
PROJECT DASHBOARD SYSTEM

Documentation

MAY 2, 2024

MINISTRY OF FISHRIES & MARINES RESOURCES DEVELOPMENT
BAIRIKI, TARAUA, KIRIBATI

Projects Dashboard System Documentation

1. Overview

The MFMRD Project Dashboard System centralizes all of MFMRD projects' statuses and progress data in the form of comprehensive tables, charts, and graphs. The dashboard must be in real-time with the current data entered into the MFMRD Projects database. Participants must develop a Projects database system with a dashboard according to the database structure under section (3. *Database Structure*)

2. Purpose

The system should be able to manage and track projects whilst also being able to generate charts and graphs to visualize project statuses, progress and reports.

3. Goals and Objectives

The goal of the system is to:

1. Manage projects data (data entry)
2. Monitor, Track and report projects (dashboard)

4. System Structure & Functions

The following table describes the essential components of the project system.

	Pages (User Interfaces)	Components & Features	Audience
Front End	Authentication	Users' login / logout	Staff
	Dashboard	<ul style="list-style-type: none"> • Multi-variate bar chart - Number of Projects Statuses by Division • Pie/Doughnut chart of All projects segmented by statuses. • Map (to identify target project sites). • Extra components may be added. 	Public
	Data	<ul style="list-style-type: none"> • Data tables • Data search • CRUD implementations 	Staff
	(Admin) Settings	<ul style="list-style-type: none"> • User Registration / updates • User privileges assignment 	Staff
	Back End	Developers may choose their preferred development platform, or programming languages.	
Database	DBMS	Data Structure	
	Developers may choose their preferred DBMS that best suits their development e.g (MySQL, Microsoft SQL Server, MongoDB, PostgreSQL, Etc...)	Refer to section 5	IT Admins

5. Database Structure

The Database consist of 3 tables. The projects table is the primary table that holds the primary key for the other 2 tables: the activity table and the expenditure table. The relationship between these tables is defined in section (**5.D Database schema**). Extra features may be added if necessary.

A. TABLE 1 - MFMRD Projects

Columns	Data Type	Key
Project Code / ID	VARCHAR	PK
Title	VARCHAR	
Background	LONGTEXT	
Donor	TEXT	
Theme	TEXT	
Implementing Island / Community (All Kiribati Islands)	TEXT	
Implementing Division (CD, CFD, GSD, PDD, CA, OFD)	TEXT	
Start year	DATE	
Est End Year	DATE	
Status (Active, Inactive, warranted, complete, acquitted)	TEXT	
Provision	TEXT	
Total Fund Received	DECIMAL (10,2)	
Warrant	DECIMAL (10,2)	
Actual Expenditure	DECIMAL (10,2)	
Total Fund Expenditure	DECIMAL (10,2)	
Remaining balance	DECIMAL (10,2)	
progress	DECIMAL (3,2)	
created	TIMESTAMP	

B. TABLE 2 - MFMRD Project Activities

Columns	Data Type	Key
Activity ID	VARCHAR	PK
Project ID	VARCHAR	FK
Description	LONGTEXT	
Status	TEXT	
created	TIMESTAMP	

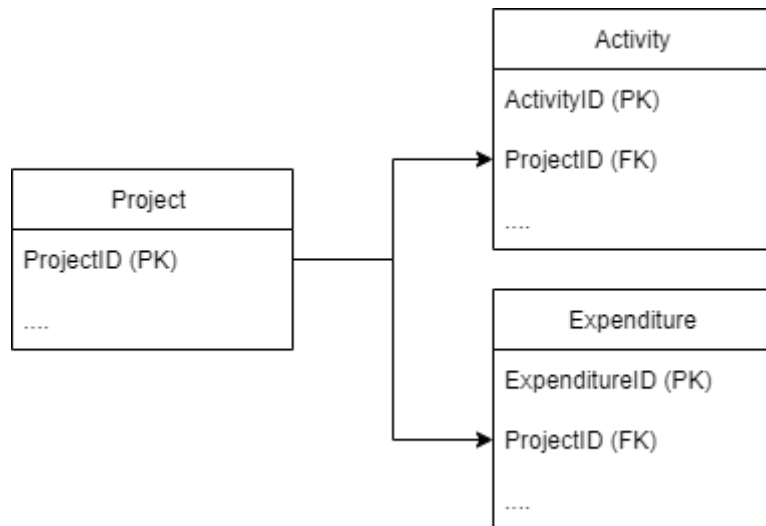
C. TABLE 3 - MFMRD Project Expenditures

Columns	Data Type	Key
Expenditure ID	VARCHAR	PK
Project ID	VARCHAR	FK
Spent	DECIMAL (10,2)	
Status	TEXT	
created	TIMESTAMP	

D. Database Schema

Entity Relationship

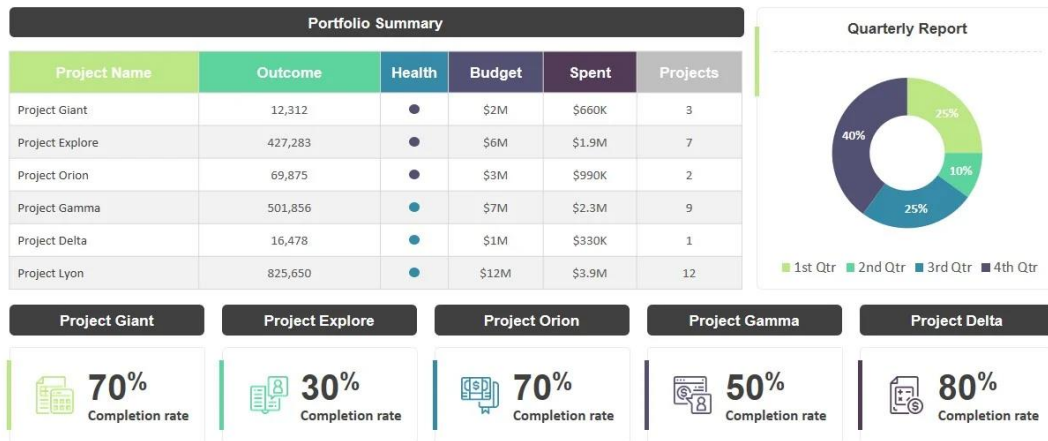
- Project to Activity (one to many)
- Projects to Expenditure (one to many)



6. Dashboard Samples

The following samples do not represent the final expectation for the dashboard. They are simply just for guidance.

PROJECT DASHBOARD



POWERSLIDES

2

WWW.POWERSLIDES.COM

