Software Requirements Specification

for

FastData

**Version 1.0 approved**

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**Revision History**

| **Name** | **Date** | **Reason For Changes** | **Version** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

# Introduction

FastData: Simplified Data Collection and Visualization Made Fast and Easy

# Overall Description

## Product Overview

FastData is a powerful and accessible software tool designed to revolutionize the way data collection and visualization are approached. This user-friendly solution empowers individuals of all skill levels to effortlessly create databases and generate visually stunning representations of their data without the need for advanced Excel or statistical expertise.

## Product Features

1. **Lightning-Fast Data Collection:** FastData offers a streamlined and efficient data collection process, eliminating the complexities often associated with traditional spreadsheet or database management systems. Users can input data quickly and easily, saving valuable time and effort.
2. **Instant Visualization:** Say goodbye to tedious manual charting. FastData automatically transforms collected data into visually appealing charts, graphs, and diagrams in real-time. Instant visualization allows users to gain insights at a glance and communicate their findings effectively.
3. **Simple and Intuitive Interface**: With a clean and intuitive interface, FastData ensures that users can navigate the software effortlessly. The user-friendly design caters to beginners while offering advanced functionality for experienced data analysts.
4. **Customization Made Easy**: FastData provides a range of customization options, allowing users to personalize their visualizations to match their specific requirements. Customize chart types, colors, labels, and other visual elements to create stunning, professional-grade outputs.
5. **CSV File Import/Export:** Existing .csv file data sets can be imported easily and FastData datasets can be exported as a .csv file.

## User Classes and Characteristics

The primary user class is the End User, which may include students, business professionals, researchers, or simply someone interested in exploring data.  
There is no need for Admin User nor Dev User classes.

## Design and Implementation Constraints

There is no budget for possible expenses for this project. Possible expenses may arise when deploying the project through Azure or some other service.   
Here is an article about Free Web App Hosting On Azure:  
<https://www.c-sharpcorner.com/article/free-web-app-hosting-on-azure/#:~:text=In%20this%20article%2C%20you%20will,application%20on%20Azure%20for%20free.&text=Primarily%20Azure%20is%20known%20for,free%20of%20cost%20for%20life>.

Looks like Azure free option limits to 1gb storage and doesn’t allow for custom domains. GitHub Pages may be a better option than Azure.

## User Documentation

A video demo will be available on YouTube as well as embedded user manual in a hamburger menu on the landing page.

# Use Cases

## Use Case One EX

* Actor: User / Admin / CEO / Debugger
* Story:
  1. Numbered steps

# External Interface Requirements

## User Interfaces

This is a mockup of the dataset editor/visualizer page

Still need mockups for a landing page and the ‘insert data point prompts’

## Software Interfaces

We are using Google Charts and Google Sheets API’s.

We are considering using the user’s personal Google Sheets account for our databases. This will exclude the need to have user accounts and security issues with our product as Google will handle all security issues with their sheets.

# Nonfunctional Requirements

## Performance Requirements

We should be able to create, modify, and visualize datasets that are up to 10gb in size. (if we use the user’s google sheets to store our datasets this should not be a problem)

## Safety Requirements

If we use the google sheets data set logging method we should have no safety concerns

## Security Requirements

If we use the google sheets data set logging method we should have no safety concerns

## Software Quality Attributes

This project should not require the user to watch a tutorial to be able to use the basic functions of FastData. (intuitive design)

# Other Requirements

**Appendix A: Glossary**

**Appendix B: Issues List**