IoT Based Air Pollution Monitoring Sysystem

A Project report submitted in partial fulfilment

Of the requirements for the degree of B.Tech of

Information Technology

By

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AIR QUALITY MONITORING SYSTEM

PHASE 5 : Document the Air Quality Monitoring project and prepare it for submission

- ➢ **PROJECT OBJECTIVES**
- ➢ **TYPES OF PROJECT OBJECTIVES**
- ➢ **IOT DEVICE DEVELOPMENT** ➢ **PLATFORM DEVELOPMENT**
- ➢ **CODE IMPLEMENTATION**

What are project objectives?

Project objectives describe the desired outcome of a project, which is often a tangible object. It's beneficial to create objectives for your project because creating a specific goal for you and your team helps everyone know what they're supposed to be working toward. This can improve your team's chances of success.

When you're writing an objective, use the SMART method. SMART is an acronym that stands for specific, measurable, attainable, relevant and time-based. The objectives are most useful when they're written before a project begins.

7 types of project objectives

1. Performance objectives

You may establish a performance objective when you want to improve your product, service or process. You can also use this objective type to detail how the project is going to proceed, such as the project deadline or the resources needed to complete the task. Performance objectives can also describe the desired outcome of a product or service, such as how many potential customers can click on your website to browse. Overall, this objective can help you track the progress of your team. Here are some metrics it can measure:

2. Business objectives

Create a business objective when you want to align a company's values with a project for potentially higher rates of success. This objective could include details of launching a new product or service, a grand opening or closing of a business' location or the overall mission of an organization. When you're writing, ensure you provide plenty of details about your plan, where the project is beginning and where you would like to see the organization when it's completed.

3. Financial objectives

A financial objective is when you want to have a direct impact on an organization's finances, and you measure it in monetary values. This objective can detail the organization's budget of how much you're expecting to spend on the project and how much you're estimating to make back from the project when it's finished. You can also use this objective to compare the overall company budget with the individual budget of the project. Other details you can outline.

4. Effectiveness objectives

Use an effectiveness objective when you want to improve the processes of a company and the way employees complete tasks. Setting goals to monitor how your team is progressing in the project and outline how you want to see team members complete their tasks can be beneficial when writing the objective. This way, everyone understands their roles and what the goals are for the team. As you monitor these goals, it can help you identify where you can improve productivity during the project process.

5. Regulatory objectives

A regulatory objective is when you want to understand the effects of your project outside of the organization. Depending on where you live, your city or the government can set regulations you're required to adhere to when working on a project, such as sustainability regulations. Detailing regulations in your objective helps keep everyone on track and stay within the limits of what the team members can do.

6. Technical objectives

Create a technical objective when you want to implement certain technology into the project. The technical objective can detail your plans to upgrade your current technology systems, install new equipment within the organization or update the way you use existing technology within the project. Here are some examples of technology you can include in your objective:

7. Quality objectives

Introduce a quality objective when you want to measure the quality control of your products during a project. This objective can also reflect improvements during the assembly of the product to reduce the number of defects or how to increase the customers' satisfaction with the product. If you've created a quality plan, it's most likely your quality objectives are within those details, so you can take them directly from there when outlining your objective. A quality plan is a document describing your product standards, quality practices and the specific resources and processes needed for an individual project.

Why use IoT device management?

You may be familiar with the oft-quoted statement that "Amateurs talk about tactics, but professionals study logistics." In many ways, IoT device management is the logistics of your IoT strategy. It encompasses a variety of processes and functions to deploy, connect, maintain and retire physical devices at scale, effectively providing the logistics to bridge the physical and digital worlds.

PLATFORM DEVELOPMENT ?

Platform development means different things to different people depending on their role or the product they are developing. Therefore, the term platform can be used in several different contexts when talking about technology or app development, and this undoubtedly causes confusion and issues with miscommunication.

- Computing platforms
- Utility platforms
- Tech platforms
- Network platforms
- Service platforms
- Marketplace platforms
- Content platforms

CODE IMPLEMENTATION ?

In computer science, an implementation is a realization of a technical specification or algorithm as a program, software component, or other computer system through computer programming and deployment. Many implementations may exist for a given specification or standard. For example, web browsers contain implementations of World Wide Web Consortiumrecommended specifications, and software development tools contain implementations of programming languages.

```
1    for ( jjj =0;  jjj <No;  jjj+=Tjj )  {
2    // Tiling  the  output  neurons  into  blocks , Tjj  and  Tj
3    are  the  two−layer  block  size
4            for  ( jj=jjj ;  jj <jjj +Tjj ;  jj+=Tj )  {
5                 for  ( j=jj ;  j<jj+Tj ;  j++)
6                      y[ j ]=0;
7                 for  ( iii =0;  iii <Ni ;  iii+=Tii )  {
8    // Tiling  the  input  neurons  into  blocks ,  Tii  and  Ti  are  two−layer  block  sizes
9                 for  ( ii=iii ; ii <iii +Tii ; ii+=Ti )
10                    for  ( j=jj ; j<jj+Tj ;  j++)
11                         for  ( i=ii ;  i<ii+Ti ;  i++)
12                              y[ j ]  +=
13                                        W[ j ][ i ]∗x[ i ];}
14                 for  ( j=jj ; j<jj+Tj ; j++)
15                      y[ j ]=G( sum[ j ]+b[ j ]);
16    }}
```