

Introduction

The Project Data Quality System is a web application to help business track and manage data quality projects using six sigma/DMAIC.

Overview

The web application consists of three tiers:

Tier	Description
Front End	Runs within a browser on the PC (phase 1) Modify to be a responsive app to target mobile (phase 2) Use React (phase 3)
Back end	Use Flask and a file based routing system focused around web pages. Convert to a Restful api (phase 3). Use related packages as needed.
Database	Various relational databases depending upon the phase

Components

Tier	Component
Front End	<ul style="list-style-type: none">• A set of Flask HTML templates and CSS files• Shoelace (for a few web components)• Bootstrap• mermaid.js
Back End	<ul style="list-style-type: none">• Python• Flask, flask-wtf, flask-fs-router• sqlalchemy• Bokeh• scipy• jinja• pandas• wtforms• numpy
Database	<ul style="list-style-type: none">• Sqlite (first release)• Sqlite, Postgres (second release)