report       | RP      | Р       | -          | Р         | -        | -             | -          |
| 4.3 Trial before          | RP      | А       | -          | Р         | R        | -             | -          |
| launching the app         |         |         |            |           |          |               |            |
| 5.1 Final project report  | RP      | Р       | -          | -         | -        | -             | -          |
| 5.2 Final project         | RP      | Р       | -          | -         | -        | -             | -          |
| presentation              |         |         |            |           |          |               |            |

Table 2: Responsibility Assignment Matrix

## Resource Histogram

Prepared by: Darah Al-Qahtani

Project Start Day: 4/12/2024

| Resources           | September | October | November | December | Total |
|---------------------|-----------|---------|----------|----------|-------|
| Project Sponsor     | 1         | 1       | 1        | 1        | 4     |
| Project Manager     | 1         | 1       | 1        | 1        | 4     |
| IoT Engineer        | 0         | 1       | 1        | 1        | 3     |
| Software Developer  | 0         | 1       | 1        | 1        | 3     |
| QA Tester           | 0         | 0       | 0        | 1        | 1     |
| Wellness Specialist | 0         | 0       | 0        | 1        | 1     |

Table 3: Table of resources

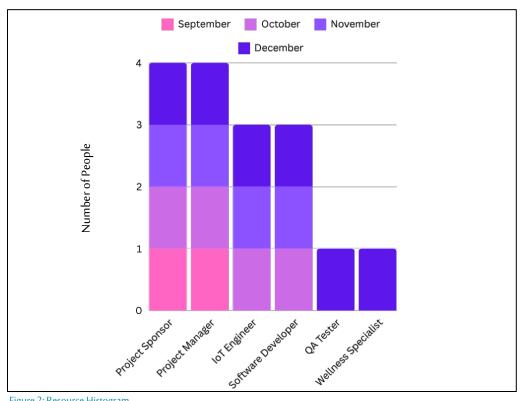


Figure 2: Resource Histogram

## List of prioritized risk for : IoT Employee Wellness System

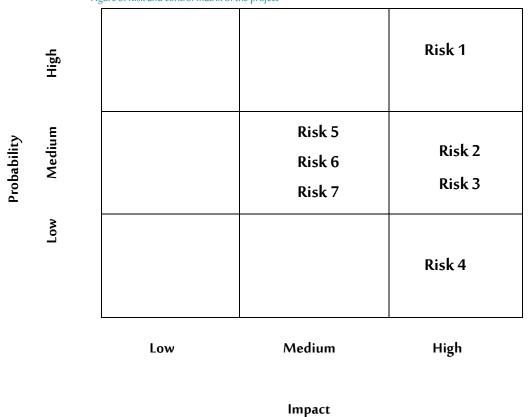
Prepared by: Rana Alaqeel

**Date:** 4/12/2024

| Ranking |   | Potential Risk   |
|---------|---|--|
|         | 1 | Data privacy: Unsecured handling of sensitive wellness data.   |
|         | 2 | Scope creep: Expanding beyond initial requirements.            |
|         | 3 | Technical integration: Challenges in IoT system compatibility. |
|         | 4 | Unauthorized access: Security breaches in the system.          |
|         | 5 | Communication gaps: Inefficient stakeholder engagement.        |
|         | 6 | Budget constraints: Insufficient funding for completion.       |
|         | 7 | Time delays: Project taking longer than anticipated.           |

Table 4: List of prioritized risks

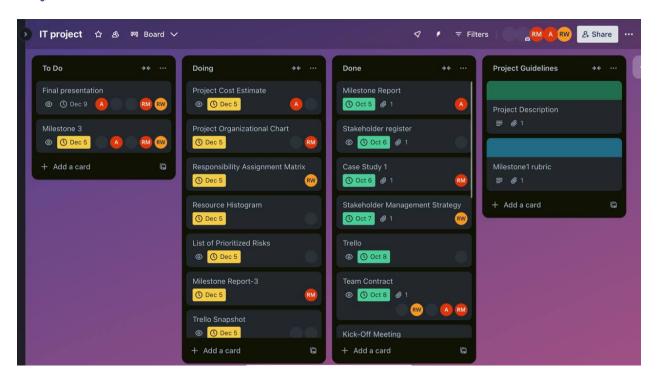
Figure 3: Risk and control matrix of the project

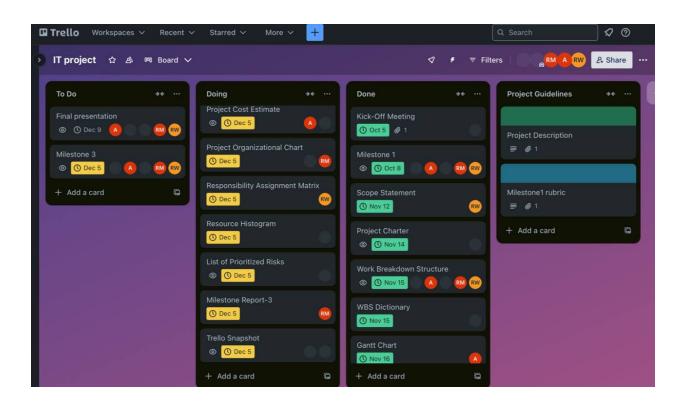


#### Trello Snapchat

#### Prepared by: Rana Alaqeel

Project Start Day: 5/12/2024





# Milestone Report 3 for IOT wellness System

Prepared by: Raghad Lisloum

**Date:** 5/12/2024

| Milestone                          | Date       | Status    | Responsible     | Issues/Comments                              |
|------------------------------------|------------|-----------|-----------------|--|
| Project Kickoff                    | 1/12/2024  | Completed | Rana and Raghad | Initial team meeting completed.              |
| Project cost estimate              | 2/12/2024  | Completed | Albandari       | -  |
| Project<br>organizational<br>chart | 2/12/2024  | Completed | Darah           | -  |
| Responsibility Assignment Matrix   | 3/12/2024  | Completed | Reef            | -  |
| Resource<br>Histogram              | 4/12/2024  | Completed | Darah           | -  |
| List of prioritized<br>Risks       | 4/12/2024  | Completed | Rana            | Reviewed with sponsor and team               |
| Trello Snapshots                   | 5/12/2024  | Completed | Rana            | -  |
| User feedback<br>Collection        | 29/12/2025 | Upcoming  | Raghad          | Prepare survey questions for user feedback.  |
| Unit Testing                       | 1/1/2025   | Upcoming  | Reef            | -  |
| User Acceptance<br>Testing         | 12/1/2025  | Upcoming  | Darah           | Schedule sessions with users for feedback.   |
| Project Closure                    | 15/1/2025  | Upcoming  | Raghad          | Finalize documentation and project handover. |

Table 5 : Milestone 3 report