# 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:

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| --- | --- |
| 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

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| --- | --- |
| Tier | Component |
|  |  |
| Front End | * A set of Flask HTML templates and CSS files * Shoelace (for a few web components) * Bootstrap * mermaid.js |
| Back End | * Python * Flask, flask-wtf, flask-fs-router * sqlalchemy * Bokeh * scipy * jinga * pandas * wtforms * numpy |
| Database | * Sqlite (first release) * Sqllite, Postgres (second release) |