7. Technology Stack

The following tools and technologies were carefully selected to design, develop, and deploy the *College Food Choices Case Study Visualization Platform*. The goal was to ensure an intuitive, high-performance solution for analyzing and presenting student dietary data.

7.1 Data Collection & Storage

Tool / Technology	Purpose
CSV Files	Raw data storage format used for dietary and lifestyle data
Excel / Google Sheets	Initial formatting and exploration of datasets

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7.2 Data Preparation & Transformation

Tool / Technology	Purpose
Tableau Prep (Optional)	Data cleansing, column filtering, joining multiple tables
Tableau Desktop	Importing CSV data, building calculated fields, structuring dashboards

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7.3 Data Visualization

Tool / Technology	Purpose
Tableau Desktop	Core platform for creating interactive visualizations
Tableau Public / Server	Hosting the dashboards for external access

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7.4 Web Integration

Tool / Technology	Purpose
Python	Backend scripting and logic
Flask Framework	Embedding Tableau dashboards in a minimal web UI
HTML / CSS	Styling and structuring the web interface

7.5 Deployment (Optional)

Platform	Purpose
Render / Vercel	Hosting the Flask application online

Platform	Purpose
GitHub	Version control and source code repository

7.6 Supporting Tools

Tool	Purpose
VS Code / Jupyter	Code development and testing environments
Mermaid / draw.io	Visualizing system architecture and data flow diagrams
OBS / Screen Recorder	Recording project walkthroughs and demonstrations